

# SUSTAINABLE GREEN ENERGY FOR THE FUTURE



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# Vision

## A leader in Alternative energy business

using modern, up-to-date and environmentally friendly technology for the benefit and fairless to consumers, shareholders, partners and employees.



# Message from CEO



“Energy Absolute (EA) and subsidiary companies are committed to operating a business in green energy by considering sustainable development: environment, social and governance (ESG) and also economy by using modern technology and environmentally friendly. EA operates business in 3 sectors: (1) Alternative Energy such as Bio-diesel and Glycerin, after that are developed to phase change material (PCM) and Green-diesel. (2) Renewable Energy such as Solar Energy and Wind Energy. (3) Battery and Electric vehicles, this business can increase the value of products in Thailand by Thai people. In addition, the organizational operation of this year was successful with total revenue of 27,546.81 MB and net profit of 7,406.47 MB (increase from last year of 33.99% and 24.91 respectively) the result could show organizational performance was successful.

The company found an opportunity of clean energy industrial by energy consumption, it was increase significantly. This can affect to economy, reduce fuel imports, reduce pollution and global warming, the current global trend that every country has turned to focus on the transition of technology both renewable energy and changing from conventional automotive that consume oil to drive to electric vehicles (EV). EA invest in Lithium-ion battery and Energy Storage System (ESS) factory. The first phase of the factory is 1 GWh, the largest factory in ASEAN. It could be use with any EV or ESS. This investment could stabilize the renewable energy power plant for increasing the efficiency of power generation and distribution system in Thailand as well as the establishment of battery manufacturer in Thailand could be a significant change of electric vehicle industry to be successful as the new S-Curve according to the national strategy. Becoming to Clean Energy Era can raise the potential of competition and support sustainability of Thailand in international level.

According to the United Nations Conference on climate change or COP26 and COP27, EA has been a founding member of the Thai Renewable Energy Association (RE100 Thailand Club) to be an important driving force in the use of energy efficiency and towards solving global warming issue and maintaining Thailand’s competitiveness. It also announced Net Zero Carbon emission by 2060.

EA hopes Thailand becoming ASEAN BEV HUB in the production of EV in this region. The company established Lithium-ion battery factory with 1GWh capacity and commercial EV factory (The capability is 9,000 cars). In the first phase, the factory delivers 1,250 cars to customers for service in Bangkok and Bangkok metropolitan region. It affects to the number of EV charging station from EA Anywhere. The company can create Net Zero transportation for commercial EV and personal EV. “Mission no Emission” is company’ vision and it made our colleagues create new innovation to drive Thailand become Net zero carbon society while develop and improve employees’ skills for sustainability. All of these could help Thailand pass the Middle-Income trap country to High income country”

Sincerely Yours,

**Somphote Ahunai**  
Chief Executive Officer

## About this report

Energy Absolute Public Company Limited publishes a sustainability report annually. Its purpose is to be one of the channels to communicate our commitment to business sustainability to the public through disseminating policies and management guidelines that are important to business and stakeholders, which cover the impacts on economic, social, and environmental dimensions, including the implementation of good corporate governance in accordance with the principles of corporate governance. In addition, the Company disclosed key indicators, goals, and performance improvements from the integration of sustainability strategies with responsible business operations.

## Reporting Boundary

This report presents the 2022 performance covering the operations of all business groups under the Energy Absolute Public Company Limited that operates in Thailand and the group company, in which the Company holds 100% of the shares and has operational control through the Board of Directors. The reporting period is from January 1, 2022, to December 31, 2022.

## Reporting Cycle

Annually

## Report details and reporting references

This report is the 8th Annual Sustainable Development Report of Energy Absolute Public Company Limited. This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. Also, the organizational operations are considered with the Sustainable Development Goals (SDGs).

## Report Assurance

The content of this report has been reviewed for completeness and coverage of key issues relating to the Company, and its stakeholders, including verification of information accuracy by senior management of relevant departments to ensure that the information reported is complete, accurate, and comprehensive in response to all stakeholders. In this regard, the Company is under consideration for further review or quality assurance of information by external parties in the future.

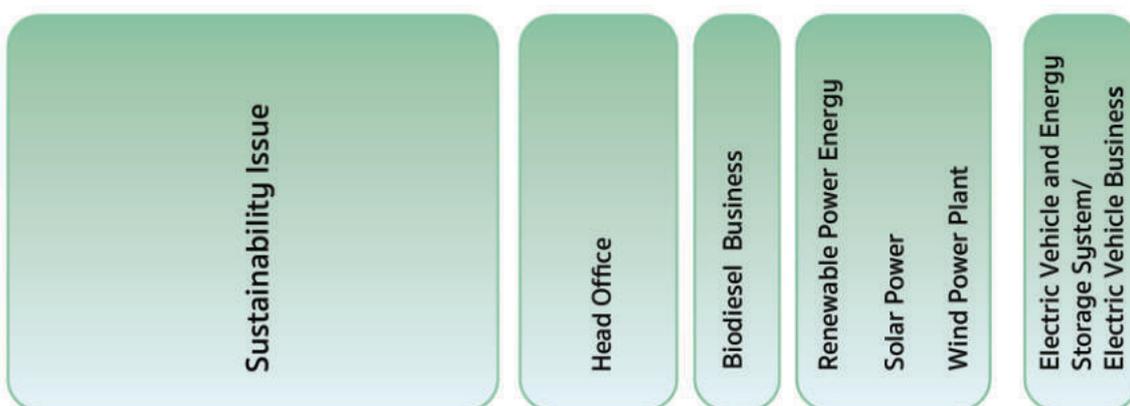
### Inquiry

If you have any questions or suggestions, please contact

Corporate Communications Department, Energy Absolute PCL.

E-mail: [ir@energyabsolute.co.th](mailto:ir@energyabsolute.co.th) Phone 0-2248-2488-92, 0-2002-3667-9 Ext.19531

## Scope of reporting



Sustainability Issue	Head Office	Biodiesel Business	Renewable Power Energy Solar Power Wind Power Plant	Electric Vehicle and Energy Storage System/ Electric Vehicle Business
<b>Corporate Governance</b>				
Corporate Governance	●	●	●	●
Risk Management	●	●	●	●
Anti-Corruption	●	●	●	●
<b>Economic</b>				
Quality and Safety of product	●	●	●	●
Tax Policy	●	●	●	●
Customer Relationship Management	●	●	●	●
Cyber Security and Data Privacy Protection	●	●	●	●
Sustainable Supply Chain Management	●	●	●	●
Innovation Management	●	●	●	●
<b>Social</b>				
Human Resource Management	●	●	●	●
Occupational Health and Safety	●	●	●	●
Social Enterprise	●	●	●	NA
Corporate Social Responsibility	●	●	●	●
<b>Environment</b>				
Air Quality Management and GHG Emissions	●	●	●	●
Resource Management, Reuse and Recycle	●	●	●	●
Waste Management	●	●	●	●
Biodiversity	NA	NA	NA	●

Remark : NA (Not Available) – Information is not available.

## About Energy Absolute

Energy Absolute Public Company Limited (“the Company” or “EA”) was first incorporated in original name Suntech Palm Oil Company Limited, with registered capital of THB 50 million. In 2008, the Company was converted into a public company limited and renamed as Energy Absolute Public Company Limited. Currently, the Company has registered and paid-up capital of THB 373 million, divided into 3,730 million ordinary shares at par value of THB 0.10 per share. In the early of 2013, the Company registered 3,730 million shares to the “Market for Alternative Investment (mai). Later in the end of 2016, the Company submitted a request to the Stock Exchange of Thailand for trading of EA’s securities in the Stock Exchange of Thailand (SET) (from mai to SET). The ordinary shares were allocated in the Resources category, Energy and Utilities section. The abbreviation for securities trading remained “EA” as before since 6 January 2017 onwards. Currently, the Company is engaged in the production of biodiesel and bio-products from crude palm oil, as well as the production of electricity from wind and solar, and it is expanding its business to energy storage systems, electric vehicles, and other clean energy related businesses in order to create sustainability for the country through renewable energy technology and environmentally friendly modern innovations.



# Awards & Achievements



## Best Innovative Company Award 2022

Innovation AMITA Lithium-Ion Battery

By : The Stock Exchange of Thailand (SET) and Money & Banking Magazine



## Outstanding CEO Award 2022

By : The Stock Exchange of Thailand (SET) and Money & Banking Magazine



## Outstanding Company Performance Award 2022

for listed company with more than 100 billion market capitalization

By : The Stock Exchange of Thailand (SET) and Money & Banking Magazine



## The Sustainability Yearbook Member 2022

By : S&P Global

Sustainability Yearbook  
Member 2022

S&P Global

## Product Innovation Awards 2022

Innovation and Technology, AMITA Lithium-Ion Battery

By : BUSINESS+ Magazine and College of Management, Mahidol University



## Sustainability Disclosure for 3<sup>rd</sup> Consecutive year

By : Thaipat Institute



## MSCI ESG Ratings : A

By : MSCI

## Thailand Sustainability Investment (THSI) for the 5<sup>th</sup> Consecutive year

By : The Stock Exchange of Thailand

**THSI**  
THAILAND  
SUSTAINABILITY  
INVESTMENT 2022



### CSR-DIW Continuous Award 2022

-EA Solar Lampang Co.,Ltd.  
-EA Solar Nakornsawan Co.,Ltd.  
By : Department of Industrial Works, Industry Ministry

### Excellent CG Rating (5 star) for the 5<sup>th</sup> consecutive year

By : Thai Institute of Directors (IOD)  
and The Stock Exchange of Thailand (SET)



### Bloomberg Gender Equality Index (GEI) for the 2<sup>nd</sup> consecutive year

By : Bloomberg

### Honorable Mention, Human Rights Awards 2022 for the 3<sup>rd</sup> consecutive year

By : Rights and Liberties Protection Department, Ministry of Justice



### Eco Factory plus Social Value: Eco Factory +SV

Level Silver Awards : EA Bio Innovation Co.,Ltd.  
By : Department of Industrial Works, Ministry of Industry



### Green Industrial level 4 (Green Culture)

-EA Solar Lampang Co.,Ltd.  
-EA Solar Nakornsawan Co.,Ltd.  
-EA Solar Phisanulok Co.,Ltd.

By : Department of Industrial Works, Ministry of Industry



### Green Industrial Level 3 (Green system)

EA Solar Co.,Ltd.  
By : Department of Industrial Works, Industry Ministry



## Operational Highlights in 2022

**Biodiesel**  
Sale Volume

**155**  
mil. lites

**Renewable**  
Sale Volume  
Solar Power

**627**  
mil. kWh

**Sale Volume of**  
Wind Power

**796**  
mil. kWh



### Employees

**Total** Increased from 2021  
**2,039** persons **73%**  
2021 total 1,175 persons

### Financial Performance

**Total Revenue**  
**27,547** mil.baht

**EBITDA**  
**12,612** mil.baht

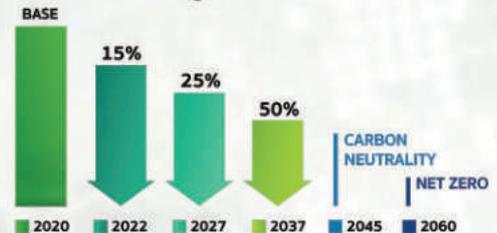
**Net Profit**  
**7,406** mil.baht

### Environmental

from Thailand Voluntary Emission  
Reduction Program (T-VER)

**738,087** tCO<sub>2</sub>e

**Greenhouse Gas Emission**  
**Reduction Targets**



### Social

**Increase farmer's income**  
Goat / Sheep Farming

Farmer's income avg. **473** baht/day

**EASE Organic Project**

Farmer's income avg. **340** baht/day

**Assessment Result of**  
**the Customer satisfaction level**

**Biodiesel Business**

Service **100%**

Product **95.5%**

**Renewable Business**

Service **98.65%**

### Corporate Governance

**CG Rating**



**"Excellent"**

The quality assesment  
of the shareholder's

**100%**  
6 years in a row

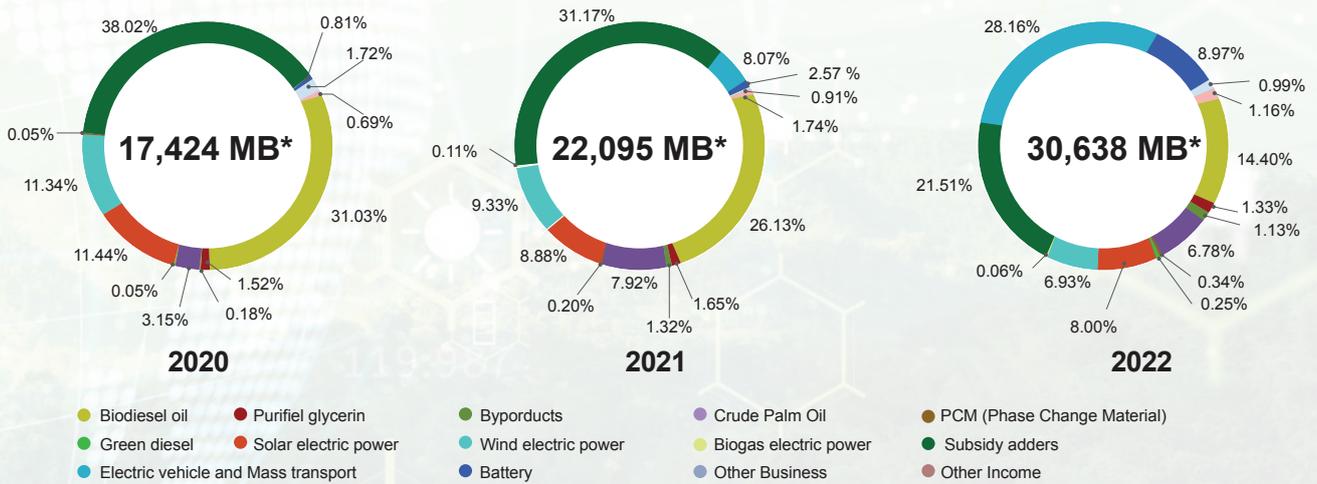
All employees passed of CG  
and CoC assesment

**100%**

## Financial Highlights



## Revenue proportional



\*The total revenue as above is the revenue before inter-segment revenue deduction. Please refer to 1.2.1 Revenue structure.

## Significant Financial Ratios

		2020	2021	2022
Net Profit Margin	%	29.35	28.84	26.89
Return on Equity Ratio	%	20.34	20.23	21.29
Return On Assets Ratio	%	8.97	8.93	9.49
Debt to Equity Ratio	time	1.65	1.44	1.50
Liquidity ratio	time	0.54	0.92	0.85

# ENERGY ABSOLUTE

Energy for the Future

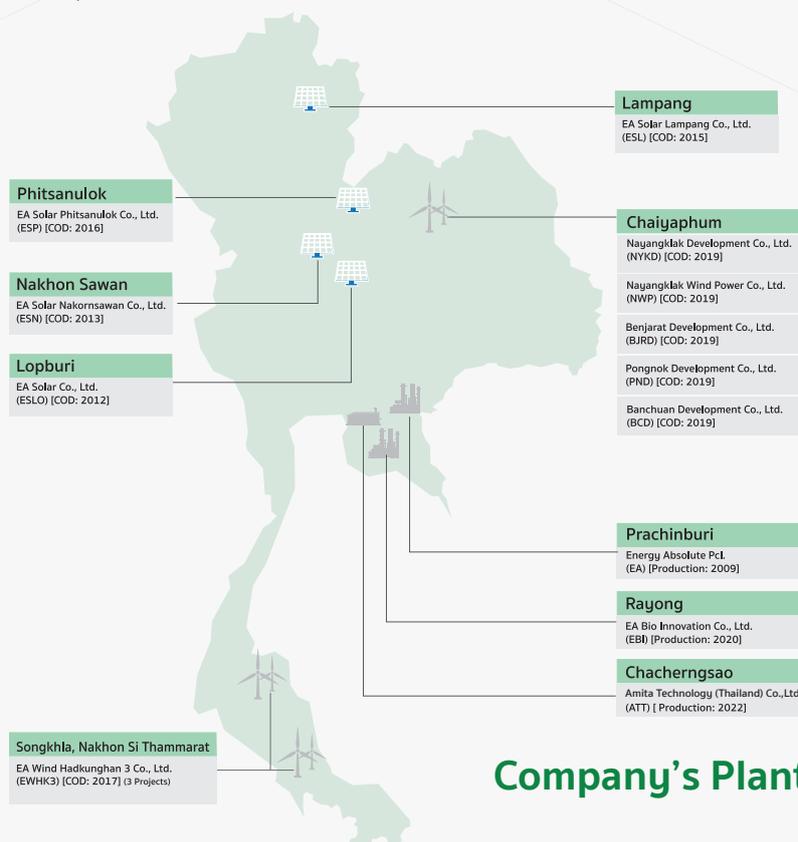


## Nature of business

The Company has continuously developed since carries out biodiesel and renewable power plant business to more advanced technologies to conform to the energy demand in the future such as the electric charging station under the brand “EA Anywhere”, the electric automobile business under the brand “MINE Mobility” including battery and energy storage system business to create a cost-effective use of energy as well as the highest benefits, especially, the clean energy right from nature. Moreover, the Company continues conducting researches and development of technologies, utilizing current innovation to carry on business to leverage product quality, resulting in cost-effective use of raw materials and resources such as the development of Green Diesel and Bio-PCM which enhancing our competitiveness to regional and the world scale according to the long term strategic plan of the Company, to become a leader of the energy business and related business by using the cutting edge technology which is harmless to the environment.

Nature of business can be divided to 4 groups as follow:

- 1) Biodiesel Business (through the Company and Subsidiaries)
  - Produces and Distributes biodiesel (B100)
  - Purified glycerin
  - Byproducts
  - Phase Change Material, PCM
  - Produces and Distributes Phase
- 2) Renewable Power Plant Business (through Subsidiaries)
  - Produces and Distributes solar electric power
  - Produces and Distributes wind electric power
- 3) Electric Vehicle and Energy Storage system Business
  - Battery development, manufacturing and distribution business
  - Electric charging station service business (For electric vehicle)
  - Electric Vehicle Business
- 4) Other business
  - Battery Electric Vehicle and Electronic Products Testing Center
  - Research and Development



## Company's Plant

# BIODIESEL BUSINESS



# Biodiesel Business

## Biodiesel (B100)

Biodiesel (B100) is a natural diesel alternative fuel, produced from vegetable oils and animal fats. Most of biodiesel is produced from palm products, such as Crude Palm Oil (CPO), Refined Bleached Deodorized Palm Oil (RBD) and Stearin and be taken into the Trans Esterification process (Transesterification Process) to react with an alcohol (Ethanol or Methanol) and base as the catalysts, such as sodium hydroxide (NaOH) in order to form the Ester which is catalyst by type of alcohol used for reaction. This biodiesel ester's properties are almost the same as diesel fuel. As such, biodiesel performs well in engine. If biodiesel is consumed purely, it will be called B100. However, if biodiesel is blended with the high-speed diesel, it will be called according to the blending proportion, such as, B7 is high-speed diesel fuel that contains 7% biodiesel (B100) by volume or B10 is high-speed diesel fuel that contains 10% biodiesel (B100) by volume.

## Purified glycerin

Purified glycerin is a transparent, colorless, scentless, sweet-tasting liquid, and well-soluble in alcohol and water but not in fats. Since glycerin has various chemical properties, it can be used as a substrate to synthesize with other chemical substances. It is widely used in food, medicine, cosmetics, and soap industries. Purified glycerin is made by refining raw glycerin from biodiesel production process through the glycerin refining process. Purified glycerin is one of the Company's products which has demand both in domestic and foreign for using as an ingredient in many types of products such as cosmetics, medicine, and consumer daily products such as toothpaste. The production capacity for glycerin is at 80 tons per day.

## Byproducts

In addition to the above-mentioned products, there are byproducts generated from the production process of biodiesel which include raw glycerin which is the orange liquid soluble in alcohol and water, free fatty acid (FFA) - the fat dark color liquid used as a mixture in feed meals industry and others. The byproducts result from the palm oil extraction includes Palm Fatty Acid Distillate: PFAD which become solid at the room temperature, similar to a candle.

## Phase Change Material (PCM)

PCM are substances that absorb and release thermal energy during the process of melting and freezing. When a PCM freezes, it releases a large amount of energy in the form of latent heat at a relatively constant temperature. Conversely, when such material melts, it absorbs a large amount of heat from the environment. PCMs recharge as ambient temperatures fluctuate, making them ideal for a variety of everyday applications that require temperature control. In addition, PCM benefits in term of energy saving. For the industries, PCM was used in the buildings and construction, transportation, cooling industry, clothes, and others to maintain temperatures. Furthermore, the company has developed and researched the production of Bio-PCM from palm oil as the first time in the world, Bio-CPM which friendly to environment, using PCM for heat storage option are particularly attractive because they offer high-density energy storage.

## Green Diesel / Hydrogenated Vegetable Oil (HVO)

Green Diesel / Hydrogenated Vegetable Oil (HVO) could be produced from palm oil or waste materials such as used cooking oil and tallow. EA Bio Innovation has converted these raw materials to Green Diesel by Hydrogenation process. Green Diesel has very similar properties as diesel from petroleum base so blending ration could be varied greatly to meet the market requirement. Furthermore, Green Diesel has superior Cetane number then blending into petroleum base diesel could improve the performance of blended diesel.



# RENEWABLE POWER BUSINESS

## Renewable Energy Business Group

The Company expands its business to produce and distribute solar and wind electric power generated from renewable energy according to the government policy that promotes the production of electricity from renewable energy for reducing the dependence on import of energy and to stabilize the energy security. At the present, the Company operates 12 projects as detailed below:

### 1) Solar Power Plant

4 Projects with total production capacity of 278 megawatts.

EA Solar Farm : Phatthana Nikhom District / Lopburi Province	8 megawatts
Project 1 : Takhli district /Nakhon Sawan Province	90 megawatts
Project 2 : Mueang Lampang District / Lampang Province	90 megawatts
Project 3 : Phrom Phiram District / Phitsanulok Province	90 megawatts

### 2) Wind Power Plant 8 Projects with total production capacity of 386 megawatts.

8 Projects with total production capacity of 386 megawatts.

Hadkanghan 1 : Ranod District / Songkhla Province	36 megawatts
Hadkanghan 2 : Huasai District /Nakhon Si Thammarat Province	45 megawatts
Hadkanghan 3 : Pak Panang District /Nakhon Si Thammarat Province	45 megawatts
Hanuman 1 : Subyai District/ Chaiyaphum Province	45 megawatts
Hanuman 5 : Thep Sathit District/ Chaiyaphum Province	48 megawatts
Hanuman 8 : Subyai District/ Chaiyaphum Province	45 megawatts
Hanuman 9 : Thep Sathit District/ Chaiyaphum Province	42 megawatts
Hanuman 10 : Bamnet Narong District/ Chaiyaphum Province	80 megawatts

The Company operates a business of produces and distributes electric power generated from renewable energy form the sun and wind distribute to the Provincial Electricity Authority (PEA) and the Electricity Generating Authority of Thailand (EGAT) with a power purchase agreement (PPA)



# ELECTRIC VEHICLE ENERGY STORAGE SYSTEM



# Electric Vehicle and Energy Storage System

## 1. Battery development, manufacturing and distribution business

To enhance competitiveness in the renewable energy business and to comply with the business operation policy of the Company's Group, the Company acquired ordinary shares of Amita Technologies Inc. (AMITA-Taiwan), a company incorporated under the law of Taiwan, the Republic of China (ROC) and listed on the Emerging Stock Market of the Stock Exchange of Taiwan to operate lithium-ion polymer battery development and manufacturing business. In addition, the Company has established a subsidiary, i.e. Amita Technology (Thailand) Co., Ltd. to develop, manufacture, and distribute lithium-ion batteries. At present, the plant has already started phase 1 production (1 GWh per year) in late 2021. Thereafter, the production capacity will be gradually increased in the next phase to meet the market demand. At the beginning, the Company distributed to electric vehicle business within the group, such as E-Bus, E-Ferry and Battery Locomotive. The Company has built multi-faceted knowledge base covering research and development of products through collaboration with public and private sectors both domestically and overseas and development of its personnel's manufacturing expertise so that they would be able to accommodate production lines in advanced industries toward the targets set forth.

### Nature of Products

Characteristics of lithium-ion battery is an energy storage unit that has high electric power storage capacity and is rechargeable upon the battery energy running out as it contains chemicals that allow for reversible reaction with recharging capability by such a device as "charger." Generally, the battery properties depend on the substances used as the battery electrode components. The Company has redesigned the new type of battery to possess distinctive properties with higher energy storage capacity, lighter weight, longer useful life and better response to demand for fast charging. The Company's lithium-ion battery contains no environmentally hazardous components like liquid, acid or lead. With strong commitment and determination, it has developed and produced lithium-ion batteries for diverse applications domestically as follows:

#### (1) Electric Vehicle

These electric passenger cars, electric trucks, electric ferries and Battery Locomotive, can help lessen pollution from internal combustion engines, reduce use of fuel oil, and prevent emission of exhaust gases into the air. Using electric power for automobiles can be regarded as an alternative energy to efficiently replace fuel energy. Especially amid the increasing concerns about global warming, use of lithium-ion batteries can be a good choice of power for electric vehicle and benefit to the environment.

#### (2) Energy Storage System : ESS

Since renewable energy becomes part of electric power industry with an image of clean technology, it has increasingly been used for electricity generation. However, renewable energy has some limitations concerning system stability as most of them come from solar and wind power, hence inability to generate and distribute electricity at a consistent pace. As such, energy storage system has increasingly played a significant part in power generation system, paving way for advancement toward the age of energy for the future.

Energy storage system (ESS) refers to a system and equipment which can change electric power or electricity to power in other forms so that electricity can be stored for use when needed, and will change the stored energy to electric power again when electricity is needed. ESS is very essential to the electric system in the future as it can help stabilize the electricity generating system and maintain consistent electricity quality. In addition, it helps support the change of electrical load to the appropriate period of time. For example, when electricity generated exceeds the existing electrical load, instead of throwing it away, the excess energy can be stored in the ESS for the period of lower electricity generation. This will enable smooth energy management in overall.

Strengths of energy storage system (ESS) are as shown below:

- Enhance stability of renewable energy for consistent electricity generation even when there is disruption in renewable energy power generation such as in case of thick clouds blocking sunlight (solar radiation density) or no wind blow (wind speed), etc.
- Serve as a backup energy source to store electric power from the generation system and for use in place of solar power which cannot be generated during night time.
- Stabilize the electric system to cope with fluctuations in the electric system by using power from batteries to maintain stability of the electric pressure and frequency of the system.
- Manage congestion of electric power network by having power from batteries to supplement the system instead of transmitting electricity from afar in case such areas need high volume of electricity for a certain period of time. The ESS uses lithium-ion batteries as they are suitable for installation, storage, and fast transmission of electricity, and worthwhile compared with their useful life. In

# ELECTRIC CHARGING STATION SERVICE BUSINESS



**E-ANYWHERE**

**SERVICE FEES**  
 ค่าบริการในกรณีรถประเภท Plug-in Hybrid Type 2  
 Service fees for Plug-in Hybrid Type 2

ระยะเวลา/Time	ค่าบริการ/Fees
60 นาที/Mins	50 บาท/Thb
120 นาที/Mins	80 บาท/Thb
180 นาที/Mins	110 บาท/Thb

ค่าบริการสำหรับรถประเภท Plug-in Hybrid Type 2  
 ค่าบริการเริ่มต้น 50 บาท/ชั่วโมง

☎ 094 886 4245  
 @eanywhere  
 #eanywhere.th  
 eanywhere.com

## Electric charging station service business (For electric vehicle)

The Company has expanded its business to large-scale electric vehicle charging stations to a greater extent to serve electric vehicles under “EA Anywhere” brand, operated by Energy Mahanakhon Company Limited, its subsidiary. Its objective is to promote use of clean energy in the automobile industry to reduce greenhouse gas emission and also use of renewable energy which is environmentally friendly in place of fuel energy in the country’s transport system. This also responds to the development of infrastructure in preparation for electric automobile innovation or next generation automotive industry.



- **Ultra-Fast Charge : DC 150/300/360 kW**

- DC 360 kW and DC 300 kW, the fastest charger that can serve large battery electric vehicles such as electric ferries, electric buses.
- DC 150 kW chargers can serve mid battery electric vehicles (BEV) only, for example, electric buses and electric vehicles.



- **Super-Fast Charge : DC 40 kW**

DC 40 kW chargers can serve for Electric Vehicles car only.



- **Normal Charge : DC 22 kW**

AC Normal chargers can serve electric vehicles car both Plug-in Hybrid (PHEV) and Battery Electric Vehicles (BEV)

# ELECTRIC VEHICLE BUSINESS



# Electric Vehicle Business

The prevailing global warming situation has caused rising global temperature while the PM 2.5 problem from incomplete combustion in diesel engine results in toxic emissions from vehicle exhaust, i.e., Particulate matter and black soot, etc.

Commercial vehicles used in Thailand which are rather old and create black soot particles are a major source of carbon emissions and PM 2.5. Recognizing the significance of such problem, the Company has expanded its business to commercial electric vehicles, starting with construction of the assembly plant of large commercial electric vehicles in Ban Pho district, Chachoengsao province which covers an area of about 55,000 square meters. The Company's electric vehicle business is environmentally friendly and enables the Company to utilize electric vehicles in its operation with lower fuel cost than using combustion-engine vehicles. It also supports the National Energy Plan to drive Thailand towards clean energy and to reduce carbon emission to achieve net zero carbon emission within 2065-2070.

## (1) Electric Commercial Vehicle

### • Heavy Electric Vehicle

The Group completed construction an assembly plant for electric commercial vehicle which is 100% electric buses and electric truck using high quality lithium-ion batteries produced by the Group. The electric commercial vehicle assembly plant started commercial operation in 2021 has assembled and delivered over one thousand electric buses.

For electric bus manufactured by the Company has driven efficiency and contain no internal combustion engine which would cause air and noise pollution. It can drive continuously on all types of roads, traffic and weather condition. Its reliability is no less than that of internal combustion engine vehicles. It is installed with 250-350 kWh high quality lithium-ion battery produced by the Company, and this helps uplift eco-friendliness and sustainability of the road trip.

### • Light Electric Vehicle

The Company conducted research and development of commercial electric vehicles and launched the 1-ton electric truck of Thai nationality "MINE MT30" under the concept: Driving Toward Net Zero by MINE MT30. This has been in line with the Company's vision aiming at clean and eco-friendly energy and applying technology and innovation to develop business toward the net zero goal and drive Thailand toward the low carbon society.

## (2) Electric Ferry

MINE SMART FERRY has been designed by the Group teams and produced 100% by Thai labor under the Corporate Social Innovation (CSI) concept with its potential and innovation availability. MINE SMART FERRY is a 24-meter catamaran boat with marine-grade aluminum alloy structure and 250-passenger capacity. Its maximum speed is up to 16 knots. With the use of 700-800 kWh lithium-ion battery produced by the Group and equipped with ultra-fast charge technology of EA Anywhere, the battery can be charged to 85% in only 15 minutes. The electric boat can travel by as high as 80 kilometers per one charge. In 2022, the Company developed a new electric ferry fleet, with 20-meter long and 6-meter wide and 150-passenger-capacity boat using 540 kWh lithium-ion battery equipped with ultra-fast charge technology. The electric ferry service will be provided along the Chao Phraya River to increase the number of electric ferries to adequately meet demand of customers looking forward.

MINE SMART FERRY has turned around public transport along the Chao Phraya River by modernizing and making it more Eco-friendly and causing neither water pollution nor PM 2.5. MINE SMART FERRY has been registered as the first Thai electric ferry which has passed the examination, safety test and sailing standard of the Marine Department. It is a Thai innovation and won the National Innovation Awards 2020 for Economy from the National Innovation Agency.

## (3) Battery Locomotive and Powercar

The Company had research and development on Battery Locomotive and Powercar base on State Railway of Thailand standard. Battery Locomotive will be tested and actual use instead of Diesel Electric Locomotive as company mission "Mission No Emission". Battery Locomotive was designed under 20 ton-axle specification that can be use in any service included Shunting service at Krung Thep Aphiwat Central Terminal Station, Cargo delivery service between Laemchabang port and ICD Ladkrabang and Passenger delivery service in city route or inter city route. Battery Locomotive maximum speed is 120 kilometer per hour and maximum load is 2500 ton as State Railway of Thailand requirement. Battery Locomotive contains 821 kWh Battery and another 3.2 MWh Battery on Powercar. This battery can be fully charged by our developed station within 1 hour. Total service distance is 200-480 kilometer upon loading and usage condition. Battery Locomotive is actual run testing with State Railway of Thailand. Finally Battery Locomotive can help operator not only reduce emission but also saving more than 40% of energy use.

## Other business

### 1. Battery Electric Vehicle and Electronic Products Testing Center

The Company has established a battery testing center for electric vehicles and electronic products to test the efficiency and safety and for international standard battery certification. It is also aimed at promoting use of electric vehicles according to the 30@30 policy of the government, which encourages comprehensive production in the electric vehicle industry throughout the production chain with the target to have zero-carbon emission auto vehicles in a 30% proportion by 2030 (based on the data from the Energy Policy and Planning Office). Generally, battery is one of the hazardous products which require safety test on many aspects and certification before distribution. The testing standards vary by usage as well as user country. The Company's testing center aims to become an international testing hub for electric vehicle manufacturers in ASEAN and worldwide. It also plans to include testing for diverse sizes and usage of battery. The Company currently has high-technology machinery which enables testing in accordance with international standards and expects to commence the battery testing operation by 2023.

### 2. Research and Development

The company established subsidiaries to conduct research and development of products related to palm oil, lithium-ion batteries, and electric vehicles, involving electric cars, electric ferries, and battery locomotive. This serves as an extension of development to launch new innovative products, improve the potential and quality of existing products, and boost the competitiveness of the group on a long-term sustainable basis.

#### Green Technology Research Company Limited (GTR)

Established to develop and conduct research works on innovation to pursue development and add value to Thai agricultural products. The Company's products or services involve the manufacturing processes from palm-related raw materials for higher value added. The manufacturing processes innovated can be registered for patents. The target customers are companies in its Group. Such as Green Diesel projects and Phase Change Material (PCM) which is the new research and development under Biodiesel business for value adding of crude palm oil using as substrate consisting of

- (1.) Green Diesel (GD) products: for blending with diesel fuel to enhance the efficient and engine performance.
- (2.) Phase Change Material (PCM) is a substance which releases/absorbs sufficient energy at phase transition to provide useful heat/cooling. The PCM is used in many commercial applications where stable temperature is required such as being a component of building materials or fabric fibers. The demanding of PCM is increased in the countries with inclement weather.



#### Mine Mobility Research Company Limited (MMR)

Develops and invents research in electric vehicles, such as electric cars, electric passenger ferry, and Battery Locomotive and battery system in order to expand the technology of electric vehicles to respond to the needs of the customer under the concept of "MISSION NO EMISSION". The "Zero Pollution Mission" is aimed and focused on vehicles without pollution and being the environmental friendly, economical, and safe. This is also easy to maintain in the long-term so that Thais can use electric cars and electric passenger ferry with high quality and to transform Thailand into an innovative city without pollution in the future. According to the "Zero Pollution" intention, we have been developing the research center for electric cars under the name "MINE Mobility" in line with Electric Vehicle (EV) Solution, with a focus on pollution-free innovation, with its subsidiary, Mine Mobility Corporation Co., Ltd., as a manufacturer, distributor, and manufacturer of electric vehicles and electric vehicle parts. In recent years, the company designed, developed and manufactured the electric passenger ferry using an 800 kWh lithium-ion battery, which can support maximum speed charging from the DC Fast Charge charger with a total power of more than 3 megawatts as an energy source to drive electric motors under the name "MINE SMART FERRY". By 2022 the Company developed Battery Locomotive using 821 kWh lithium-ion battery and Power car using 3.2 MWh lithium-ion battery and Develop Charging station for Battery Locomotive which can support fully charge within 1 hour.

# Stakeholder Engagement

The Company has analyzed and reviewed to compile the overview of the stakeholders by taking the analysis results of 2019 along with factors such as dependent, influence, including other factors appropriately. Stakeholders are divided into 9 groups with a practical approach that takes into account all stakeholders. There were stakeholders' prioritization and participation. There was a communication process to be aware of the expectations or concerns of stakeholder groups and can use the information to define a business guideline that can respond to all issues and all stakeholder sectors. In this regard, cooperative operations with stakeholders will help to create good relationships in which the Company and its affiliates are ready to drive all stakeholder groups to thrive and move forward together stably and sustainably.

## Engagement Channel and Stakeholder's Issue

(Importance of stakeholders ordered by high to low)

Stakeholder	Engagement Channel	Stakeholder's Issue and expectations	Responses to Stakeholders' Expectations	Sustainability Topic
Employees	<ul style="list-style-type: none"> <li>Complaints or Whistleblowing Channels</li> <li>Mailbox</li> <li>HR internal communication</li> <li>Employee engagement survey</li> <li>Town Hall Meeting</li> </ul>	<ul style="list-style-type: none"> <li>Fair wages and benefits</li> <li>Career opportunities and stability, Happiness in workplace</li> <li>Human rights and labor practices</li> <li>Confidence in the equipment and safety of the production process</li> <li>Safety workplace</li> </ul>	<ul style="list-style-type: none"> <li>Standard safety management</li> <li>Standard environmental management</li> <li>Provident fund</li> <li>Strict compliance with human rights and employment policies</li> <li>Career path and advancement</li> <li>Continuous knowledge enhancement through knowledge sharing</li> </ul>	<ul style="list-style-type: none"> <li>Nature of business</li> <li>Occupational Health and Safety</li> <li>Human Resource Management</li> </ul>
Business partner / Customer	<ul style="list-style-type: none"> <li>Customer Satisfaction Survey</li> <li>Formal Meeting</li> <li>Complaints and Suggestions Channels</li> <li>Meeting on occasions</li> <li>Responding to Disclosure Requests</li> <li>Contract and Written Agreement</li> <li>Online channels such as LINE Official Account / Facebook</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the equipment and safety of the production process</li> <li>Safety workplace</li> <li>Business transparency</li> <li>Human rights and labor practices</li> <li>GHG emissions</li> <li>Quality of products and services</li> </ul>	<ul style="list-style-type: none"> <li>Clear and standard procurement policy</li> <li>Anti-corruption policy and promotion through implementation</li> <li>Good corporate governance, transparency and examinability</li> <li>Ethical obligation to protection of confidential information</li> <li>Improvement and maintenance of equipment to ensure efficiency</li> <li>Research team for development of products and services</li> </ul>	<ul style="list-style-type: none"> <li>Nature of business</li> <li>Occupational Health and Safety</li> <li>Corporate Governance Policy</li> <li>Anti-corruption</li> <li>Human Resource Management</li> <li>Risk management</li> <li>Resource Management, Reuse and Recycle</li> <li>Sustainable supply chain management</li> <li>Customer relations management</li> <li>Air Quality Management and GHG Emissions</li> </ul>
Investor / Shareholder	<ul style="list-style-type: none"> <li>Investment Conference, Roadshow, Opportunity Day and Analyst Meeting</li> <li>IR call and Email</li> <li>Public information on EA's website</li> <li>Annual General Meeting</li> <li>Site Visit</li> <li>Interview with Executives</li> </ul>	<ul style="list-style-type: none"> <li>Opportunity and Risk management</li> <li>Innovation management</li> <li>GHG emissions</li> <li>Business transparency</li> </ul>	<ul style="list-style-type: none"> <li>Anti-corruption policy and promotion through implementation</li> <li>Good corporate governance, transparency and examinability</li> <li>Appropriate dividend payment</li> <li>Transparent information disclosure</li> <li>Appropriate business plan and risk management</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Governance Policy</li> <li>Anti-corruption</li> <li>Risk management</li> <li>Resource Management, Reuse and Recycle</li> <li>Nature of business</li> <li>Air Quality Management and GHG Emissions</li> </ul>

Stakeholder	Engagement Channel	Stakeholder's Issue and expectations	Responses to Stakeholders' Expectations	Sustainability Topic
Society / Community	<ul style="list-style-type: none"> <li>• Communication through Employees in local area</li> <li>• Community Survey</li> <li>• Complaints and Suggestions</li> <li>• Meeting on Occasions</li> <li>• Public information on EA's website</li> <li>• Community Activities</li> <li>• Publication of Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Community relations engagement</li> <li>• Human rights and labor practices</li> <li>• Social and Environmental impact from the</li> <li>• Customer well-begin and economic distribution</li> <li>• Quality of products and services</li> </ul>	<ul style="list-style-type: none"> <li>• Human rights policy and promotion</li> <li>• Anti-corruption policy and promotion through implementation</li> <li>• Good corporate governance, transparency and examinability</li> <li>• Support for public activities</li> <li>• Environmental policy and promotion through implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Nature of business</li> <li>• Occupational Health and Safety</li> <li>• Social responsibility</li> <li>• Human Resource Management</li> <li>• Air Quality Management and GHG Emissions</li> <li>• Waste management</li> <li>• Resource Management, Reuse and Recycle</li> <li>• Social enterprise</li> <li>• Sustainable supply chain management</li> <li>• Customer relations management</li> </ul>
Environment / Civil Society	<ul style="list-style-type: none"> <li>• Public information on EA's Website</li> <li>• Complaints and Suggestions channels</li> <li>• Clarification of the facts to the public</li> <li>• Publication of Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Social and Environmental impact from the</li> <li>• Company's operations</li> <li>• Customer well-begin and economic distribution</li> <li>• Innovation management</li> <li>• GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Human rights policy and promotion</li> <li>• Anti-corruption policy and promotion through implementation</li> <li>• Good corporate governance, transparency and examinability</li> <li>• Support for public activities</li> <li>• Environmental policy and promotion through implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality Management and GHG Emissions</li> <li>• Waste management</li> <li>• Resource Management, Reuse and Recycle</li> <li>• Social enterprise</li> <li>• Nature of business</li> <li>• Air Quality Management and GHG Emissions</li> <li>• Emissions</li> </ul>
Co-investors	<ul style="list-style-type: none"> <li>• Board and management meeting for subsidiaries and associated companies and Joint Venture</li> <li>• Public information on EA's website</li> <li>• Publication of Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Business transparency</li> <li>• Human rights and labor practices</li> <li>• GHG emissions</li> <li>• Innovation management</li> <li>• Opportunity and Risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Anti-corruption policy and promotion through implementation</li> <li>• Good corporate governance, transparency and examinability</li> <li>• Transparent information disclosure</li> <li>• Appropriate business plan and risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Governance Policy</li> <li>• Anti corruption</li> <li>• Risk management</li> <li>• Resource Management, Reuse and Recycle</li> <li>• Nature of business</li> <li>• Air Quality Management and GHG Emissions</li> <li>• Climate change management</li> </ul>
Creditors	<ul style="list-style-type: none"> <li>• Meeting between Management and Creditors</li> <li>• Public information on EA's Website</li> <li>• Publication of Annual Report and Sustainability Report</li> <li>• Contract and Written Agreement</li> </ul>	<ul style="list-style-type: none"> <li>• Business transparency</li> <li>• Human rights and labor practices</li> <li>• Innovation management</li> <li>• Opportunity and Risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Anti-corruption policy and promotion through implementation</li> <li>• Good corporate governance, transparency and examinability</li> <li>• Transparent information disclosure</li> <li>• Appropriate business plan and risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Governance Policy</li> <li>• Anti- corruption</li> <li>• Risk management</li> <li>• Nature of business</li> <li>• Air Quality Management and GHG Emissions</li> </ul>
Government Sector / Regulator	<ul style="list-style-type: none"> <li>• Meeting between the Company and related Sector</li> <li>• Meeting on Occasions</li> <li>• Partnership and supports of Government's Projects</li> <li>• Public information on EA's website</li> <li>• Publication of Annual Report and Sustainability Report</li> <li>• Being a lecturer and attending seminar</li> </ul>	<ul style="list-style-type: none"> <li>• Business transparency</li> <li>• Human rights and labor practices</li> <li>• Innovation management</li> <li>• Opportunity and Risk management</li> <li>• GHG emissions</li> <li>• Compliance with relevent laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Anti-corruption policy and promotion through implementation</li> <li>• Good corporate governance, transparency and examinability</li> <li>• Appropriate business plan and risk management</li> <li>• Environmental policy and promotion through implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Governance Policy</li> <li>• Anti-corruption</li> <li>• Risk management</li> <li>• Resource Management, Reuse and Recycle</li> <li>• Nature of business</li> <li>• Air Quality Management and GHG Emissions</li> </ul>

# “Energy Absolute Sustainable Development”

Energy Absolute PCL's vision is to become a "Leader in the alternative energy business, using modern technology and environmentally friendly technology to maximize returns to all stakeholders, shareholders, partners, and employees with fairness" in line with the Company's goal "Energy Transformation to the Future to a Low Carbon Society". The Company also integrates the sustainable development goals into its business operations, allowing it to identify significant concerns relating to its operations in order to maximize positive impact or effectively eliminate the negative impact. Thus, the actual impacts can be reflected as part of defining the core strategy within the organization to enhance a capacity in risk and cost management, as well as develop innovations towards higher efficiency in business operations.

To drive the sustainability, the Company and its subsidiaries operate business activities and related activities according to the GRI Standards and the United Nations Sustainable Development Goals (SDGs) by focusing on two approaches: the assessment of human and environmental risks arising from its business operations, both positive and negative, and the evaluation of guidelines for products, services, or investment to support the effective goals of sustainable development. The Company commits to using our knowledge, capability, experience, and expertise in supporting 14 of the 17 Sustainable Development Goals (SDGs), which are relevant to the Company's capacity and potential, to mobilize sustainable development in all steps of our production process, uplift quality of life and wellbeing of the stakeholders, and to promote the nation's sustainable economic growth.



# Energy Transformation to the Future to a low Carbon Society

## Economic

Supporting economic development and enhancing the city's development to be inclusive and sustainable

The Company has set a goal to grow the business through the strategic implementation of innovation and operations for sustainable business growth by focusing on the organizational structure and management that is appropriate to supporting economic development and enhancing the city's development to be inclusive and sustainable as well as the competitiveness.



## Environment

Optimizing the use of modern technology and being environmentally friendly

The Company strives to be a leader in the alternative energy business by optimizing the use of modern technology and being environmentally friendly to combine the potential of the business through the operation process to deliver good products to customers while reducing the impact on people and the environment arising from business operations throughout the supply chain.



## Social

Building community and society well-being and developing the workforce according to the country's skills requirements

The Company has social responsibility by respecting differences and using human rights principles as the basis of operations that emphasize creating shared values for sustainable growth. Moreover, relevant law and various international standards are accepted for building community and society well-being and developing the workforce according to the country's skills requirements



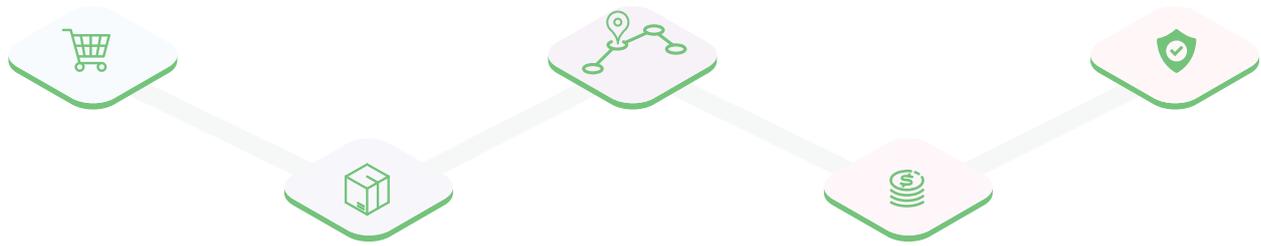
## Corporate Governance

### Creating long-term sustainable returns for investors and all stakeholders

The company adheres to and complies with the laws and regulations related to business operations strictly, including the importance of good governance or good corporate governance, such as the Securities and Exchange Commission and the Stock Exchange of Thailand, in order to have an efficient, transparent, auditable management system that will help to creating long-term sustainable returns for investors and all stakeholders.



# Value Chain and Key Stakeholders



	Sourcing and Storing Raw Material	Producing	Distributing	Marketing and Sale	After Service
Key Stakeholders	<ul style="list-style-type: none"> <li>• Employees</li> <li>• Business Partner</li> <li>• Community/Social</li> <li>• Government Sector</li> </ul>	<ul style="list-style-type: none"> <li>• Employees</li> <li>• Community/Social</li> <li>• Government Sector</li> <li>• Co-investors</li> <li>• Creditor</li> </ul>	<ul style="list-style-type: none"> <li>• Employees</li> <li>• Community/Social</li> <li>• Customer/Consumer</li> <li>• Co-investors</li> </ul>	<ul style="list-style-type: none"> <li>• Employees</li> <li>• Customer/Consumer</li> <li>• Investor/Shareholder</li> <li>• Creditor</li> <li>• Co-investors</li> </ul>	<ul style="list-style-type: none"> <li>• Employees</li> <li>• Customer/Consumer</li> <li>• Investor/Shareholder</li> <li>• Partner</li> <li>• Co-investors</li> </ul>
Value for the Company	<ul style="list-style-type: none"> <li>- Maintain business continuity</li> <li>- Optimize raw material and inventory management</li> </ul>	<ul style="list-style-type: none"> <li>- Increase community relationships</li> <li>- Increase efficiency and reduce waste of production processes</li> <li>- Improve product value and quality</li> </ul>	<ul style="list-style-type: none"> <li>- Optimize transportation management</li> <li>- Effective inventory and distribution management</li> </ul>	<ul style="list-style-type: none"> <li>- Expand market / quality and variety of products</li> <li>- Market Leader</li> <li>- Reasonable and competitive pricing</li> <li>- Good corporate image and Branding</li> </ul>	<ul style="list-style-type: none"> <li>- Increase shareholder return</li> <li>- Increase sales growth</li> <li>- Market Leader</li> <li>- Increase and maintain partner/ customer satisfaction</li> <li>- Good corporate image and Branding</li> </ul>
Value for Stakeholders	<ul style="list-style-type: none"> <li>- Improve quality of life</li> <li>- High-quality products</li> <li>- Develop knowledge partnerships</li> </ul>	<ul style="list-style-type: none"> <li>- Promote local employment and develop the local economy</li> <li>- Reduce negative impact to the environment</li> </ul>	<ul style="list-style-type: none"> <li>- Promote local employment and develop the local economy</li> <li>- Reduce negative impact to the environment</li> </ul>	<ul style="list-style-type: none"> <li>- Able to access quality and environmental friendly products</li> <li>- Increase customer satisfaction</li> <li>- Upgrade public transportation and provide a more modern and comfortable</li> </ul>	<ul style="list-style-type: none"> <li>- Able to access quality and environmental friendly products</li> <li>- Increase customer satisfaction</li> <li>- Upgrade public transportation and provide a more modern and comfortable</li> </ul>



## Strategic Goals

Energy Absolute Public Company Limited identified the significant factors that may affect the operations of the organization in the future, including key stakeholders both internal and external aspects, as well as positive and negative impact on people and planet arising from business operations and the value chain for sustainable development, covering Environmental, Social and Governance Dimensions (ESG). Moreover, the Company has integrated the sustainable development goals as part of the corporate strategic planning to support for capacity strengthening of the management of material risks and costs, minimize the negative impacts, creation and access to new markets, and creating innovations in business models making them more efficient therefore reinforce the viability of the Company in the long term.

In 2022, the Company has given importance to the issue of climate change which is already affecting our world today including, environmental issues, air pollution, and global warming such as severe weather, drought, floods and other disasters. Hence, the Company invested in a lithium-ion battery factory and energy storage system to increase efficiency in the country's electricity generation and distribution system, serving to all types of electric vehicle industry which in line with the government's promotion of new S-curve industry. Beside the electric vehicle producer, the Company also develop the energy storage systems for renewable energy power plants to reduce the fluctuation of electricity and create more stable power supply and supports the increase in the proportion of renewable energy power plants in the future toward energy sustainability especially, reduce air pollution and seeks to limit global warming, the most critical goal of COP26. EA has a plan to develop Thailand as an EV production hub for the ASEAN region (ASEAN BEV HUB) by producing the battery as an essential part in the development of commercial electric vehicles for example, "MINE Bus", "MINE Smart Ferry", "MINE Truck" and Electric Vehicle Charging Station "EA Anywhere".

In addition, the Company has a strategy to drive the public transportation systems to become modern, comfortable, and help reduce pollution sustainably along with drive the country towards a low-carbon society. EA has been relentlessly determined to drive our sustainability operations in term of create job opportunities for the Thai people, help improve the quality of life to have a better income and well-being, help Thailand overcome the «middle-income trap, moving toward becoming a high- income economy. This will raise GDP per capita and promote inclusive and sustainable economic growth according to the country definitions



# Process for Defining Report Content

The Company adheres to stakeholder engagement and sustainability context principles as a key in the process of identifying and defining report contents. There are 4 steps as follows;





## The factors used in the assessment of materiality issues



## Materiality issues of the business

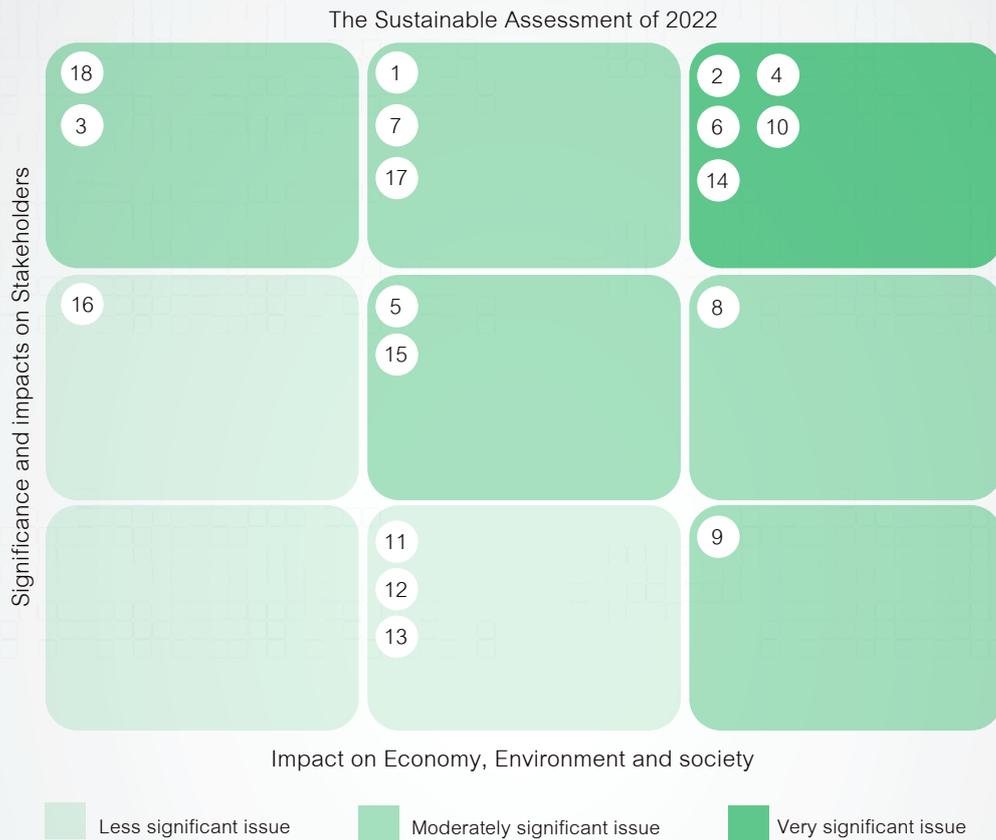
The Company has in place the assessment guideline which is the materiality of the business to lead to value creation in the long term to the Corporate and to be the important tool to identify the sustainable operation direction of the organization following the GRI Standards (Core). Stakeholders are allowed to take part in the significant issues, for example, becoming a leader in alternative energy business by using cutting-edge technology, environmental-friendly. The issues are consistent with the sustainable development target of the United Nations (SDGs) in the 3 Goal – Good health and well-being, the 7 Goal – Affordable and clean energy, the 8 Goal – Decent work and economic growth, the 9 Goal – Industry, innovation and infrastructure, the 12 Goal – Responsible consumption and production, and the 13 Goal – Climate action

Analyze the sustainability topics in the Value Chain of the Company Group	Analyze the topic that stakeholders prioritize	Analyze the consistency to the scope of risk management	Continually inspect, monitor to revise and develop
to continue the business operation of the Group which includes the existing business and future projects.	in order that the preparation of operation and improvement plan is consistent to opinions of stakeholders	to ensure prudent, cautious operation with a proper alternative plan	to create trust and continual and sustainable development
<ul style="list-style-type: none"> <li>• Biodiesel business: Raw material procurement, sales and marketing, production, research and development, risks</li> <li>• Renewable energy power plant business: Electricity generation management and maintenance, construction of new power plants which already listed in the power purchase agreement (PPA)</li> <li>• The business pending the development in Thailand and abroad Other important issues for the business group and the same industry</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement survey of employees for analysis and preparing an improvement plan</li> <li>• Take a satisfaction survey and the need of communities around the factory and power plant</li> <li>• Listen to opinions, suggestions, and satisfaction of shareholders, investors, analysts and the general public, employees, business partners</li> <li>• Practice guideline and framework for the report under international stand are included in the planning process</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze the comparison between business direction and business plan Compare risks of the Company</li> <li>• Group which cover the current risks and the risks that may occur in the future</li> </ul>	<ul style="list-style-type: none"> <li>• Propose the assessment on sustainable development issue to the Executive Committee and the Board of Directors for approval in the operation together with the business plan of the Company</li> <li>• Follow-up the operation and regularly review the operation</li> <li>• Disclose the related information in the report of Sustainable Development and on the website</li> <li>• Open up for suggestions, opinions from stakeholders for continual improvement</li> </ul>

# Materiality Analysis

The materiality analysis presented within this report is assessed through collaboration with internal and external stakeholders. We consider relevant issues in economics, social, and environmental aspects to evaluate sustainability materiality and stakeholder inclusiveness according to the GRI Standards as well as prioritization of sustainability risks and proper preparation of response plan. The Company prioritizes the key sustainability issues of the Energy Absolute Group and categorize the impact on stakeholders into 3 categories: Very important; Medium importance and Less important as follows:

## Prioritize the important materiality issues



Corporate Governance	Economic	Environment	Social
<ul style="list-style-type: none"> <li>1. Anti-Corruption</li> <li>2. Risk Management throughout value chain</li> <li>3. Good Corporate Governance</li> </ul>	<ul style="list-style-type: none"> <li>4. Innovation Management</li> <li>5. Sustainable Supply Chain Management</li> <li>6. Quality and Product Safety</li> <li>7. Cyber Security and Data Privacy Protection</li> </ul>	<ul style="list-style-type: none"> <li>8. Energy efficiency throughout the production process</li> <li>9. Environmental management</li> <li>10. Climate Change</li> <li>11. Water Management</li> <li>12. Waste Management</li> <li>13. Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>14. Occupational Health and Safety</li> <li>15. Social and Community Responsibility</li> <li>16. Human Rights and Labor Law</li> <li>17. Brand Trust (Service)</li> <li>18. Human Resource Management</li> </ul>

## Key issues and Goals

	Key issues	Stakeholders and Impact boundary		Management guidelines and goals	Link to the SDGs
		Internal	External		
Corporate Governance	Anti-Corruption	●	●	No situation related to corruption  Member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)	
	Risk Management throughout value chain	●	●	Risk Management Policy  Promote a culture of risk management throughout the organization	
	Good Corporate Governance	●	●	Good corporate governance  Create long-term sustainable returns for investors and all stakeholders	
Economic	Innovation Management	●	●	Development of new technologies and innovations that are environmental friendly  Integrate modern technology into the business and in line with customer requirements	  
	Sustainable Supply Chain Management	●	●	No complaints related to ESG  Green procurement Policy	 
	Quality and Product Safety	●	●	Develop products to support economic development and human well-being  Expand infrastructure network to coverage and promote sustainable transport systems  Raising the level of urban development to be inclusive and sustainable	  
	Cyber Security and Data Privacy Protection	●	●	Develop a system for collecting customers' personal information and preventing data leaks.	

	Key issues	Stakeholders and Impact boundary		Management guidelines and goals	Link to the SDGs
		Internal	External		
Environment	Energy efficiency throughout the production process	●	●	<p>Availability factor index of power plants not less than 98%</p> <p>Invest in save energy projects of both solar and wind energy</p>	  
	Environmental management	●	●	<p>No significant environmental complaints</p> <p>Increase the efficiency of using clean and environmentally friendly technology</p> <p>Efficient use of natural resources</p>	 
	Climate Change	●	●	Reduce greenhouse gas emissions from corporate activities (CFOs)	
	Water Management	●	●	Reuse and reduce the water usage	
	Waste Management	●	●	Reduce production waste	
Social	Occupational Health and Safety	●	●	<p>No deaths from accidents at work for both employees and suppliers</p> <p>Lost time injury frequency rate (LTIFR) is 0</p> <p>Create a safety culture throughout the organization</p>	   
	Social and Community Responsibility	●	●	<p>No significant complaints from the community</p> <p>Collaboration with various educational institutions to develop human resources according to the skills required by the country</p> <p>Build the quality of life of the community and society</p>	 



# Corporate Governance

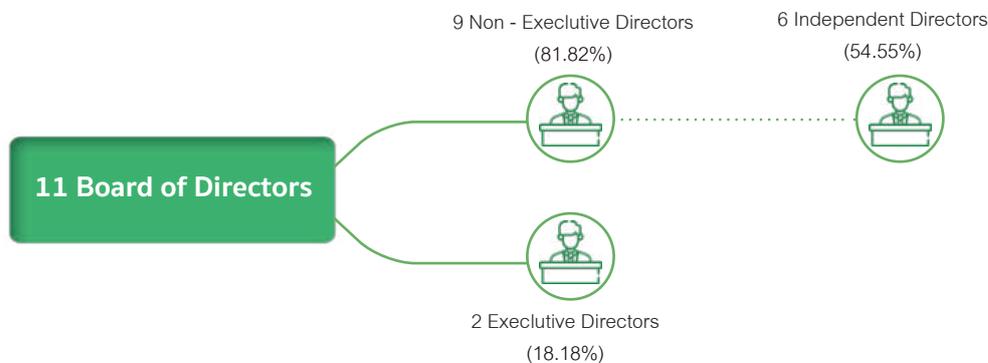
The Company recognizes the importance of corporate governance, or good corporate governance, and thus adopts the “Good Corporate Governance” set by the Stock Exchange of Thailand and, therefore, has implemented such “Good Corporate Governance” to guide the Company’s operations in order to enable effective and transparent management, ensuring trust and confidence among shareholders, investors, stakeholders, and all related parties.

## Board Structure

The Company realizes the significance of having management structure that is aligned with the long-term strategy of driving the Company’s business so that it can operate efficiently, transparently, business operation and maintain a balance of care for stakeholders. The Company has determined the management structure that is appropriate for the size, type and complexity of the business, as well as checks and balances to ensure the stakeholder’s involving in the management of the Company’s business.



The structure of the Board of Directors consists of the Board members and its sub-committees, appointed by the shareholders. The Board members are qualified by the applicable laws and regulations.



\*Target share of independent directors: Number of Independent Directors least one – third of all Director but not less than three person and complied with corporate governance least 50% of all Directors.

## Board of Diversity Policy

The Board of Directors appoints the Nomination and Remuneration Committees to screen and consider to ensure that the nomination procedures of the Board of Directors and high-level of executives, as well as remuneration, to ensure transparency, fairness, and appropriateness with regard to the business operations. For the nomination procedures, there will be at least 90 days’ notice prior to the opening for nominations from shareholders. In order to find the person who best suits the organization, the nomination process take into account diversity, such as gender, age, race, nationality, or religion, as well as diversity in each occupation based on experience or skills.

## Board Election Process

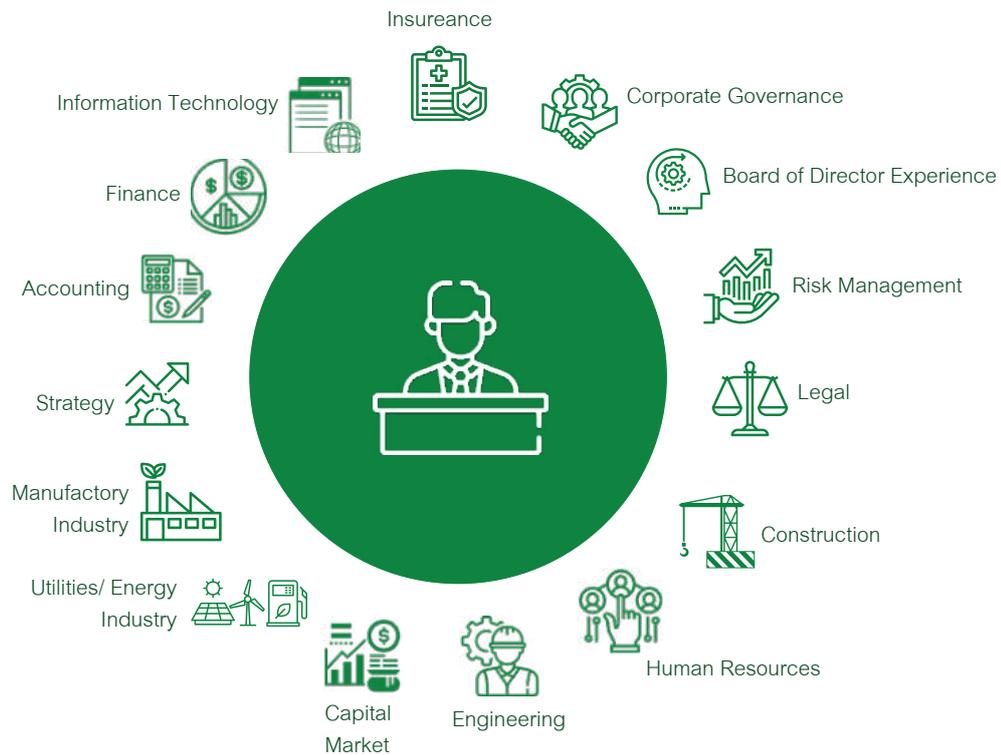
- 1.) The Company has Nomination and Remuneration Committee to select and propose the qualified person with morality, ethics and meets the requirements as prescribed in Section 68 of the Public Company Act B.E. 2535 and as stated in the related Notifications of the SEC and SET. The consideration also based on experience, knowledge, skills relevant to the business of the Company. Then the lists of selected applicants will be submitted to the Board of Directors for further proposal to the shareholders' meeting for selection and appointment. Currently, the Board of Directors consists of 11 members, 6 of them are Independent Directors, 2 of them are Executive Directors and 3 of them are non-Executive Directors.
- 2.) At the Annual General Meeting of Shareholders (AGM), one-third of all directors shall resign by rotation. In case the number of resigned directors cannot be precede, the similar amount to one-third of the directors to resign during the first year. In second year after registration of the company, the ballot papers will be provided for seeking director to resign. Later years, the directors who hold longest term shall be resigned. The resigning directors may be re-elected.
- 3.) Shareholders' meeting will appoint directors from majority votes according to the following rules and methods
  - 3.1 Shareholder has votes equal to one (1) share per one (1) vote.
  - 3.2 Each shareholder must use all existing votes according to Clause 3.1 to elect one person or many people as directors, however, the votes cannot be divided.
  - 3.3 Persons who receive the highest votes in descending order being elected as a director equal to the number of directors that should have or should be elected at that time. In the event that the person elected in the next order having equal votes in excess of the number of directors that the shareholders' meeting must elect at that time, the chairman of the meeting is the casting vote
- 4.) In the event that the position of the director is vacant due to reasons other than the expiration of the term, the Board shall select the qualified person and does not have the characteristics of being prohibited under the law on public limited companies and the law on securities and stock exchange, to be replaced in the next board meeting except that director's remaining term shall be less than two months. The person who is the replacement director will be in the position of director only for the remaining term of the director that replaced.
- 5.) The shareholders' meeting may have resolution to removal director(s) prior to the term expiration with the votes of not less than three-fourths (3/4) of the attending shareholders with total shares no less than half of total shares hold by the attending shareholders with the rights to vote.





## Board Skill Matrix

The Board of Directors has a varied range of qualifications and skills in accordance with the business strategy of the Company. The Board Skills Matrix is prepared base on experience, education, and training background.



### Board Skills Matrix

	Financial	Manufactory Industry	Account	Strategy	Energy Industry	Capital Market	Engineering	Human Resources	Construction	Legal	Risk Management	Board Experience	Corporate Governance	Insurance	Information Technology
1. Mr. Somchainuk Engtrakul 78 years (Male) (ID)	•					•				•	•	•	•	•	
2. Mr.Somphote Ahunai 55 years (Male) (Ex.Dr)	•	•		•	•	•	•		•		•	•	•	•	•
3. Mr.Amom Saphaweekul 48 years (Male) (Ex.Dr)	•	•	•	•	•	•					•	•	•	•	
4. Mr.Wuthilerd Chiannilkulchai 52 years (Male) (Non-Ex)	•	•	•		•	•	•				•	•	•		•
5. Mr.Sutham Songsiri 84 years (Male) (Non-Ex)				•				•			•	•	•		
6. ACM.Chainan Thumasujarit 72 years (Male) (ID)					•		•	•	•		•	•	•	•	
7. M.R.Bravochat Chatchait 62 years (Male) (ID)								•		•	•	•	•		
8. Pol.Gen.Patcharavat Wongsuwan 73 years (Male) (ID)										•	•	•	•		
9. Mr.Somboon Ahunai 67 years (Male) (Non-Ex)	•	•	•		•	•					•	•	•		•
10. Mr.Amornsuk Noparumpa 77 years (Male) (ID)	•		•	•		•		•		•	•	•	•		
11. Mr.Sompoph Keerasuntonpong 55 years (Male) (ID)	•		•	•		•	•				•	•	•		
<b>Total</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>4</b>	<b>3</b>

ID : Independent Director Non.Ex : Executive director

Ex.Dr : Executive director

## • Duties and responsibilities

Committee	Main Duty
Board of Directors	<ul style="list-style-type: none"> <li>• To perform their duties under applicable laws, objectives, regulations of the Company and resolutions of shareholders' meetings with a duty of loyalty, duty of care, respect the laws and regulations of the Company (Duty of Obedience) and disclose information to shareholders accurately, completely, transparently, and timely (Duty of Disclosure), accountability, as well as the full benefit of all shareholders.</li> <li>• To determine policy and regulate the Company in order to prepare guidelines for supporting anti-corruption measures to ensure that management is aware of the importance of this anti-corruption, and cultivates to be an organizational culture.</li> </ul>
Executive Committee	<ul style="list-style-type: none"> <li>• To consider and review direction of business operation to be in line with policy, target, operation plan, business strategy and the budget approved by the Board of Directors.</li> <li>• To consider the code of practice and operation manual of the Company.</li> </ul>
Audit Committee	<ul style="list-style-type: none"> <li>• To consider a financial report and the completeness of the information acknowledged, and to assess the appropriateness of accounting principles applied to the financial report.</li> <li>• To ensure that the Management has set the internal control system as well as internal control of appropriate information systems, including adequately addressing a wide range of potential risks, such as corruption risks and guidelines for communicating the importance of internal control.</li> <li>• To review the efficiency of the internal audit performance to ensure that the internal audit standard has been implemented.</li> <li>• To assist the compliance with morality, ethics and conflict of interest prevention policy.</li> </ul>
Nomination and Remuneration Committee	<ul style="list-style-type: none"> <li>• To consider the policy of nomination of directors and top executives, nominate, select, and propose a qualified person with morality, ethics, and qualifications suitable for the position.</li> <li>• To review and assess the work performance of the directors and executives.</li> <li>• To provide the succession plan, revise the development plan of the top executives.</li> <li>• To consider the preparation of the development plan for directors to develop knowledge of directors including the rules and laws related to the business of the Company.</li> <li>• To consider and propose the remuneration for the Board, sub-committee, and CEO.</li> </ul>
Risk Management Committee	<ul style="list-style-type: none"> <li>• To establish risk management policies, supervise and support efficient risk management covering the business operations of the Company, including the risk of corruption, and consider and review various measures to prevent those risks from being at an acceptable risk level.</li> <li>• To follow up the implementation, review the report of risk management, ensure the appropriateness and sufficiency of the risk management, ensure the risk management remains at an acceptable level, and ensure that the risk management has been continuously applied.</li> </ul>
Corporate Governance and Sustainability Committee	<ul style="list-style-type: none"> <li>• To consider the policy and practice for the good corporate governance and plan about activities related to corporate social responsibilities and the stakeholders.</li> <li>• To consider and advise on the establishment of a standardized sustainability policy framework and approach to sustainability that is comparable to international practices or principles in order to function effectively, including responding to the needs of stakeholders in order to ensure the group's long-term growth.</li> <li>• To conduct an internal assessment based on corporate governance principles in order to seek improvement.</li> <li>• To act as the Company's representative in communication and corporate governance with the executives, employees, and external agencies.</li> </ul>

## Duties and responsibilities

Committee	Main Duty
Strategic Planning Committee	<ul style="list-style-type: none"> <li>To consider and determine the corporate strategy of the group Company and propose it to the Board of Directors for consideration and approval.</li> <li>To review and monitor the direction of the corporate strategy of the group Company and propose it to the ultimate strategic direction as deemed appropriate to the Board of Directors.</li> <li>To consider and understand the strategic direction and initiatives, new business, as well as the corporate organization overall, to determine the essential resources to approach and support the corporate strategy of the group Company and propose it to the Board of Directors.</li> </ul>

## Board meeting attendance

The Board of Directors and subcommittees have planned and scheduled their meetings in advance to acknowledge and consider related matters. In 2022, the Board of Directors and subcommittees held the following meetings :

Board of Directors and Subcommittees	Number of times	Meeting Attendance Ratio (%)
Board of Directors	8	87.25
Executive Committee	12	85.00
Audit Committee	11	100.00
Nomination and Remuneration Committee	3	93.33
Risk Management Committee	4	71.43
Corporate Governance and Sustainability Committee	4	100.00
Strategic Planning Committee	1	100.00

## Performance evaluation of the Board of Directors and Sub-Committees

The Company conducts a self-assessment of the board of directors and sub-committees related to good corporate governance according to the board self-assessment form issued by the Stock Exchange of Thailand by conducting an evaluation form for both collectively and individually at least once a year. The Board of Directors jointly set criteria for self-assessment of the performance of both the collectively and individually. Self-Assessment is required to be conducted annually and the Board of Directors will jointly consider the evaluation results to determine ways to improve work.

### Performance Evaluation for the entire Board of Directors

1. Performance evaluation for the entire Board of Directors is comprised of 6 topics:



2. Performance evaluation for the individual Board of Directors is comprised of 3 topics:



### Performance Evaluation for the sub-committees:

1. The criteria of performance evaluation for the entire sub-committees is comprised of 3 topics

- Structure and qualifications of the Committee.
- The meeting of the Committee.
- Roles, duties and responsibilities of the sub-committee.
- Self-development of directors and executives.

The Audit Committee brings the assessment form from the guideline of the SEC to be complied with the Company's assessment by adding the general responsibilities and specific duties of the Audit Committee.

2. Individual Performance Evaluation for sub-committees is comprised of 3 topics:

- Structure and qualifications of the Committee.
- Roles, duties and responsibilities of the sub-committee.
- The meeting of the Committee.

## Performance Evaluation of the Board of Directors for the year 2022

Board of Directors and Subcommittees	Board's Self-Assessment (%)	Individual's Self-Assessment (%)
Board of Directors	98.90	98.55
Executive Committee	98.83	98.00
Audit Committee	97.62	98.48
Nomination and Remuneration Committee	98.50	98.25
Risk Management Committee	99.33	99.33
Corporate Governance and Sustainability Committee	98.61	98.86
Strategic Planning Committee	98.92	99.00

## Code of Practice to stakeholders



### Shareholders :

The Company determines to create quality and stable business growth for the full and sustainable benefit of the shareholders based on the effective work performance, excellent turnover, equal access to necessary information, disclosure of actual information, conducting business with honesty, integrity, transparency and fairness.



### Customers :

The Company provides excellent service system to ensure that all customers receive appropriate response and complete, accurate information as required. The Company also has survey forms to take customers feedback as a guideline for continual improvement and development.



### Partner :

The Company continues to treat its partner whom deemed as business partner with equity and based on the mutual benefit, develop and maintain long-term relationship with partner, while creating trust between each other. The Company has complied with the procurement regulations which the procedures and practice guides are clearly stated.



### Creditors :

The Company strictly adheres to the creditors' conditions, controls the payment of the load and interest to all types of debtors fully meets the term and conditions of the loan agreement in full.



### Employees :

The Company treats its employees with fairness and appropriate manner in term of opportunity and compensation, appointment, transfer, skill development and safe working condition. The Company welcomes any opinion and suggestions from employees and treats everyone with fairness and equality.



### Competitors :

The Company determines to conduct business under fair competition environment, not seeking competitor's confidential information dishonestly or inappropriately, not executing any action that violates their intellectual property.



### Community, Society, Environment, Health and Safety:

The Company maintains its participation in society by complying with the law and/or approved regulations, coordinates with government authorities, ensures that business operation will not cause any damage to community, society and environment, supports and develop society in terms of life quality development, education development, energy saving and environmental care.

# Code of Conduct for Business

The Company committed to operate the business with the code of conduct which is transparent and accountable. The Company has determined the “Code of Conduct for Business” as a guideline for directors, executives and employees to use as a guideline for operations; it is divided into the following topics:

## 1. Human rights and treatment to employees:

Respect for human rights, without discrimination on the basis of similarity or difference for race, religious, gender, age, education, status, including respect for personal liberty and privacy protection including the rights shall be fully protected and proper development and promotion of quality of life and work be provided.

## 2. Communities, societies, environment, health and safety:

Correctly and fully comply with relevant laws, and management guidelines, as well as promote the implementation of international standard management systems as the tool of management and to inspect, monitor and evaluate the implementation including communicate for understanding and cooperation in providing information to the community and society, investors, shareholders and other interested parties in timely manner with the situation and the fact of the business operation of the Company without obscuring facts and aim to participate in the development and promotion of social activities, environmental protection and improve the quality of life in the community in according with the principle of sustainable development for happily living together.

## 3. Receiving or Providing Property or any benefits that might motivate the decision:

Perform their duties with honesty, diligence and sense of responsibility. Disclose all factual information. Do not request or receive any property, item or benefit from people involving in business with the intention to act or refrain from any action that is not correct or exchange with the privilege of the Company. Not use the power in the position / duties in the Company for personal benefit.

## 4. Conflict of interest in transactions of the Company:

Avoid any action that will cause conflicts of interest with the organization or that may affect the decision, Do not take advantage of data or opportunity to be a staff member in the pursuit of personal interests for private purposes or any action that is contrary to the business interests of the Company or competitive with the Company which affect the Company to lose benefits or receive lesser beneficial than it should be.

## 5. Acquisition and disposal assets of the Company and the use of internal information:

Do not use internal information or disclose internal information to outsiders or use the important information that is not publicly available for personal benefit including Do not use the information obtained during performing duties for personal benefit or for any unlawful.

## 6. Compliance with laws, regulations, provisions:

Strictly perform duties under the law and regulations of the Company and Respect and support activities / transactions that are legitimate and the ethics of the organization.

## 7. Application of properties, information, IT and intellectual property of the Company:

Comply with laws and regulations on information technology of the Company and protect the intellectual property of the Company from damage, loss, depreciation, and use of intellectual property to maximize the benefit of the Company including maintenance of confidential information appropriately.

## 8. Treatment to customers and product quality / marketing communication:

Advertise the Company's products and services truthfully and do not make any misunderstanding. Deliver goods and services in accordance with agreements with customers. Listen to customer complaints and timely improve and correct and do not collect money, materials or any benefits from the customer which will be dishonest actions.

## 9. Treatment to contract parties (partner and creditors):

Strictly follow the conditions and terms of the contract if the conditions cannot be met, notify / negotiate with the contract party to find solutions and remedies for damage. Precede the procurement with transparency and equally treat all stakeholders with fairness and verifiability. Negotiate and enter into contract with fairness and without taking advantages from contract party by taking into account the reputation and image of the Company.

## 10. Treatment to competitors:

Promote the fair competition and strictly adhere to the rules of competition. Do not make any agreements with a competitor or any person to reduce or limit the trade competition. Take into account equality and honesty in business operation and benefits with trading partners including operate the business with the code of conduct.

For more information about Code of Conduct for Business,

Please visit at Website: [www.energyabsolute.co.th/code\\_of\\_conduct](http://www.energyabsolute.co.th/code_of_conduct)

## Management Approach

The employees should acknowledge that they must perform work by following the Corporate Governance requirement and the Code of Conduct for Business to create sustainability in the entire corporate governance. The Company cultivated the ethical operating culture by setting as a part of corporate value and as one of the performance indicator of executives and employees. Additionally, the ethical culture is promoted regularly in various activities to ensure that everyone acknowledges the business code of conduct, for example,

- Orientation on the Ethical Code of Conduct to new employees
- Publicize handbook and practice guideline on the Company's website

For more information about Code of Conduct for Business,

Please visit at Website: [www.energyabsolute.co.th/code\\_of\\_conduct](http://www.energyabsolute.co.th/code_of_conduct)

## Risk Management

With the determination to develop the risk management system that responds to the business operation and business plan of the Company continuously, to control the impact level that may occur on the business, society, and environment, the Company is aware of the impact level and maintains it in an acceptable range together with preparing the action plan.

### Risk Management Policy

- To determine the risk of management as the responsibility of all levels of employees, to be aware of the risk contained in work operations within the department or organization, and to prioritize risk reduction to an inappropriate and acceptable level.
- To implement risk management procedures which is in line with international standards in order to effectively create manage risk which may impact business operation of the Company to create development and performance which covers risk management through the entire organization by applying risk management system as supporting factor for decision making, strategic planning, targets, working plan and business operation direction of the Company, including to put emphasis on moving forward to achieve objectives, targets, visions, missions and imposed strategies to create excellent work performance as well as confidence among stakeholders.
- To define measures on prevention and minimize risks from business operation in order to avoid potential damage or loss, as well as to monitor and assess the risk management result regularly.

## Operation process

The Board of Directors appoints the Risk Management Committee to support the Board in determining whether a risk management policy covers the entire organization and to implement a risk management system or procedure to reduce or minimize the impact on the business of the Company Group efficiently by formulating factors, such as scope of authority, duties, and responsibilities, to ensure the Risk Management Committee perform its duties with full effect. Besides, the Risk Management Committee Charter is prepared to describe the 3 main duties of the Risk Management Committee as follows:

- 1) Establish the policy and acceptable risk level
- 2) Follow up the implementation, review the report of risk management, ensure the appropriateness and sufficiency of the risk management, ensure the risk management remains at an acceptable level, and ensure that the risk management has been continuously applied.
- 3) Regularly coordinate with the Audit Committee by exchanging knowledge and information regarding risk and internal control which impacts or may impact the Company.
- 4) Encourage to have a culture of risk management and proper internal control.

The Risk Management Committee held 4 meetings in total for 2022.

## Risk to the business operation of the Company and Group after has been considered from the executives and the Risk Management Committee

is summarized as follows :

Risk Factors	Major risks
1. Strategic Risk	<p>Based on its vision, the Company has mapped out a technology driven strategy to be a business and project pioneer using modern technology as a key factor in the strategy. This has made the Company among the first to innovate projects in the country and overseas so as to generate higher returns than those from general investments. Therefore, the Company may have come across instability in the surrounding environment and competition both domestically and abroad. Strategic risk factors can be summarized as below:</p> <ul style="list-style-type: none"> <li>• Risk from dependence on key executives</li> <li>• Risk from competition in the industries</li> <li>• Risk from implementation of new business projects</li> <li>• Risk from Investment in New Overseas Projects</li> </ul>
2. Operating Risk	<ul style="list-style-type: none"> <li>• Risk associated with human resources management</li> <li>• Risk of operational disruption</li> </ul>
3. Financial Risk	<ul style="list-style-type: none"> <li>• Risk associated with debt service capability</li> <li>• Risk of Investment returns lower than projected</li> <li>• Risk associated with funding for new businesses</li> <li>• Risk of change in electricity offtake rate</li> </ul>
4. Compliance Risk	<ul style="list-style-type: none"> <li>• Risk from changes in government policies</li> <li>• Risk related to compliance with relevant laws and regulations</li> </ul>
5. Business Operation Risk	<ul style="list-style-type: none"> <li>• Risk from dependence on large customers</li> <li>• Risk associated with raw material procurement and price fluctuations</li> </ul>
6. Social Risk	<ul style="list-style-type: none"> <li>• Human Rights Risk</li> <li>• Risk from Operation that Impact to the Community, Society and Environment</li> </ul>
7. Emerging Risk	<ul style="list-style-type: none"> <li>• Technology and Innovation Risk</li> <li>• Cybersecurity and Data Security Risk</li> <li>• Climate Change Risk</li> </ul>



## Emerging Risk

### Technology and Innovation Risk

The Company's consistent business growth and expansion since 2017 has been attributable to its strength in the technology and innovation areas. Its long-term operational plan is to utilize energy storage technologies to bring energy security and to uplift use of eco-friendly renewable energy. The Company is aware of new risks that may arise from new technological inventions to replace the existing technologies which the Company is now investing in, or from the fact that power sale/ purchase can freely be undertaken at both domestic and international levels and at low prices, which may lead to possible changes in the growth of electricity power production and storage. Possible changes in various forms have prompted the Company to make efforts in strengthening its business and income base, and continuously expand the market to the entire energy storage industry, electric vehicle industry and other related industries in parallel to exploring new investment opportunities along with human resource development and advanced technological study and development.

In addition, the Company recognizes that adoption of new technologies and innovations in the operation processes is significant and clearly beneficial in a long term, as well as can shorten operation time and save costs. The Company has thus launched projects to support invention and innovation development to promote self-learning among the employees and stimulate their creativity in adopting innovations for performance development and improvement.

### Cyber Security and Data Security Risks

Today's technological changes are happening at a rapid pace and employees are increasingly working in a hybrid way through various digital technologies. This causes information security and cybersecurity risk factors. Which may affect the infrastructure of the information system including various data.

The Company emphasize importance on information technology risk management by setting strategies to prevent attacks on the Company's system and information security, cyber-attack, and all processes in accordance with the law and good corporate governance practices compliance of listed companies. Also with preparation of a processed policies and regulations communicated to employee through training.

Along with providing tools and technology to prevent, detect, respond and remediate as a complete security strategy. In addition, the Information Technology Unit has conducted information and cyber security risk assessments to ensure that risks can be managed effectively and reduce potential impacts on the organization and business opportunities.

# Climate Change Risk

Climate change affects all sectors around the world. both in terms of environmental issues Air pollution and global warming such as severe weather, drought, floods and other disasters as well as changes in government policies or regulations. Therefore, the company Therefore, it is important to adjust to mitigate the impact of changes that will occur. especially the risks that may affect the procurement of agricultural raw materials including the production of electricity from solar energy and wind energy which may directly affect the revenue of the company

The Company has established strategic management guidelines in the short term, medium term and long term to enhance its ability to adapt. climate change such as research and development of raw materials to replace the main raw materials in the future Developing value-added products such as Green Diesel or applying environmentally friendly technologies to increase energy efficiency. as well as expanding investments in lithium-ion battery plants and energy storage systems and electric vehicle plants. as well as expanding the infrastructure network of the charging station To contribute to the success of the new S-Curve electric vehicle industry, as well as the application of energy storage systems in renewable energy power plants. reduce the fluctuation of electricity less and create more stable power supply It also helps push Thailand into a Low Carbon Society. In particular, reducing pollution and global warming to achieve goals according to COP26.



## Anti-Corruption

Energy Absolute Public Company Limited and its affiliated companies are determined to conduct business adhering to social responsibilities and stakeholders under good corporate governance and business ethics as well as policy and practice guidelines for all stakeholders. The Company has in place a policy that defines the responsibility and regulations of inappropriate operations to prevent corruption in all corporate activities. Besides, the ensure that the decisions and business operations that may have a risk of corruption will be considered and rectified prudently, the company has prepared the “Anti-Corruption Policy” in written form as a clear practice guidance in business operation and to achieve sustainable development.

### Anti-Corruption Policy

1. Directors, executives, employees, and stakeholder groups of the Company and its affiliates are prohibited to conducting or accepting all forms of corruption either directly or indirectly for the benefit of oneself, family, friends and acquaintances, covering all businesses in all country and agencies involved and regularly reviews compliance with anti-corruption policy and reviews guidelines and operational requirements for action to be comply with changes in business, regulations, and legal requirements.
2. To have measures to prevent and against corruption as a part of the Company’s business operations. This is the responsibility of all departments, including directors, executives, and employees of the Company and its affiliates, as well as groups of interested parties, to participate in giving opinions on various practices to prevent and against corruption in the Company in order to achieve the Company’s policy.
3. The Company must continually improve and develop measures to prevent and against corruption in accordance with relevant rules and regulations, including the Code of Conduct and Good Corporate Governance, which must assess the risk of corruption that may occur in the Company’s business operations and prepare guidelines under good internal control in order to prevent any forms of corruption from occurring in the Company’s business operations.
4. The Company must not give or accept bribes or support all forms of bribery, Including supervision and control of various donations, including charitable donations, donations to political parties, including giving or accepting gifts or receiving financial support as well as rewards or other benefits, in order to make the transactions transparent and not to convince or motivate related persons, including directors, executives, employees of the Company and its affiliates, as well as groups of public and private stakeholders performing improper operations.
5. The Company must provide a suitable, adequate, and sufficient internal control system to prevent corruption in all forms.
6. The Company must communicate the commitment of the Company in preventing and anti-corruption in all forms as well as promote the knowledge on preventing and anti-corruption to the directors, executives and employees in order to instill good awareness and for all Company personnel to be aware of their duties and responsibilities in carrying out their duty to fight against corruption in all forms.
7. The Company must provide a transparent financial reporting mechanism in accurate and reliable.
8. The Company must promote good and diverse communication channels in order to receive notification of fraud and corruption from directors, executives, employees, and all relevant parties, with a guarantee for the whistleblower to be protected by not being unfairly punishment or being bullied, and including the appointment of a person or group of people to closely monitor and monitor all corruption reports that have been reported.

### Whistleblowing Policy

In order to encourage both internal and external stakeholders to participate in the Good Corporate Governance process, the Company therefore has set a policy in the event that various groups of stakeholders have questions or see actions suspected of violation or non-compliance with laws, regulations, or business ethics, or suspicions that may lead to corruption, can report clues or complaints together with sending evidence and details through the whistleblowing channels as follows:

#### Letter to the recipient of the complaint:



**Chairman of the Audit Committee**

**Address:** Energy Absolute Public Company Limited

16th Floor, AIA Capital Center Building, No. 89 Ratchadaphisek Road, Dindaeng Subdistrict, Dindaeng District, Bangkok 10400 Thailand

#### E-mail Address:



[chairman.audit.com@energyabsolute.co.th](mailto:chairman.audit.com@energyabsolute.co.th)

#### Website:

[www.energyabsolute.co.th/complaints](http://www.energyabsolute.co.th/complaints)

## Performance/Success Indicators

### Complaint investigation

Number of Significant complaints	2022
The number of significant corporate governance complaints (Cases)	0
The number of violations of a significant business code of conduct	
• Code of conduct	0
• Corruption or Bribery	0
• Money laundering or Insider trading	0
• Conflicts of interest	0
• Customer privacy data	0
• Environment Occupation and Safety	0
• Human rights violations	0
• Discrimination or Harassment	0

### Corporate Governance Assessment Results

According to the survey conducted by the Corporate Governance Report of Thai Listed Companies 2022 by the Thai Institute of Directors (IOD) and the Stock Exchange of Thailand, in 2022, the Company obtained an “Excellent” score (five stars), and its average score was higher than the average score of overall listed companies and the SET100 Index.



### Result of Quality Assessment of the Shareholders’ Meeting

The Company holds the Annual General Meeting of Shareholders to present the operation results annually. In 2022, the Company was rated 100 scores out of 100 in the Quality Assessment of the Shareholders’ Meeting Program for the year 2022 by the Thai Investors Association for 6 consecutive years.



### Anti-Corruption Performance

In 2022, the Company revised its anti-corruption measures, assessed bribery and corruption risk, and conducted self-assessment to develop its anti-corruption mechanism and renew the certification of its membership of the Thai Private Sector Collective Action Against Corruption (CAC).

The Company has reviewed “Anti-Corruption Measures Guide” to comply with the law and its operations of the Company. Anti-corruption policies are communicated both inside and outside the company, as well as arranging in-house training for directors, executives, and employees including knowledge and understanding assessments and communicating the Anti-Corruption policy and No Gift Policy with business partners, stakeholders and the public.





# ECONOMIC DIMENSION

## Business Continuity Management

The Company recognizes and understands the significance of long-term and continuous business operations that take into account all stakeholders equally. The importance of proper organizational structure and management in creating competitiveness, creating flexibility in business operations to accommodate changes from both external and rapidly changing internal factors, including various uncertainties that cannot accurately predict the future to be able to identify various threats that will affect the business benefits of all stakeholders is emphasized by the Company.

The company's management is governed by the ISO 9001 quality standard system, which is an international quality management standard system. This enables the company to improve work efficiency and encourages the company to continuously develop by incorporating other standards such as environmental management standards (ISO 14001), standards for occupational health and safety management (ISO 45001), roundtable sustainable palm oil (RSPO) and international sustainability and carbon certification (ISCC (EU)) which assist the company in setting standards in the management of work, environmental management, occupational health and safety management and sustainable management following on international standards, and these management standards include risk management which covers the following areas:

- 1) Company context, which includes an overview of the Company's business operations.
- 2) The Company's stakeholders' needs and expectations
- 3) Environmental Aspect
- 4) Hazard Risk
- 5) Legal requirements, other requirements, and a variety of obligations
- 6) The internal work processes of the company

As a result of the aforementioned risk management, risk factors in the «Very High» and «High» levels will be presented to the Risk Management Committee meeting and the Board of Directors' meeting (if necessary) for consideration and review, as well as to provide advice (if any) for risks in emergency situations (Crisis Management) that may disrupt the Company's business operations (Disruption) and need to be addressed. The management will form a Crisis Management Team, with senior management involved, to ensure that the management is completed and that emergency management planning (Crisis Management Plan) is in place, including monitoring the plan's implementation and receiving adequate support until the risk in such an emergency situation is at a level that does not significantly affect the Company's business. The Company is confident in the measures it has put in place to manage the various risks that it currently faces, such as the use of efficient information technology systems for monitoring production processes and various work processes like inventory management, human resource management to support future business expansion, and the establishment of an appropriate procurement and financial accounting system, monitoring of rules and other relevant regulations, as well as various disaster prevention systems such as fire, flood, and insurance systems that cover potential damages, will help prevent and/or reduce risks to an acceptable level, or pass the risk to third parties.



# Customer Relationship Management

With an intention to develop the business with the Company and the Company group to follow the sustainable development, the Company is ready to advise, assist and to receive the suggestions and provide helps through many activities i.e. giving knowledge, efficiency assessment, and suggestion for improvement guideline. The EA Business Partner Code of Conduct has been prepared as a guideline for business partners to lead to being a good citizenship coupling with the good corporate governance which taking into account the society and environment and to use as a mutual business standard. In preparation of the EA Business Partner Code of Conduct, the Company adheres to the principles and practice from related regulations, laws. The Code of Conduct also refers to charters and standards recognized in the global standard i.e. Universal Declaration of Human Right (UDHR), International Labor Organization (ILO), UN Global Compact and Social Accountability International (SAI).

## Management approach

- The Company has prepared the EA Business Partner Code of Conduct
- The Company has prepared the EA Business Ethics.
- The Company has prepared the EA Customer service Code of Conduct

## Operation process

The handbook and code of practices are prepared as a guideline to manage customer relations to ensure compliance with Good Corporate Governance. Meanwhile, the documents also promote the fair business operation among business partners, respect to the freedom and rights of the individual, the care for labor and human right, occupational health, safety and environment, including the anti-corruption in all forms.

Applying for ISO 9001:2015 Certification, the Company aims to develop and improve the quality of its products and services, deliver the products to meet customers/ business partners' satisfaction. The Company understands that the satisfaction of customers/business partners is the priority, therefore, collects the satisfaction survey forms from customers/business partners to be a reference for product and service improvement to the maximum effort.

## Performance / Success Indicators

According to the systematic operation on customer relations including the intention to develop and improve product and service quality, lead to the customers/business partners' satisfaction survey for the year 2022 achieved the target. Meanwhile, there are no complaints from customers/business partners in 2022 owing to the preparation of ISO 9001: 2015. Details are as below:

### Evaluation of customer satisfaction level

#### Biodiesel

**2022 Target**  
Customer satisfaction in indicators not less than 90%

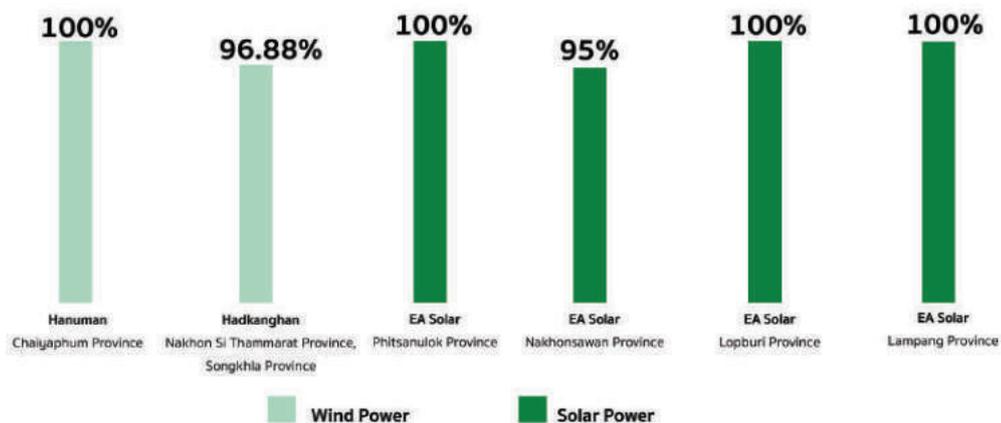


**Products 95.5 %**



#### Renewable Energy

**2022 Target**  
Customer satisfaction in indicators not less than 90%



## Sustainable Supply Chain Management

The company pledged to constantly develop and improve its supply chain management processes in order to ensure risk governance, transparency, equity, and integrity, as well as strengthening and developing trading partners' potential to lead to long-term business operations, as well as being accountable to customers, communities, society, the environment, health, and safety.

At the moment, the company operates in a variety of industries. It is critical to improve the partner management process in order for it to be applicable to all businesses. This is due to the fact that its partners are both upstream in the supply chain and stakeholders in the business. Furthermore, the Company promotes and educates procurement staff on a regular basis in order to create knowledge and understanding and to be able to work effectively.

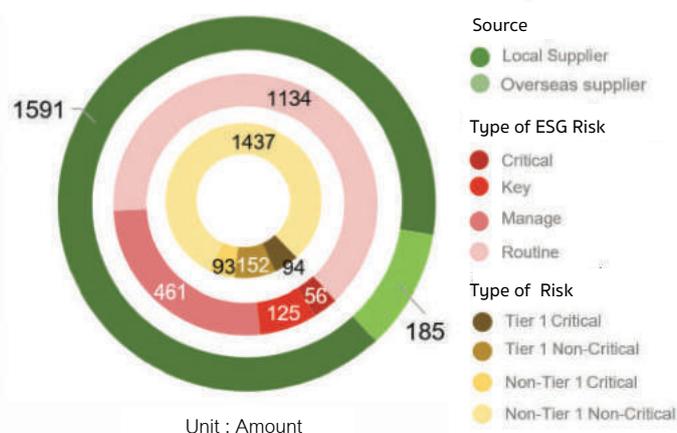
## Management approach

1. **Purchasing Procedure:** The Company has established guidelines for procurement operations to be accurate, fast, and that users must receive quality products and services in a timely manner based on their needs, as well as a guideline for managing partners in accordance with the requirements of the RSPO (Roundtable on Sustainable Palm Oil) for the biodiesel business, and the requirements of ISO9001, ISO14001, OHSAS18001, and ISO45001 for renewable energy and electric vehicles. By referring to the EA Supplier's Code of Conduct and Anti-Corruption Manual, the selection and evaluation of suppliers are considered to cover social responsibility, using environmentally friendly products, legal use of labor, non-discriminatory, and respect for human rights to support and drive business partners to comply with the Company's mission.
2. **Supplier Management:** The Company has classified its business partners based on the type of goods and services they provide:
  - 1) Suppliers of direct raw materials
  - 2) Suppliers of assets, machinery and equipment used in the manufacturing process
  - 3) Other product and service suppliers

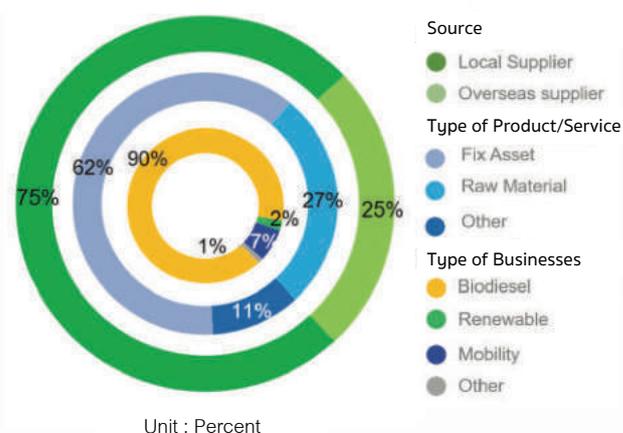
And also classified according to the type of ESG risk (Environmental, Social, and Governance: ESG) as follows

- 1) A critical ESG supplier is a group of business partners who have a high risk of having a negative impact on the suppliers, the community, and the company in terms of both business and corporate image.
- 2) A key ESG supplier is a group of high-risk business partners who will have an impact on the company's business and corporate image.
- 3) A managed ESG supplier is a group of business partners with medium risks to the community or nearby areas, as well as to the company.
- 4) A routine supplier is a group of business partners who pose low risks to the company.

### Classify supplier according to the source, the type of ESG risk, and the type of risk



### Classify supplier spending by source, product/service type, and the type of businesses



## Operation process

- 1.) Create a purchasing plan, a production plan, a delivery plan, and a distribution plan to be consistent by coordinating both within the company group and with external agencies to ensure a smooth operation, including the use of an online bidding system (e-Bidding) for the direct sourcing of certain types of raw materials to ensure fair and transparent competition.
- 2.) Having a business contingency plan in place in case an event does not go as planned. The executives in charge of the relevant departments are in charge of determining the necessity and appropriateness of using the aforementioned backup plan.
- 3.) Manage supplier relationships and expectations (Supplier On-site Visit, Supplier Meeting) to achieve consistent satisfaction.
- 4.) There is an evaluation and follow-up on the performance of significant suppliers (Supplier ESG Assessment) in order to comply with the Company's sustainability policy and exchanging cooperation in joint development.
- 5.) Avoid relying on a single supplier by selecting and evaluating new suppliers (New Supplier Evaluation), as well as considering and selecting based on environmental, social, and corporate governance criteria.
- 6.) Sourcing new products and services available in both domestic and international markets (Productivity Action Plan) to create procurement that provides user satisfaction while lowering the company's purchasing costs.
- 7.) The Company's major partners signed to acknowledge the EA Supplier's Code of Conduct and anti-corruption measures.
- 8.) Purchasing employees carry out their responsibilities in accordance with the Code of Business Conduct (Ethic of directors, executives and employees).

## Performance/Success Indicator

KPIs	Targets
KPI1 % of tier 1 supplier assessed on ESG risk	100% assessed by year 2023
KPI2 % of critical and sustainability high risk supplier monitored on ESG performance	100% of critical and sustainability high risk suppliers monitored on ESG performance by year 2023
KPI3 % sustainability high risk supplier where gaps identified with corrective action plan and have improved	50% of those identified gap supplier improved by year 2023

## Tax Policy

Being well aware that the “Tax” has a vital role in the sustainable development which does not only promote and support the competitiveness in the business sector but also creating a positive outcome to the economy and society including the national development as a whole, therefore, the Company has set forth the tax policy to implement in business operation to ensure the transparency, to assess the risk that could occur, to protect reputation and image of the Company Group and to create the absolute added value to the Company Group and all stakeholders. The said policy has been approved by the highest executives of the Company Group based on the accuracy, transparency and traceability principles.

## Management approach Policy and practice guideline

### 1. Prepare the plan and guidance for tax operation

- Manage tax by complying with the law, promoting the positive image of the Company Group, safeguard the reputation and maintain a good relationship of the organization with the revenue department. Be prudent in any operations taking into account the highest taxing benefit of the Company Group and stakeholders with fairness.
- Submit taxes and duties within the prescribed period of time and manage the payment or tax refund to allow the highest liquidity among the Company Group.
- Study and consider the tax impact regularly. Consider tax rights and benefits or the exemption for the related tax upon the imposing of the new law or taxation policy. Conduct any transactions, investment and business operation taking into account the maximum benefits of the Company Group.

### 2. Coordination about tax with government agencies

- The Company must assign a person to be responsible for tax and to coordinate with the government tax agency. Such a person must possess the knowledge in taxation and duties only.

### 3. Tax consultant

- In case of new transactions that affect significantly the Company Group in the future, the Company must employ the tax consultant who is knowledgeable when it necessary from time to time or when there is a problem that requires consultation to ensure the transparency and compliance with the law.

## Performance/ Success Indicator

Detail	2019	2020	2021	2022
Energy Absolute PCL. / (consolidated financial statement)				
• Net profit before tax (MB)	6,016	5,029	5,932	7,552
• Tax expenses <sup>1</sup> (MB)	(11)	(18)	3	145
• The corporate income tax rate (Percentage)	20	20	20	20

The group of companies' effective tax rate is 0.65 percent, which is lower than the statutory corporate income tax rate because the company received tax incentives from the Board of Investment, BOI.

## Supporting and membership of a variety of organizations

The following organizations have received support and membership from the company:

Organizational sponsorship / membership

Association/Organization	Organization type	Annual supporting/Membership fee (Baht)		
		2020	2021	2022
Independent Commodity Intelligence Services (ICIS)	Trade association	247,483.00	289,275.00	345,936.69
The Federation of Thai Industries	Trade association	25,000.00	25,000.00	25,000.00
Thai Wind Energy Association	Trade association	20,000.00	20,000.00	20,000.00
Thai Listed Companies Association	Non-Profit Organization/ Foundation	25,000.00	25,000.00	25,000.00
Thai Biodiesel Producer Association		8,000.00	8,000.00	8,000.00
Society of Automotive Engineers Thailand		10,000.00	10,000.00	10,000.00
Thai Renewable Energy Association (RE100)				50,000.00
Thailand Energy Storage Technology Association (TESTA)			11,000.00	
The Federation of Thai Industries (Prachinburi Province)			2,000.00	
Personnel Management Association of Thailand (PMAT)			16,000.00	
<b>Total</b>		<b>335,483.00</b>	<b>377,275.00</b>	<b>512,936.69</b>

## Sponsorship / membership of organizations by issue

Topic	Our Position and Contribution	Name of Organization	Organization Details	Total Spending in 2022 (THB)
To promote the adoption of renewable energy and electric vehicles in Thailand	As members of associations promoting the use of renewable energy in Thailand and expanding business opportunity in this region, the Company contributes to sharing and gaining best practices, industry insights, rules and regulation update, and future trends. Through our membership fees, we contribute to the lobbying activities of such business associations to advocate for more governmental support and updated legislation to facilitate wider use of renewable energy, the new construction of renewable energy infrastructure, and new transmission and distribution infrastructure to prepare for increasing electrification (i.e. all type of EVs) in the near future.	Independent Commodity Intelligence Services (ICIS)	ICIS is a trade association that helps connect data, customers, and the global commodities market and provide real-time price data, market analytics, and policy and regulatory impact analyses on the global energy market	345,936.69
		Thai Renewable Energy Association (RE100)	RE 100 Thailand was established to act as an intermediary in the decarbonization of the private sector committed to producing renewable and 100% renewable energy. RE100 Thailand's primary mission is to accelerate the transition to electrification for Net Zero Carbon Emissions	50,000
		The Federation of Thai Industries	FTI is a trade association that convenes industry leaders in Thailand to promote economic development. FTI represents Thai companies at both the domestic and international levels, collaborates with the government in establishing and revising national policies, and helps develop industrial enterprises, including renewable energy and electrical vehicle businesses and related businesses.	25,000
		Thai Listed Companies Association	Thai Listed Companies Association (TLCA) is a not-for-profit organization. TLCA's member comprise of companies listed on The Stock Exchange of Thailand (SET) and The Market for Alternative Investment (mai). Focus on building a platform consider sharing knowledge on this issue, which is generated with other agencies, the Thai capital market, in order to drive the development of the Thai capital market.	25,000

## Information Technology System Security and Personal Data Protection Management

Information systems and data are business resources that need effective care and well managed. IT system usage control, access control and system securities control are most important for lowering risk of organization and reducing damage that impact to information systems and data. Energy Absolute group companies have realized the importance of information systems and data protection. We encourage to all employee to have awareness and to be involved in process of protecting information system and data

### Management Approach

Energy Absolute group companies had set management guidance to manage information system and cyber security and risk by applied international standard NIST Cybersecurity Framework with 5 important procedure

1. Identify to understand environment, asset and for risk management
2. Protect system and data by apply standard security protection
3. Detect threat, monitoring and detection
4. Response when threat detected for reduce impact and limit system damage
5. Recover system to normal operation quickly



### Information Technology System Security Policy and Strategy

Energy Absolute group companies have continually created policy to manage information system and cyber security and made awareness to employees to follow policy and procedure also following related laws

- Work from anywhere policy : The company has devised the work from anywhere scheme to be effective in the event when operations on its premises is untenable and built a mechanism for efficient, unfettered, and secure and rigorously controlled access to its IT system. It has also formulated relevant policies, criteria, and measures to enhance the security of Microsoft Office 365 System, including access management, multi-factor authentication, data access rights and control
- Organize training and educated to all employee about IT security and Cyber security to prevent organization risk and employee risk
- Organize training and educate to all employee about protection of personal data for employee and related person by follow Thailand PDPA Act 2019
- Assessment the risk of IT and Cyber Security in all system scope and increased network system protection and other system for support employee to work from out of office

### 2022 Progress

Percentage of employees receiving training related to cybersecurity and privacy data protection.

2020	2021	2022
100%	100%	100%

- Number of cybersecurity breaches 2022 = 0.
- Number of data breaches 2022 = 0.
- Number of customer information use for other purposes from consent 2022 = 0.
- Pass the BCP (Business Continuity Plan) Tests.
- Increase work efficiency, communication, and elevate the security of information technology systems by using the Cloud Collaboration Platform (MS Office 365).
- Improve the data center in accordance with ISO 27001 and ISO 27017 standards.
- Cybersecurity enhancement with the zero trust model to elevate its cybersecurity standards.

### 2023 Target

- Improve the cyber-attacks and threats testing to measure awareness within the organization and to prepare agencies that involved can act in the event of a threat

## Innovation Management

Energy Absolute group companies has brought technology and innovation to improve multiple of work processes such as implement Robot Process Automation(RPA) to streamline work process and reduce errors these will also reduce employee working hour for repetitive jobs

Also increase employees proficiency by implemented Robot Process Automation to improve work processes of their department by themself support by RPA Academy

### 2022 Success story

- Implemented Robot Process Automation to improve procurement for purchasing department ,accounting journal process for accounting department ,payment process for finance department
- Implemented Robot Process Automation to improve work processes for paperless adaptation and document collection system for support complex document works
- Organize RPA training and set up RPA academy project for employees for bought Automation mechanism to improve their routine and repetitive job

### 2023 Target

- Increase RPA usage and introduce to Production process in our factories
- Implement RPA usage for improvement work processes in other department and business unit such as Human resource department
- Organize more RPA training event and expand opportunities to more of employees



# ENVIRONMENT

## DIMENSION

### Quality, environmental, and occupational health & safety policy

#### Sustainability Management Policy and Target

EA has committed to develop the standard of business operations and general management to be in line with our Sustainable Environment Management Policy . The focuses will be on safety environmental and health in workplaces including the social responsibility. The policy will cover all Company's operations which emphasize on resource management covering all business activities products, services, transportation and distribution, as well as waste management. Furthermore, this commitment is the direct responsibility of all executives, employees, business partners, contractors and the relevant stakeholders whom working on the company's behalf. Which are :

1. To be a leader in alternative energy business by using the modern technology and environmentally friendly for the best benefit of shareholders
2. To comply with all applicable quality health safety and environmental laws and regulations as well as other business operation and stakeholder requirements environment
3. Create customer satisfaction in terms of the services , quality , safety and on-time delivery of all products
4. Prevent, minimize and protect impacts from our operations on the environment and communities while supporting a wide range of human and social development initiatives
5. To commit on the prevention of all risks , terminate hazard for reduction of injury and illness from working, which may occur to employee and stakeholder
6. Continually improve our processes, operations and internal company management system

#### Performance/Success Indicators

The Company strictly complies with relevant environmental laws and regulations. From 2019-2022, there were no environmental violations and the Company has not paid any significant fines (Environmental Violations Fine since USD 10,000 or more) related to environmental issues.

#### Greenhouse Gases Management

The Company realizes the importance of participating in society and environment care to be better quality and conducting different activities to support social development and a sustainable environment.

#### Management approach

The Company has a social and environmental policy as follows:

- Consider the impact of the business operation on society and environment
- Strictly comply with the relevant laws, regulations and related practices.
- Develop and improve work standards to comply with environmental standards

#### Performance/Success Indicators

In 2022, we can achieve Target to control GHG emissions less than 69,529 ton. Increasing in greenhouse gas emission (Scope 1&2) from the foregoing year by 13,946 tons of carbon dioxide equivalent per year as the scope of collection of data on direct and indirect greenhouse gas emission was extended in 2022 according to TGO's requirements on carbon footprint calculation and report.

## GHG emissions of EA Group Company

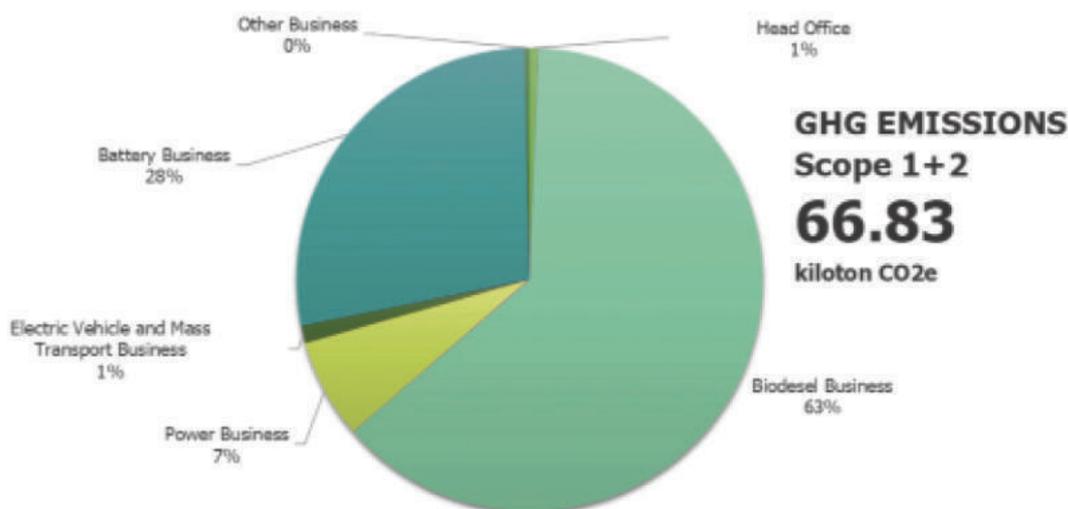
To determine the GHG emissions, the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) was used on Global Warming Potential (GWP). The Company conducted assessment according to ISO 14064-1 and the guidelines of Thailand Greenhouse Gas Management Organization (TGO). The data was verified by Bureau Veritas Certification (Thailand) Co., Ltd.

GHG emissions of EA Group Company <sup>(1) (2)</sup>					
	Unit	2019	2020	2021	2022 <sup>(3)</sup>
Target: Direct and Indirect GHG emissions (Scope 1 and Scope 2) of the Group	TonCO <sub>2</sub> e	-	58,270	55,355	70,030
Direct GHG emissions (Scope 1)	TonCO <sub>2</sub> e	44,201	45,305	39,326	40,854
Energy Indirect GHG emissions (Scope 2)	TonCO <sub>2</sub> e	10,882	12,965	13,559	25,977
Other Indirect GHG emissions (Scope 3)	TonCO <sub>2</sub> e	55	68	143,502	247,867
Direct and Indirect GHG emissions (Scope 1,2)	TonCO <sub>2</sub> e	55,083	58,270	52,885	66,831
Direct, Indirect and Other Indirect GHG emissions (Scope 1,2,3)	TonCO <sub>2</sub> e	55,138	58,338	196,387	314,698
<b>Total Revenue (Million Baht)</b>	TonCO <sub>2</sub> e	<b>14,955</b>	<b>17,199</b>	<b>20,558</b>	<b>27,547</b>
GHG emissions intensity of the Group (Scope 1,2) (TonCO <sub>2</sub> e) per Baht 1 Million of Revenue)	TonCO <sub>2</sub> e / Baht 1 Million	3.68	3.39	2.57	2.43
GHG emissions intensity of the Group (Scope 1,2,3) (TonCO <sub>2</sub> e) per Baht 1 Million of Revenue)	TonCO <sub>2</sub> e / Baht 1 Million	3.69	3.39	9.55	11.42

Remark : (1) Since 2019, a GHG emission from coal was revised last year referring to IPCC standard.

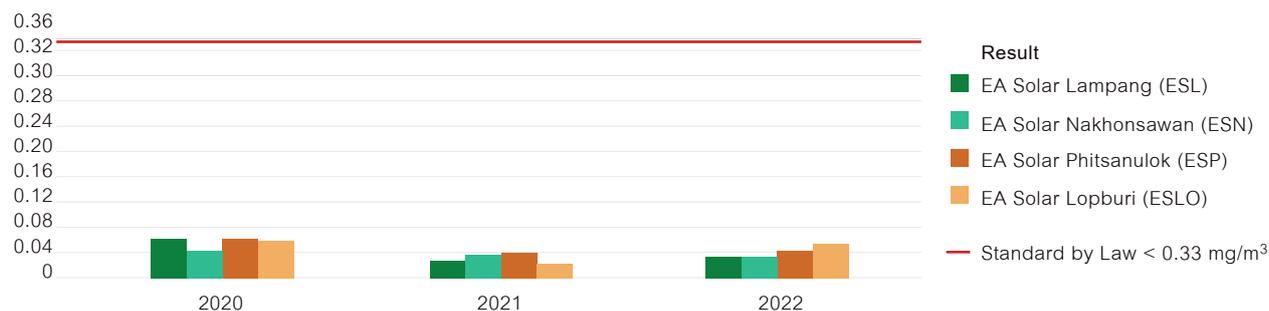
(2) In 2022, GHG Emissions data has been verified by Bureau Veritas Certification (Thailand) Limited

(3) In 2022, the scope of GHG emissions was extended by business expansion



## The air quality monitoring in the area surrounding the power plants.

### Power Plants' Total suspended particles (TSP)



The top three business that generates volume of greenhouse gas emission is biodiesel business, battery business and power business were as follows:

## Biodiesel Business

Greenhouse gas emissions decreased 11,172.75 tonsCO<sub>2</sub>e compare with base year 2020.

Performance data	2020	2021	2022
GHG Emissions Scope 1 (TonCO <sub>2</sub> e)	44,846.10	38,733.79	34,890.00
GHG Emissions Scope 2 (TonCO <sub>2</sub> e)	8,445.65	8,278.03	7,229.00
GHG Emissions Scope 3 (TonCO <sub>2</sub> e)	54.44	141,262.46	247,002.00
GHG Emissions Scope 1+2 (TonCO <sub>2</sub> e)	53,291.75	47,011.82	42,119.00
GHG Emissions Scope 1+2+3 (TonCO <sub>2</sub> e)	53,346.19	188,274.28	289,121.00
GHG Emissions compare with base year 2020 (TonCO <sub>2</sub> e)	-	6,279.93	11,172.75
%GHG Emissions compare with base year 2020 (%)	-	11.78	20.97
Total Revenue (Million Baht)	6,262.29	8,225.75	7,422.27
GHG emissions intensity of the Group (Scope 1+2) (TonCO <sub>2</sub> e per Baht 1 Million of Revenue)	8.51	5.72	5.67

## Battery Business

Start collecting GHG Emissions data of battery business in 2022.

Performance data	2020	2021	2022
GHG Emissions Scope 1 (TonCO <sub>2</sub> e)	-	-	5,340
GHG Emissions Scope 2 (TonCO <sub>2</sub> e)	-	-	13,327
GHG Emissions Scope 3 (TonCO <sub>2</sub> e)	-	-	755
GHG Emissions Scope 1+2 (TonCO <sub>2</sub> e)	-	-	18,666
GHG Emissions Scope 1+2+3 (TonCO <sub>2</sub> e)	-	-	19,420
GHG Emissions compare with base year 2020 (TonCO <sub>2</sub> e)	-	-	-
%GHG Emissions compare with base year 2020 (%)	-	-	-
Total Revenue (Million Baht)	-	-	2,748.97
GHG emissions intensity of the Group (Scope 1+2) (TonCO <sub>2</sub> e per Baht 1 Million of Revenue)	-	-	6.79

## Power Business

GHG emissions (Scope 1+2) intensity of the Group ( TonCO<sub>2</sub>e per Baht 1 Million of Revenue) decreased compare with base year 2020.

Performance data	2020	2021	2022
GHG Emissions Scope 1 (TonCO <sub>2</sub> e)	279.22	185.40	223.00
GHG Emissions Scope 2 (TonCO <sub>2</sub> e)	4,207.14	4,277.57	4,428.00
GHG Emissions Scope 3 (TonCO <sub>2</sub> e)	2.15	650.42	56.00
GHG Emissions Scope 1+2 (TonCO <sub>2</sub> e)	4,486.36	4,462.97	4,651.00
GHG Emissions Scope 1+2+3 (TonCO <sub>2</sub> e)	4,488.51	5,113.39	4,707.00
GHG Emissions compare with base year 2020 (TonCO <sub>2</sub> e)	-	23.39	164.64
%GHG Emissions compare with base year 2020 (%)	-	0.52	3.67
Total Revenue (Million Baht)	10,601.98	10,933.38	11,181.66
GHG emissions intensity of the Group (Scope 1+2) (TonCO <sub>2</sub> e per Baht 1 Million of Revenue)	0.423	0.408	0.416
Electric generation (GWh)	1354.06	1423.32	1319.21
Carbon intensity of Power Business (tonsCO <sub>2</sub> e per Gwh) ( Scope 1+2 )	3.11	3.01	3.36
Carbon intensity of Power Business (tonsCO <sub>2</sub> e per Gwh) ( Scope 1+2+3 )	3.31	3.59	3.57



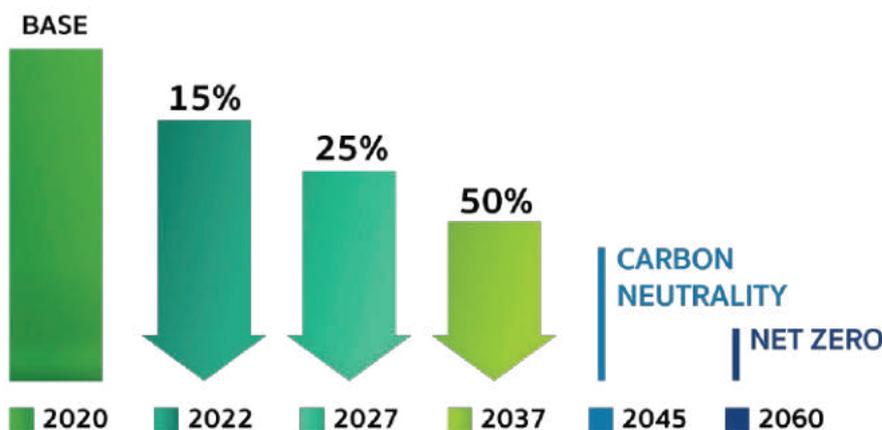
## Aiming for Net-Zero Greenhouse Gas Emissions (Net Zero)

In 2021, the Company joined as a founding member of the “RE100 Thailand Club” (RE100TH) in order to show the intention of determination and become a key driver of energy efficiency, including aiming to solve the global warming problem and maintain the capability in enhancing Thailand’s competitiveness. This is in line with Thailand’s Carbon Neutrality and Net Zero Emission goals in accordance with the COP 26 UN Climate Change Conference (COP26).

The Company has announced a policy of Carbon Neutrality and Net Zero Emission with a short-term goal of reducing greenhouse gas emissions by at least 15% by 2022, 25% by 2027, and 50% by 2037, respectively. The long-term goal is carbon neutrality by 2045 and net-zero greenhouse gas emissions by 2060. There is also a goal to disclose regularly and set the goal of reducing greenhouse gas emissions according to its goal of limiting global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels and striving to solve the problems of greenhouse gas emissions effectively.

Organization Target*	Year
Reduce GHG emission at least 15%	2022
Reduce GHG emission at least 25%	2027
Reduce GHG emission at least 50%	2037
Carbon Neutrality	2045
Net Zero Emission	2060

\* Cover scope 1 and 2



## Actions against Climate Change

As the climate change situation has intensified and affected many continents of the world, which is partly a result of greenhouse gas emissions from human activities. Many countries have turned their attention and are aware of the disaster, which can reduce the severity of climate change by collaborating to reduce greenhouse gas emissions. The company, therefore, has implemented business processes to reduce greenhouse gas emissions as follows:

### Promotion of a low carbon society (Reduce of Greenhouse Gas Emissions)

1. The Company supports building the low carbon society and the reduction of greenhouse gas emissions and it has been approved for listing in the Thailand Voluntary Emission Reduction Program: T-VER with the Thailand Greenhouse Gas Management Organization (public organization) or TGO. TGO develops the project to promote and support all sectors to take part in reducing the greenhouse voluntarily. The amount of greenhouse gas reduced or known as «Carbon Credit» under T-VER or «TVERs» can be traded to the local voluntary carbon market. TGO has determined criteria and procedures for project development, the methodology for reducing greenhouse gas, listing and certifying the amount of greenhouse gas. The project must cause reduction/absorb the greenhouse gas in Thailand, to reduce the emission rate which is the main cause of global warming, increase the source to store the greenhouse gas, generating income from trading the greenhouse gas. As a result, in 2022, the Company has applied to participate in such initiatives. The following renewable energy projects can cut greenhouse gas emissions by 738,087 tons of carbon dioxide equivalent (tCO<sub>2</sub>e):

#### Solar Power Plant Project

The TGO sub-committee approved the greenhouse gas mitigation in this project as follows:

The amount of greenhouse gas reduced from the electricity generation	January - December 2020	January - December 2021	January - December 2022
Solar Farm at Nakhonsawan, Thailand - under an operation of the Company's subsidiary, EA Solar Nakhonsawan Co., Ltd. with a capacity of 90 MW.	99,629	102,999	113,385
Solar Farm at Lampang, Thailand - under an operation of the Company's subsidiary, EA Solar Lampang Co., Ltd. with a capacity of 90 MW.	116,526	115,795	124,347
Solar Farm at Phitsanulok, Thailand - under an operation of the Company's subsidiary, EA Solar Phitsanulok Co., Ltd. with a capacity of 90 MW.	124,960	127,211	125,600

Remark: 2022 data has been verified by Bureau Veritas Certification (Thailand) Limited

### Wind Power Plant Project

The TGO sub-committee approved the greenhouse gas mitigation in this project as follows:

1) **Wind Farm at Songkhla and Nakhon Si Thammarat, Thailand**

Indirect subsidiary, EA Wind Hadkanghan 3 Co., Ltd. with a capacity of 126 MW. The Sub-Committee of TGO has certified that the amount of greenhouse gas reduced as follows:

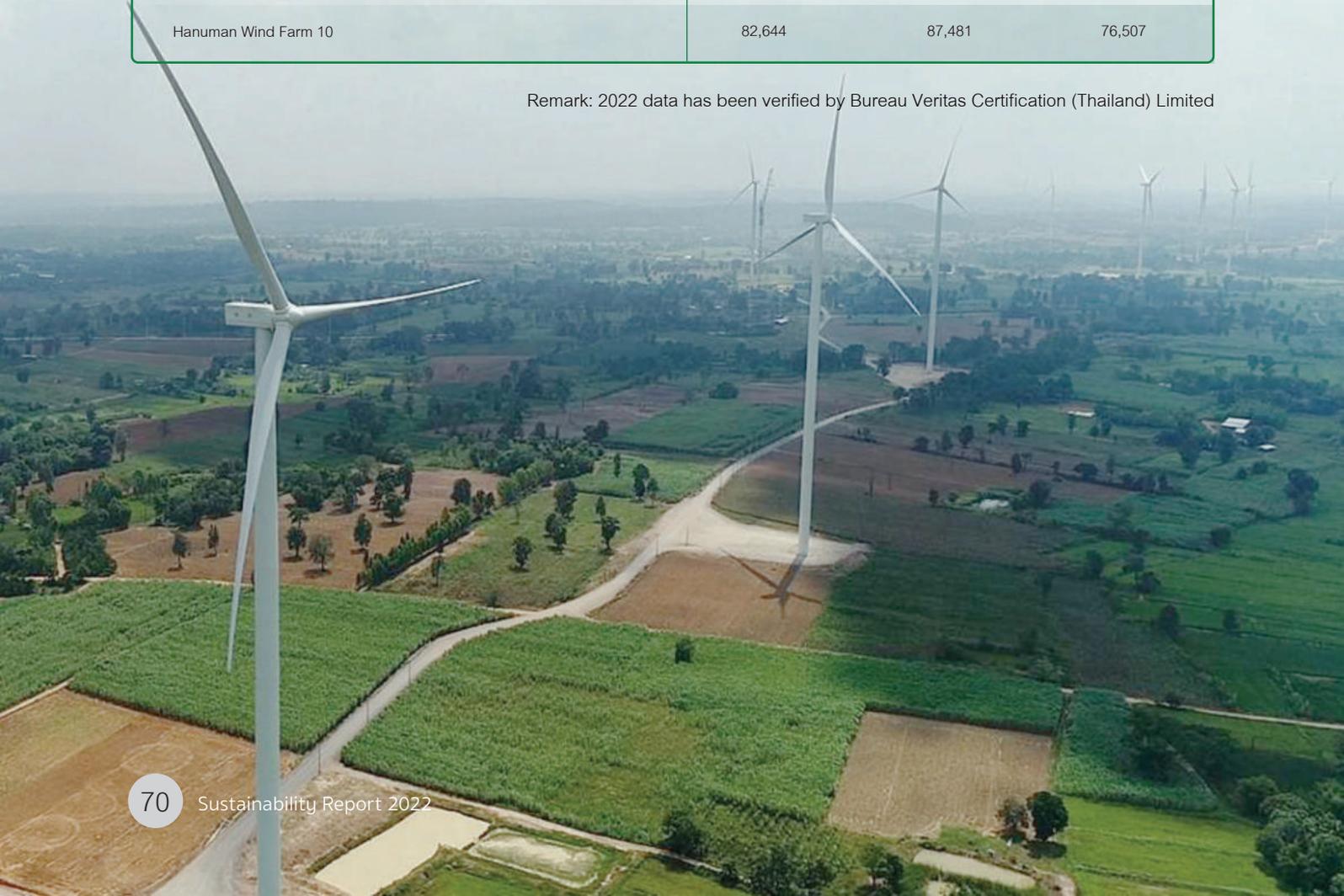
The amount of greenhouse gas reduced from the electricity generation by Wind Power Plant	January - December 2020	January - December 2021	January - December 2022
Wind Farm at Songkhla and Nakhon Si Thammarat	143,270	162,371	127,164

2) **Wind Farm (Hanuman Wind Farm 1, 5, 8, 9 and 10) at Chaiyaphum, Thailand**

of a group of company with a capacity of 260 MW. The Sub-Committee of TGO has certified that the amount of greenhouse gas reduced as follows:

The amount of greenhouse gas reduced from the electricity generation by Wind Power Plant	January - December 2020	January - December 2021	January - December 2022
Hanuman Wind Farm 1	43,164	43,883	37,512
Hanuman Wind Farm 5	61,382	63,123	56,036
Hanuman Wind Farm 8	43,457	45,832	38,106
Hanuman Wind Farm 9	43,260	45,456	39,430
Hanuman Wind Farm 10	82,644	87,481	76,507

Remark: 2022 data has been verified by Bureau Veritas Certification (Thailand) Limited



2. The company continues to expand its operations to businesses that promote the use of electric vehicles. instead of fossil fuel energy in the country's transportation system and is part of the development of infrastructure ready to support innovations in electric vehicles or the modern automotive industry (Next-generation Automotive) in the form of charging stations for electric cars under the trademark EA Anywhere, including promoting research and development in electric vehicles To extend the technology to meet the needs of users truly according to the concept of "MISSION NO EMISSION" by focusing on the creation of vehicles that are pollution-free, environmentally friendly. Under the trademark "MINE Mobility", the company has opened a commercial operation of a lithium-ion battery factory. and a modern integrated energy storage system. Amita Technology (Thailand) Co., Ltd., which EA jointly invests with Amita Technology Inc. (Taiwan) on the area of the Eastern Economic Corridor (EEC) development project on an area of more than 90 rai, accounting for a plant area of 80,000 square meters, producing pouch cell lithium-ion batteries, a fully integrated backup power system that uses intelligent systems. automated production system Starting with a capacity of 1 GWh per year. and can expand the capacity up to 4 GWh per year The capacity of 1 gigawatt will help reduce emissions to the environment. It can be used in 4,160 electric buses with a maximum driving distance of 240 kilometers per year, 11 meters, and the use of 4,160 electric buses can help reduce greenhouse gas emissions by approximately 91,709 tons per year and reduce the amount of It uses 97,066,667 liters of diesel per year compared to a diesel-powered passenger car."

## Amita Technology (Thailand) Co., Ltd. Lithium-ion Battery Plant Capacity 1 GWh



## Waste Management

The management of waste, the Company has implemented the waste management policy which is consistent with the vision and mission of the Company to use resources for maximum benefit, therefore, reduce waste and reduce the cost of waste disposal from the business operations of the Company.

### Management Approach

The Company focusing on the waste management under the Quality, Environmental, Energy and Occupational Health & Safety Policy, the operation process aims to reduce the negative impact on the society and the Environment. Also, the Company determines to minimize the amount of waste produced and re-use to reduce wastes to disposal. The Company has constantly implemented waste management projects such as reusing wastewater effluent from biodiesel manufacturing and relocating solar panels that are decreasing efficiency to other areas of the Company or communities. In addition, the company has established the waste management procedure that covers the management of waste and hazardous waste generated by the company's production processes or activities, as well as the control of the sorting process/type of waste and hazardous waste, and proper waste and hazardous waste disposal.

The Company has set a guideline for waste management practice. From the past operation, the Company has set the Waste Management Practice and adopted the 3Rs strategy by focusing on the reducing, reuse and recycle. Besides that, the Waste Management Procedure has been reviewed regularly, while awareness among employees in the organization about excellence in environmental management and the commitment to comply with relevant laws are set in order to lead to sustainable business development.

### Performance/Success Indicators

Biodiesel business			
	2020	2021	2022
Total waste generation (Tons)	9,027	8,936	7,909
Hazardous waste generation (Tons)	331	259	216
Non-hazardous waste generation (Tons)	8,696	8,677	7,693
Total water discharge from factory (m <sup>3</sup> )	64,886	50,640	60,960
Solar & Wind Power business			
	2020	2021	2022
Total waste generation (Tons)	208	103	88
Hazardous waste generation (Tons)	124	18	23
Non-hazardous waste generation (Tons)	84	85	65
Battery Electric Business			
	2022		
Total waste generation (Tons)	434,742.64		
Hazardous waste generation (Tons)	118,882.14		
Non-hazardous waste generation (Tons)	315,860.50		
Total water discharge from factory (m <sup>3</sup> )	112,168.00		
Electric Business			
	2022		
Total waste generation (Tons)	1,484.93		
Hazardous waste generation (Tons)	430.72		
Non-hazardous waste generation (Tons)	1,054.21		
Total water discharge from factory (m <sup>3</sup> )	7,002.72		

#### Biodiesel Business

The project to reduce dirt in wastewater from glycerin tower is implemented with the use of filter press so that filtered water can be reused in the production process. The project helps reduce treatment of wastewater from the production process by 40 tons per month.

# Environmental Performance

## Energy management

The company has Energy management guidelines by developing an appropriate energy management system. The operating guidelines are setting goals and creating energy projects for the reduction of fuel consumption. Fuels that the company can reduce are LPG and Coal.

## Performance/ Measurements

The company has an Energy Conservation Policy announcement, a summary of the annual report on Energy management by setting goals and creating energy projects for the implementation of fuel consumption control to be in the appropriate amount for the operation.

### Biodiesel Business

The factory set up a project to reduce fuel consumption. It is divided into 2 projects as follows,

1. The project reduce LPG by reusing the remaining heat from hot RBD oil instead of using LPG to heat up directly on raw material. Reduce ratio the consumption of LPG from 0.71 to 0.78 (Kg of LPG / Kg of RBD oil).

2022	
Target (Kg of LPG / Kg of RBD oil )	Performance 2022 (Kg of LPG / Kg of RBD oil )
0.71	0.78

2. The project reduce Coal by improving Energy Efficiency of Boiler Systems, change tubes in Boiler 16 Ton. Reduce ratio the consumption of Coal from 150 to 147.79 (Kg of Coal / Ton steam).

2022	
Target (Kg of Coal / Ton steam )	Performance 2022 (Kg of Coal / Ton steam )
150	147.79

### Renewable power business

The project to reduce the use of electricity in the building through the automatic transfer switch cabinet by bringing the timer to install inside the automatic transfer switch cabinet by placing a circuit to cut off the electricity of the device is idle at night.

- Energy to be reduced amount : Average 18,801 units (kWh)/month
- Discount amount : Average 56,087 baht/month
- Percentage is it compared to the previous year : Energy savings amount accounted for 14% of the total energy used before the project.

## Water Resource Management

The Company has a guidelines for water management resulting from its operations by reusing the used water to reduce the amount of water used. In addition, the company has an action plan to turn the treated wastewater into good quality water for use in the green areas of the factory. To replace the use of tap water, including campaigning and promoting the use of resources in a cost-effective manner and maximum efficiency.

### Performance/ Measurements

In 2019-2022, there were no water-related incidents with a financial impact above USD 10,000.

### Biodiesel Business

For 2022 performance, the amount of water used in the production process is 138,181.00 cubic meters and the amount of recycled water is 3,210.00 cubic meters from the operation of 2 projects, as shown below.

- The reuse of blowdown water discharged from the cooling tower for the fire firefighting system as a substitute for tap water, which the project implemented for the first year. The amount of water used in the cooling tower is 46,932.28 cubic meters and the blowdown water reused is 2,821.00 cubic meters or 6 percent. In 2023, the target is the blowdown water reused by 6%. as indicated in the following table.

2020		2021		2022	
Target (%)	Performance (%)	Target (%)	Performance (%)	Target (%)	Performance (%)
1	1	1	5	5	6

2023 Target : Reduce the use of tap water by 6%



2. The project recycle the treated water that can reduce water use by 389.00 cubic meters or 0.28% of tap water usage. In 2023, the target is reduce water by 0.3%. as the following table.

2021		2022	
Goal (%)	Performance (%)	Goal (%)	Performance (%)
0.2	0.15	0.2	0.28

2023 Target : Reduce the use of tap water by 0.3%

## Electric Vehicle & Energy Storage System Business

1. The project to reduce water used by standardization of EC (Electrical Conductivity) parameter in Water Rinse2 and Water Rinse4 in order to reduce the addition of DI water (water that passes through the deionization process ), which can reduce the amount of tap water used to produce DI water by 50.4 cubic meters/month. (tap water 72 cubic meters/month)

### Performance/Success Indicators

The Company has campaigned and instilled cost-effective use of the resources into our employees and personnel by organizing “3Rs Campaign Communication”. It focuses on reduce, reuse and recycle. In addition, the company has the management and implementation of cost-effective use of the resources, while controlling and regularly following up the results.



# Biodiversity

## Management Approach

EA realizes the value of the ecosystem, therefore, the Company joined with those involved in the rehabilitation of the natural environment to protect the ecosystem. In 2019, the Company kicked off a long-term plan to restore the ecosystem in biodiversity areas by starting in Lampang province which experienced the burning of forests and trees around power plants each year from the first to the second quarter. Besides, destroying valuable natural resources also caused the generation of electricity from solar energy to be lower production and affected the health and safety of employees and the surrounding community.

## Action on Biodiversity

The Company, therefore, cooperated with the Department of National Parks, Provincial Governor, and Lampang Provincial Government Agencies, Provincial public health, Private sectors and community representatives in Lampang Province for the project "Wet Fire Break" at Mon Phaya Chae National Park and Khelang Banphot National Park, Lampang Province, which is a large National park and faces the problem of burning forests every year causing widespread pollution. The restoration and reducing plans were carried out using the principles of the former King of Thailand in creating a forest fire protection line and ground cover by planting trees and ecological restoration, such as planting trees with high humidity in the leaves, not leaving leaves during the dry season, planting mulch and legumes to store moisture and increase soil nutrients, planting trees that can store water on the stems and leaves, Making small holes to create natural fertilizer, promoting the propagation of red ants, butterflies and insects for the fertile ecosystem, including using this pilot area as a source of economic crops such as bamboo mushrooms, herbs, rare trees, etc. The pilot project at Mon Phaya Chae National Park, not only taking steps to prevent forest fires but also restoring plants, insects, and the natural environment, preserving biodiversity as well.

## Biodiversity Study of Wind Power Plant

Wind turbine operation may have an impact on bird and bat habitats. The Company recognizes the importance of protecting the local ecosystem, and thus conducted a biodiversity study in the area surrounding wind power plants to collect biodiversity data during the pre-construction and operational phases

## Bat Diversity study

Because bats are nocturnal animals, the study required a variety of methodologies, including secondary data research, expert survey, bat detector use, audiomoth and echo meter touch bat detector, and bat carcass survey at wind turbines and surrounding areas, where the study discovered 6 species of bats. The company believes that this research will help to conserve biodiversity in the future.

- Hanuman Project at Chaiyaphum province discovered 6 species of bats.
- Hadkunghan Project at Nakonsithammarat province discovered 4 species of bats.



# Bird Species Diversity and Migration Route Study

The Company conducted a bird species diversity survey over 9 months during the dry and wet seasons, covering local and migratory bird species, migration routes, flying height, and seasonal changes in bird species. The following is the outcome of a study on bird species diversity at wind power stations

## Hanuman Project

### Chaiyaphum Province

**HNM1 found 43 bird species**

with 39 species of which are residents, 4 species of migrants

**HNM5 found 53 bird species**

with 51 species of which are residents, 2 species of migrants

**HNM8 found 53 bird species**

with 50 species of which are residents, 3 species of migrants

**HNM9 found 54 bird species**

with 51 species of which are residents, 1 species of migrants

**HNM10 found 60 bird species**

with 56 species of which are residents, 4 species of migrants

## Hadkunghan Project

### Nakonsithammarat province

A total of 94 bird species are observed from both surveys, with 49 species of which are residents, 37 species of migrants, 7 species are both resident and migrant, and 1 species is breeding visitor.

# Vegetation Diversity : Study

The Company conducted a study of vegetation diversity utilizing secondary data, satellite images, and field observations in the surrounding areas. According to the study, most areas were used for cassava, corn, and sugarcane cultivation, indicating that the project had no adverse effect on vegetation diversity or forest resources.

## Performance

The Company conducts a preliminary risk assessment of biodiversity in all operation areas and all power plants are not situated in areas with high biodiversity potential, such as World Heritage sites, protected areas by the International Union for Conservation of Nature (IUCN) Category 1-4 that are strict nature reserves, national park, natural monument, and habitat/species management area.

In the past year, the Company also undertook biodiversity studies wind power plants in order to use the data from the studies to enhance project design and establish preventive measures to avoid impacts prior to project implementation.





# Social Dimension

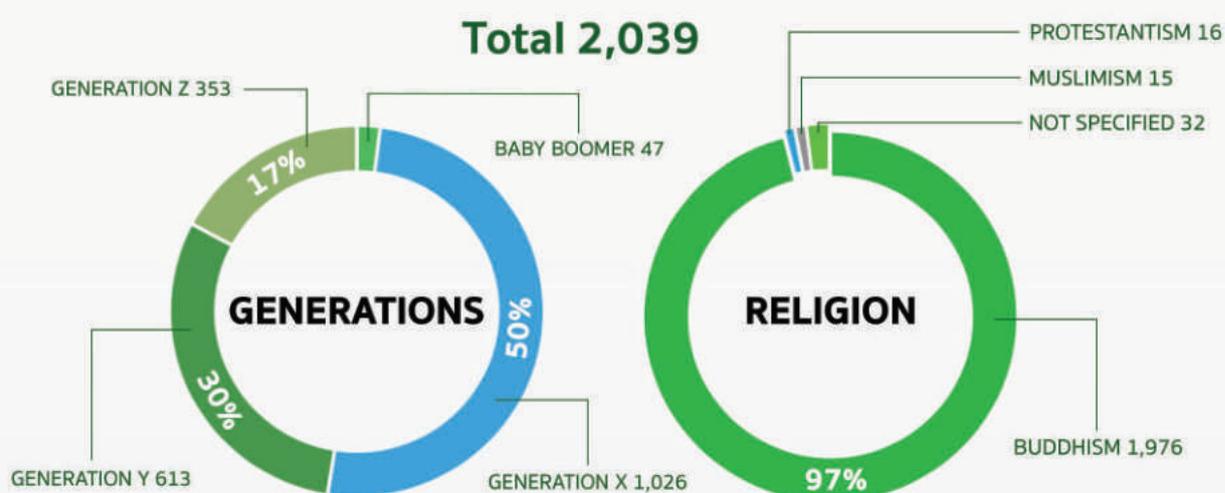
## Human Resource Management

Energy Absolute Group is well aware that employees are key factors for elevating organizational competitive advantages. Therefore, human resource management strategies are determined, comprising increasing employees' productivity, enhancing organizational commitment among employees, developing employees' capacity in response to rapid and unexpected changes (BANI – Brittle, Anxious, Nonlinear, Incomprehensible), including uplifting human resource standards and management.

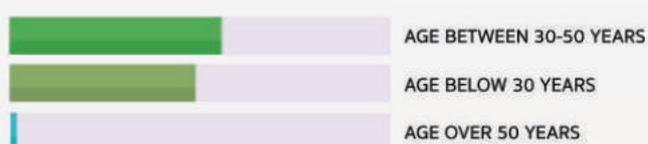
Employee management – Energy Absolute Group sets up diversity & inclusion policy. In this regard, all employees are treated equally and appropriately without discrimination, regardless of their race, sex, social status, disability, religion, or anything else. Cultural and value differences are accepted, including the process of recruitment, employment, and appointment. Promotion is given to learning, employee development, and overseeing employees to work efficiently to support organizational success, achieving the set goals efficiently and sustaining the growth of business continuously.

# EMPLOYEE DEMOGRAPHY

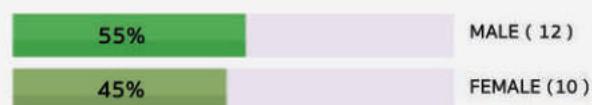
as of December 31, 2022 Energy Absolute and its subsidiaries have 2,039 permanent employees included the employees in special projects (excluded board of committees and advisors)



## TOTAL NUMBER OF NEW EMPLOYEE HIRES



## SHARE OF WOMEN IN MANAGEMENT POSITIONS IN REVENUE-GENERATING FUNCTIONS (E.G. SALES)



Diversity Indicator	Year 2021		Year 2022		Percentage Target 2023
	Percentage 2021	The number of up coming of women employees (person)	Number of employees	Percentage 2022	
Share of women in total workforce	25.19%	15	491	23.59	24
Share of women in all management positions, including junior, middle and top	33.98%	7	257	36.32	41
Share of women in junior management positions, i.e. first level of management	38.71%	4	216	39.92	43
Share of women in top management positions, i.e. maximum two levels away from the CEO or comparable positions	7.69%	1	2	8.33	8
Share of women in management positions in revenue-generating functions (e.g. sales)	50.00%	1	10	2.28	3
Share of women in STEM-related positions	20.63%	2	57	25.11	26

Work area		
Area	No. of staff	Percentage
Bangkok	191	9.37%
Prachinburi	149	7.31%
Chachoengsao	1485	72.83%
Chaiyaphum	17	0.83%
Nakhon Si Thammarat	18	0.88%
Nakhon Sawan	19	0.93%
Phitsanulok	24	1.18%
Rayong	40	1.96%
Lopburi	9	0.44%
Lampang	25	1.23%
Samut Prakan	62	3.04%
<b>Total</b>	<b>2039</b>	<b>100.00%</b>

Management Level		
	No. of staff	Percentage
<b>Senior management</b>	<b>12</b>	<b>100%</b>
Male	11	92%
Female	1	8%
<b>Middle management</b>	<b>159</b>	<b>100%</b>
Male	117	74%
Female	42	26%
<b>Junior management</b>	<b>531</b>	<b>100%</b>
Male	319	60%
Female	212	40%
<b>Non-management</b>	<b>1337</b>	<b>100%</b>
Male	1111	83%
Female	226	17%
<b>Total</b>	<b>2039</b>	<b>100%</b>

People Diversity		
Nationality	No. of staff	Percentage
Thais	1977	96.96%
Chinese	45	2.21%
Taiwanese	16	0.78%
Burmese	1	0.05%
<b>Total of Asian</b>	<b>2039</b>	<b>100.00%</b>

Performance of employee management		
Total number of new employee	No. of staff	Percentage
Male	1285	77.64%
Female	370	22.36%
<b>Total number of new employee hires</b>		
Age below 30 years	878	53%
Age between 30-50 years	763	46%
Age over 50 years	14	1%
<b>Total</b>	<b>1655</b>	<b>100%</b>

STEM or NON-STEM		
	No. of staff	Percentage
STEM	223	11%
NON-STEM	1816	89%
<b>Total</b>	<b>2039</b>	<b>100%</b>

Resigned		
	No. of staff	Percentage
<b>Voluntary resigned</b>		
Male	257	72%
Female	102	28%
<b>Voluntary resigned</b>		
Age between 30-50 years	195	54%
Age below 30 years	155	43%
Age over 50 years	9	3%
<b>Total</b>	<b>359</b>	<b>100%</b>

Gender in STEM		
	No. of staff	Percentage
Male	167	75%
Female	56	25%
<b>Total</b>	<b>223</b>	<b>100%</b>

Parental Leave		
	No. of staff	Percentage
Male	28	80%
Female	7	20%
<b>Total</b>	<b>35</b>	<b>100%</b>

## Human Rights Management

The Energy Absolute Group is committed to the company's success and sustainability together with promoting human rights throughout the organization. The Company recognizes the importance of respecting the human rights of every employee. This is claimed as an essential role of the Company, its Business Partners and Joint Ventures in the supply chain to adhere to human rights principles of equal treatment of employees, customers, local communities and other stakeholders and avoiding all forms of human rights violations.

This is to ensure that The Energy Absolute Group has operated the business without any human rights violations. The Group has established policies and guidelines on human rights to prevent human rights violations in all business activities of the Group. We value and respect human rights as stipulated in the Universal Declaration of Human Rights, including collective agreements and treaties relating to the treatment of labor and the UN Declaration on the Rights of Indigenous Peoples, UN Global Compact, UN Guiding Principles on Business and Human Rights, Voluntary Principles on Security and Human Rights, and the International Labor Organization's Declaration on Fundamental Principles and Rights at Work (ILO.) The Group has formulated and declared those policies as Policy Commitment & Human Rights Commitment.

## Integrated Human Rights Review Process

Energy Absolute Group has adopted the Human Rights Due Diligence (HRDD) process in accordance with the UN Guiding Principles on Business and Human Rights (UNGPR) as a framework in Human Rights Management. It covers all business activities in Thailand and country-wide where the Company operates and analyzes potential impacts as well as having a systematic human rights risk management to ensure that the Group has a system to control and prevent human rights violations. Further, there is the effective human rights management to support its business operations, business partners, contractors, and all stakeholders to highly pay attention and respect to the human rights principles in accordance with the Human Rights Management Guidelines of the Group.



## Integrated Human Rights Review Process



Major Risks	Examples of Current Control Measures
<p>Labor Practice</p> <ol style="list-style-type: none"> <li>1. Executors safety and health</li> <li>2. Clarity in terms of employment in the supply chain</li> <li>3. Child Labor</li> </ol>	<p>at work and risk areas for employees and contractors.</p> <ol style="list-style-type: none"> <li>1.3 Safety equipment is provided for employees and contractors.</li> <li>2.1 Employee must sign and acknowledge the contents of the Employee Code of Conduct.</li> <li>2.2 There is a training with a test to confirm employees' understanding and respect of human rights.</li> <li>3.1 All forms of child labor prohibition are declared and stipulated in the Human Resources Operations Manual.</li> </ol>
<p>Community and Society</p> <ol style="list-style-type: none"> <li>1. Safety and way of living in the community</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Community area survey process</li> <li>1.2 Clear complaint handling process</li> </ol>

### Ethics/Code of Conduct training and communication, anti-corruption, risk management, information technology securities awareness, and Personal Data Protection Act

**Challenge** : Promoting ethical decision making in the workplace, including risk awareness in the workplace, be careful with the use of information technology and personal data by means of communication and public relations that can be widely accessible to employees.

**Implementation** : Content is prepared to enable employees to learn and review the knowledge on their own. Tests are provided to measure knowledge levels of ethics, anti-corruption, risk management, information technology securities awareness,, and Personal Data Protection Act among employees at all levels. Thai and foreign employees obtain knowledge and pass the tests, accounting for 91%.

## Promotion of gender equality

Implementation : As Gender Equality Act B.E. 2558 (2015) is enacted in Thailand, which protects all individuals from gender-based discrimination, Energy Absolute Group has monitored and communicated gender equality with all stakeholders to acknowledge and use as a practical guideline. Energy Absolute Group has continuously adhered to the principles of gender equality in terms of employment, remuneration paid, job position and career advancement, and working condition.

Talent recruitment							
Recruitment is conducted to meet the vision statement of EA	Recruitment analytics tools	Recruitment channel			Personnel recruitment measurement		
Smart people having vision similar to the vision of the organization are recruited, namely, they wish to participate in creating innovation for country development together.	For all job positions recruited, recruitment team needs to consider job positioning by using SWOT analysis tool and others to reach the target group directly and speedily.	<b>Internal recruitment</b> The recruitment process is similar to recruiting people outside the company, such as making a business plan for a management position.	<b>External recruitment</b> Posting the job descriptions on different job boards (both online and offline). <a href="http://www.energyabsolute.co.th">www.energyabsolute.co.th</a>  <a href="http://www.Jobsdb.com">www.Jobsdb.com</a>  <a href="http://www.jobtopgun.com">www.jobtopgun.com</a>  <a href="http://www.Jobthai.com">www.Jobthai.com</a>  LinkedIn Job posting sign	<b>Headhunter</b> Recruitment team acts as a headhunter to select candidates proactively and perform field work.	<b>Time spent on recruitment process :</b> - Operation staff = 15 days - Officer level = 30 days. - Manager level = 45 days - Executive level = 60 days.	<b>Recruiting quantity</b> 90% of its vacancies are filled.	<b>Recruiting quality</b> The performance of employees recruited must not below EA Standard.

Company	Vacancy	Done	Balance
EA	130	115	15
ESM	43	36	7
EBI	18	18	0
EAF	8	8	0
MMR	8	8	0
MMC	74	72	2
GTR	4	3	1
EMN	13	10	3
BEV	15	13	2
AMITA	434	359	75

## Recruiting Competent Employees from Educational Institutions

The Group focuses on a proactive strategy through building partnerships with leading educational institutions in the country in order to reach and understand students expectations for the organizations they aspire to join. It also helps prepare them in terms of knowledge, skills and competencies that the organizations required through co-designing the learning courses. This is to get them ready with effectiveness to enter to the organization after graduation.

### Collaborative approach for recruiting employees

#### Co-designing courses with external agencies

The collaborative project with educational institutions is to design teaching and learning to prepare qualified employees with specific abilities, such as Electrical Automotive Engineering, Chemical Engineering, etc., with an emphasis on practical base in real work environment.

#### Student Internship Program

It is a program that aims to provide students with internships in the workplace with related work. This is to enhance their specific knowledge and skills with practical base learning during Co-operative Education Program and Summer Internship. The Group provides opportunities for students from various colleges and universities to join and learn while having mentors from the Group. There are 71 students joining the Co-operative Education Program and 55 students joining the Summer Internship. The Group will pay some allowance to support students' meal and travelling cost.

### Re-Employment Program

**Background :** There are many employees who are about to reach retirement age in each year. Many of them are expertise in specific fields which they can still work effectively and be able to transfer knowledge and skills to the latter generations. The Group recognizes the importance of retaining such highly competent employees and generate these values to the organization.

**Implementation :** The Group creates the project called Re-Employment Program to provide opportunities for employment after retirement with careful consideration of the job suitability and numbers of retired employees each year.

**Results :** In 2022, we have re-employed 9 employees who retired at various levels and it is expected more numbers in the future considering the suitable ability.

## Manpower Planning

**Challenge** : The disruptive technology which is inevitable in current business world drives the organizations and employees to adapt to such challenges. Therefore, the organization has prepared and developed its employees to cope with the challenges in the digital era.

**Implementation** : The Group has formulated a strategic implementation and set goals to develop employee capability as well as to be caring organization. The actions are as below.

1. To improve employee capability at all levels with learning project assignment which is tailored-made to match with skill gap.
2. To provide internal job rotation opportunity to prepare employees to be multitasking skill. The Group has provided designated and effective job rotation programs so that employees can perform the latter-roles successfully.
3. To recruit competent employees from educational institutions through a strategic human resource development program with effective communication.

## Performance Appraisal

Energy Absolute Group evaluates the effectiveness of employees' performance at all levels by applying Performance Management System within the organization. It also helps to understand capability level of employees. The system focuses on how the employee achieving the targeted objectives. It links the organization's goals and deploys to department level and each individual employee.

The first dimension is to measure job accomplishment by using OKR or Objective Key Result to measure organization's or department's success. We also use PDA, or Performance Development Appraisal, to measure individual success.

The second dimension is to measure behavioral attributes by using the 360 Degree Feedback tool to get feedback from peers, colleagues from different departments, and subordinates. Recipients are assessed on their behaviors which are the identity of the Group (EA's DNA). The frequency of performance appraisal took place by twice a year.

## Employee Capability Enhancement

**Challenge** : The arrival of digital technology has forced the organization change its way of work while the competitive environment in the digital age has great impact for recruiting and attracting talents.

**Actions** : It is not only developing employees' capability to create opportunities and career advancement under changing contexts but also creating cooperation with external agencies for recruitment. The Group prepares employee by developing their skills and helping them creating value through participation in innovative projects. Thus, they can apply knowledge and skills related to their job scope, strengthen their leadership and other necessary skills. The Group offers skills development programs for all levels covering Vice Presidents, Managers, Employees, and Officers both in production departments and support functions. For Vice Presidents, the aims to provide performance management tools and concepts through Coaching & Feedback. For Managers, the Group develop them to be good leaders together with project management skills. Moreover, The Group provided "Innovation Leadership Program" to support and endorse the people leader to be an innovation project lead. For employees and officers, the Group focuses on providing knowledge to develop their professional skills. This is to also enhance their skills to deeply understand overall effectiveness of the machines, and to learn the importance of the multi-participatory maintenance. These are key factors to facilitate employees to succeed and advance more in their careers.

The Group creates the online learning platform to enhance learning process and knowledge transfer within the organization effectively. This is to gather key learning contents and place on learning platform technology. It helps encouraging employee to be able to learn anywhere, and anytime. As a result, employees have more access to learning (Learning Adoption). Employee learning adoption is increase of 52.04% compared to the traditional learning approach.

Operating Result	2019	2020	2021	2022	Target 2023
Average Training Hour	11.66	12.54	17.87	36.79	40
Invest on Employee Development	1.543	1.968	1.431	3.516	N/A
Human Capital Return on Investment (HCROI)	16.99	21.24	21.68	21.61	21.44
% of FTEs participating in the program	100	100	100	100	100

Operating Result (No.of courses)	Online	Onsite	Knowledge Sharing	Professional	Leadership & Managerial	International Standard & SHE
2021	16	57	5	28	17	37
No.of participants (not count duplicate)	989	801	76	580	561	1,043
2022	27	61	7	36	15	34
No.of participants (not count duplicate)	1,822	1,599	84	1,977	1,158	1,183
% of developed employee 2022 VS 2021	45.72%	49.91%	9.52%	70.66%	51.55%	11.83%

## Employee and organizational development

To ensure organizational development is consistent with the direction of the business operations, which is a major challenge that all organizations have to confront, the development of employees to be flexible and adaptable to rapid changes shall strengthen the organization. Energy Absolute Group gives importance to employee development to meet changes that occur at every moment in Today's world. Employee development method has been developed in the form of 4 various learning models:

1. Digital learning through online learning platforms (Self-Learning).
2. Classroom training (Onsite training).
3. Information, skills, experience shared from experts (Knowledge sharing).
4. Project-based learning.

Such training course shall be uplifted from concepts to practice to create a business outcome using design thinking, knowledge sharing, and experiences from executives, experts. Employee development through collaborative projects can measure learning outcomes in a tangible manner with regard to knowledge and skills development, application, success towards goal, and value creation in business. Employees submitted a project to the competition under the EA Inside EA campaign of Energy Absolute Group. Besides, Energy Absolute Group held functional competency development. Emphasis is placed on the 70:20:10 model for learning and development. It reveals that individuals tend to learn 70% of their knowledge from challenging experiences and assignments, 20% from developmental relationship, and 10% from coursework and training. Based on the belief that employee development through real experience by practicing, it shall help generate learning and behavioral changes that truly affect employee performance.

## Performance

Based on the 70:20:10 model for learning and development to elevate learning and step into digital transformation, the employee development outcomes of Energy Absolute Group are as follow:

### 1. Learn 70% of their knowledge from challenging experiences and assignments i.e.

- Developing through the EA Inside EA campaign according to the process of creative cognitive process that focuses on learning through thinking and practicing project-based learning (PBL), 29 projects with estimated value added at 25 million baht,
- Developing through on-the-job training – employees learn the job while performing it within the actual work environment.

### 2. Learn 20% from developmental relationship

This year coaching skill development is given to chiefs continuously. Significant development

- 1) Development project for chief executives, middle level executives, and Executive One on One Coaching for new generation executives individually (Executive Trainee Program).
- 2) Skill development project and real coaching for subordinates of middle level executives and supervisors, there

### 3. Learn 10% from coursework and training

10% of the development is from classroom learning or training among employees. Energy Absolute Group gives importance to learning methods consistent with employees' different basic knowledge and skills, including applying new technology to achieve actual learning. Details are as follow:

- Blended learning is a combination of the development of theoretical and practical knowledge by using case based learning approach including creating skills, supporting and pushing self-learning, etc.
- The adoption of digital system to develop employee learning increasingly by self-learning management through @CORE system, QR code is used to conduct a survey and assess training outcomes.

## Engagement Survey

Employee commitment survey was conducted by institutes accepted by leading organizations in the country and foreign countries. Employee commitment outcome in 2022 was 54% while the target of employee commitment was set at 56%. In 2022, the company implemented employee commitment through development and learning provided to employees. Channels, patterns, and courses of training were added more. Information system was improved to meet usage demands to ensure it is fast and easily accessible. Moreover, a channel to listen to employees' comment was opened through the training activity "Because we care, please share with us" and the project "Process Restructuring". Based on both 2 projects, approval –seeking processes to be faster were improved. Purchasing system was developed to be convenient for users, including disbursement procedures that are more explicit, convenient, and faster for users. The purpose of the improvement and development of internal management process is organizational sustainability.

## Voluntary Resignation

In 2022, the voluntary resignation rate of employees is at 21% which is 18% decreasing from the previous year. The Group plans to improve the rate by developing Succession Plan to provide employee to see opportunity and plan their own career advancement. The Managements will take part in mentoring and coaching them to improve in terms of technical and self-management appropriately.

## Job rotation and its contribution to employee career advancement (Career Development)

Energy Absolute Group has a policy on supporting job rotation to ensure employees achieve career advancement straightly, widely, and diagonally. Job rotation in the organization enables employees to learn and create new skills across divisions or departments. Furthermore, job rotation helps the organization to prepare an adequate number of manpower, consistent with business strategies (Strategic Workforce Planning) of the company in the future.

Career path development		
	2021	2022
The number of new hiring	644	1,655
Employee transfer	14	39
Change in job position	25	93
Percentage of open positions filled by internal candidates (internal hires)	6.05	7.97%
Average hiring cost	4,226	2,268

## Long-Term Incentives for Employees

In the Energy Absolute context, employees below the senior management level are defined as Operator, Officer, and above to Vice President. The Long-Term incentive programs are programs tied to an employee's performance. The performance can be measured during one or multiple years. EA group called that incentive "Trust Fund"

EA Employee Benefit Trust – The Employee Benefit Trust aims to reward employees with financial security when they retire. The selection criteria are associated with the employees' performance, potential, and value added creation, which contributes to organizational performance. The membership status will be evaluated on a yearly basis, which will encourage employees to maintain a high performance. The program applies to employees at all levels

## Objectives of the "Trust Fund"

- 1.1 To increase financial wealth and stability for employees upon retirement
- 1.2 To create the opportunity for employees with outstanding performance and with outstanding EA employee's identity (EA DNA) to be an important force for the organization to achieve its business objectives by participating in the Company's ownership or partnership through the trust fund to create joint value for joint sustainable growth.
- 1.3 To be an instrument promoting performance, creating motivation and maintaining personnel with the company.

## Qualifications of persons entitled to participate in the "Trust Fund" are as follows:

1. Being an employee with performance in the right lane group at A grade level (A Grade) for two years or more consecutively.
2. Being a talented employee or employee with high performance and potential.
3. Being an employee with good work achievement creating significant value added to the Company.
4. Our trust fund provides long-term incentives based on our employee's development,

Organizational performance (which includes contributing to the long-term value creation and sustainability performance of the company), and their ability to demonstrate their practice of our company's values, which are 1) Be energetic and enthusiastic and dare to think and do the right thing, 2) Demonstrate professionalism and expertise as well as EA's 3Hs (head: innovative, shared value, and creative thinking; heart: entrepreneurial spirit; hand: professionalism and action), and 3) Collaborate and work with others to develop mutually.

## Performance of Long-Term Incentives for Employees

The one qualified partner of the «Trust Fund» program was announced via corporate email in the year 2022. That qualified partner was named Mr. Cheerapan P. - Biodiesel Vice President.

## Engagement Survey

Employee commitment survey was conducted by institutes accepted by leading organizations in the country and foreign countries. Employee commitment outcome in 2022 was 54% while the target of employee commitment was set at 56%. In 2022, the company implemented employee commitment through development and learning provided to employees. Channels, patterns, and courses of training were added more. Information system was improved to meet usage demands to ensure it is fast and easily accessible. Moreover, a channel to listen to employees' comment was opened through the training activity "Because we care, please share with us" and the project "Process Restructuring". Based on both 2 projects, approval –seeking processes to be faster were improved. Purchasing system was developed to be convenient for users, including disbursement procedures that are more explicit, convenient, and faster for users. The purpose of the improvement and development of internal management process is organizational sustainability.

## Innovation promotion

In addition to adopting digital technology to drive the organization to achieve competitive advantages and to cope with changes in business operations, Energy Absolute Group sets a policy to promote and develop innovation, create an environment for innovation development, one of EA's DNA. Employees are encouraged to think out of the box, have creative thinking, be brave enough to express their own ideas, be brave enough to confront changes through submitting their work to the competition under the campaign EA Inside EA.

## Performance

In 2022, employees from 12 companies of the group were interested in submitting their work to compete in 29 projects, increasing 61% from 2021 and it was the 5th year of the campaign EA Inside EA. Since 2018 to at present, there have been 61 projects. The 3 examples of work winning the biggest award from the EA Inside EA 2022 are as follow:

### **The project on cost reduction in the production by changing function coil heat C-1301 (RBD/CPO)**

Objectives: To reduce steam in the process of RBD oil production, to increase temperature in the bleaching process, and to reduce color intensity of RBD oil.

Performance: The project could reduce steam 271kg/hr or 6.5 ton steam /day, and cost reduction in the steam production is accounted for 1,350,000 baht/year.

### **The project on wastewater improvement from glycerin distillation columns using filter press technology.**

Objectives: To reduce contamination of water in the purification process in the distillation column before entering wastewater treatment process using COD and TDS as indicators, and to reduce cost in wastewater treatment process. Performance: Cost reduction in wastewater treatment process is accounted for 426,600 baht/year.

### **The project on adjusting cooling fan cycles according to temperature for energy saving**

Objectives: To reduce electrical energy from cooling tower since the fan works harder than normal and to reduce water evaporation. Performance: Electricity cost is reduced 104,370.24 baht/year.

## People Analytics Program

Energy Absolute group adopts people analytics program to measure employee performance, prepare employee development plans, enhance work skills, help recruiting and hiring employees so as to facilitate changes through 2 skill development processes, namely, reskilling and upskilling.



### Visions for sustainable employee

1. Enhancing capacity by setting the structure of content and module-based learning method, expected a body of knowledge shall induce sustainable development.
2. Seeking cooperation with educational institutions by connecting best practices from inside and outside of the organization. The body of knowledge obtained can be developed further. It is expected that it shall induce creativity and knowledge sharing about sustainable development.
3. Building knowledge sharing culture by setting knowledge sharing in a systematic and consistent manner. It is expected that employees shall be familiar with the sharing of knowledge, experience, and what they learn and be able to build upon sooner.
4. Knowledge management (KM) is used as a tool for knowledge sharing within the organization. It is aimed at collecting knowledge from individuals or documents in the organization to develop in a systematic manner to ensure employee in the organization are able to access important business knowledge and develop themselves to be knowledgeable people and perform their jobs efficiently, enabling the organization to enjoy maximum competitive advantages.

### Promoting good quality of life in Energy Absolute Group Family

Energy Absolute Group fosters employees to be happy and convenient at work. Digital platforms are available to facilitate their work. A variety of communication channels are accessible to employees to perceive news and activities implemented by the company, including suggestions that the organization brings to develop in a tangible manner, such as positive work environment, training courses, and various activities. Besides, Energy Absolute Group brings work from anywhere pattern as a pilot project to use with 3 supporting agencies, which allows employees to work from anywhere. Employees are able to adjust their schedules and working places to be flexible while they can create work-life balance on their own, responding to hybrid working. It seem like they have Flexible working hours. Moreover, the company also supported Working-from-home arrangements for example the internet package for the employees. Energy Absolute Group gives importance to and supports diversity and differences of employees in the organization equally or diversity and inclusion (D&I) by providing child support welfare that comprehensively covers employees who are mothers and fathers so as to enable employees to spend their time building a family bond. Female employees are able to have 98 days of maternity leave according to the law, Breast-feeding/lactation room and male employees are able to take leave for 3 days to care for their spouse after giving birth while they are get paid. Both male and female employees are able to take leave for 6 days to care for their father and mother, husband, wife, and child in case of being admitted to a hospital while they are get paid, or are able to take leave for attending personal errands that cannot be taken by other people, such as making contact with government agencies. It is means that EA provided the paid parental leave for the primary caregiver plus with the paid parental leave for the non-primary caregiver

Energy Absolute Group takes care of employees to have well-being in all aspects (Sport & health initiatives). In 2022, health promoting activities were held by encouraging employees to play sports, such as badminton, football (Physical Well-Being). Spacious and airy spaces are available for employees to spend time during their lunch break to relax, which enhances community well-being).



Energy Absolute Group aims at improving quality of life of all employees so that they are able to achieve work-life balance. The company establishes Welfare Committee in the workplace (Freedom of Association), consisting of 11 employee representatives who are elected among the employees to be mediator in transferring employees' needs of welfare to the company including giving suggestions and inspecting the company's welfare management. Welfare and benefits are added more from the basic legal welfare, without discrimination. Employees are entitled to receive the following welfare: annual physical checkup, life insurance, accident insurance, dental care treatment, eye care, personal protective equipment, loans from financial institutions at employee interest rate, provident fund, etc.

## Policies and measures supporting employees affected by disasters

Flash flood that occurred in 2022 had effects on livelihood of employees in Energy Absolute group who live in the northeast region. To mitigate the problem, the company delivered a primary subsidy to 7 employees.

## Policies and measures assisting employees during the Covid-19 crisis

Though in 2022 the Covid-19 crisis was unfolded, Energy Absolute Group is aware of employee safety and impacts they received. Therefore, the company maintains the policies and measures to assist employees. Welfare is provided to support employees to work with the company based on disease-free status according to the intention of the company that aims at creating value and growing together in a sustainable manner, i.e. the provision of ATK for employees who are directly exposed to customers or employees who have a close contact setting (Tier 1), the provision of ATK at cost price to enable employees to screen Covid-19 every week so as to reduce the spread of infection among people close to them. Employees are able to buy ATK at cost price for their families so as to control the infection in a certain area.

## Occupational Health and safety

The Company believes that the management of safety, occupational health, and working environment is a basic responsibility and it is an important and necessary factor for business operations and the company's employees. The Company determines to promote every business unit to have a healthy and safe operating environment and adheres consistently along with organizational development to determine for excellence. This is in line with the Sustainable Development Goals 8, decent work and economic growth.

## Management Approach

The Company value employee safety by announcing occupational health and safety policy and working environment policy sets guidelines and safety management systems to ensure they are in line with legal and international standards on safety, occupational health, and work environment for employees, business partners, and stakeholders. This includes risk prevention measures for accidents, injuries, and illnesses caused by operations, along with support to improve the work environment to promote employees' physical and emotional wellbeing and hygiene, and their quality of work life.

- Prevent accidents, injuries, and illness due to operations with the cooperation of employees and all contractors as well as limiting and controlling risks in unsafe operations by providing a briefing and checking safety readiness before operating in the area
- Cooperate with other government agencies and private organizations to comply with laws and regulations strictly regarding safety and implement good safety standards in business operations emergency and accidents from operations quickly effectively and carefully.
- Provide personal protective equipment to prevent, mitigate and control risks and potential health impacts from operations, transportation, services, as well as guidelines for controlling emergencies to reduce losses and injuries
- Set procedures, action plans, and training including educating employees at all levels to have sufficient knowledge, understanding, and information regarding work safety to prevent danger from work or various diseases including use in daily life
- Provide safety measures for employees and those involved by providing a safe and hygienic working environment
- Arranges annual health checks for all employees according to work-related risk factor (Confined Space Entry Work, High Work).
- Provide training, rehearsal, and control to work correctly and can use tools equipment correctly in case an incident occurs, which the rehearsal plan is practiced annually
- Review occupational health and safety management policies and provide assessments periodically
- Listen to comments and suggestions from employees, contractors, business partners, communities, the government, and relevant parties to improve or work together to increase confidence in occupational health and safety operations

## Hazard identification risk assessment and investigation of incidents

The company has established measures to prevent and control hazards, focusing on eliminating risks and dangers in the workplace. and has also been prepared to support various emergencies, such as checking the alarm system, fire escape routes, and emergency lighting automatic fire extinguishing system and emergency equipment Also implement the training of emergency respond.

In addition, the company has set up an accident investigation process. In case of physical or property accidents as well as diseases arising from work There is an accident investigation process to determine the cause. set corrective measures and prevent recurrence as well as follow up on the results of corrective actions Including monitoring performance for continuous improvement.

## Work-related health care

The Company conducts a health risk assessment by occupational medicine physicians covering all activities.to determine measures to control and reduce health risks appropriately In addition, the company has regularly measured the working environment, such as odor, light, sound, heat, dust and chemical measurements in the work area. compared to safety standards,has provide a hospital and a regular nurse. To provide health services to employees and those who come to work in the area of the company.It also arranges a health check-up for employees before starting work. when changing jobs By providing annual health check-ups and health checks based on risk factors by occupational medicine physicians.



## Consultation and communication on occupational health and safety issues

The Company promotes employee participation in the development of occupational safety and health operations through the Safety Committee, for the board able to communicate safety information to employees In addition to the meeting of the Board of Directors of the Safety Committee Occupational Safety, Health and Working Environment Able to Communicate safety information to employees In addition to organizing meeting of the Committee of Directors, the company has organized activities to promote safety and occupational health in order to promote employee participation. Raising awareness,providing advice and communicating on related issues with safety and occupational health through Safety talk, Safety talk , Safety Patrol activities

## Occupational health and safety training

The company provides training on safety and occupational health for all employees and operators before starting work or when changing positions by considering the training course According to the nature of the hazards and risks associated with the work or activities performed, such as safety, training in the use of chemicals. electrical safety training and safety training in working in confined spaces, etc. In addition, the company Organized training in the event of various emergencies, such as fire evacuation drills, chemical spillage there is a training plan. Follow up on the implementation of the plan. as well as record the training history of employees

### In 2022, the Company has provided training about work safety as follows :

- Training on basic fire fighting and emergency preparedness
- Training on chemical spill situation.
- Training on the use of personal protective equipment.
- Training on Occupational disease.
- Training on First aids.
- Training to control external service providers.
- Training to Confined Space entry.
- Process Safety Management Internal Auditor
- Safety Officer in Management level and Supervisor level
- Training on the management of waste or unused materials.
- ISO 45001:2018 requirements.
- Risk assessment for ISO 45001:2018, identify risks, opportunities, and hazards.
- Forklift Safety Training



### Performance/Indicators

In 2022 the Group Company determined the operational indicators from Lost Time Injury Frequency Rate (LTIFR) and fatalities are as follows

Indicators	Target	2020	2021	2022			
		Renewable Power Energy And Biodiesel	Renewable Power Energy And Biodiesel Business	Renewable Power	Biodiesel Business	Electric Vehicle	Average
Lost Time Injury Frequency Rate : LTIFR of employees (per 1 million hours)	0	0	0	0	0	6.58	5.49
Lost Workday Rate : LWR of employees (per 2 hundred thousand hours)	0	0	0	0	0	2.05	1.71
Lost Time Injury Frequency Rate : LTIFR of contractors (per 1 million hours)	0	1.86	1.09	0	0	0	0
Lost Workday Rate : LWR of contractor (per 2 hundred thousand hours)	0	0	0	0	0	0	0
Work-related fatalities of employees (person)	0	0	0	0	0	0	0
Work-related fatalities of contractors (person)	0	0	0	0	0	0	0
Total number of employees (person)		722	1,175	156	206	1,687	

### COVID-19 Safety Measures of the Company

The Company considered to health and safety and well-being of employees especially during the COVID-19 pandemic that effects to the business operation including the living condition of employee so the Company set out the measures to protect, take care and facilitate of all employees

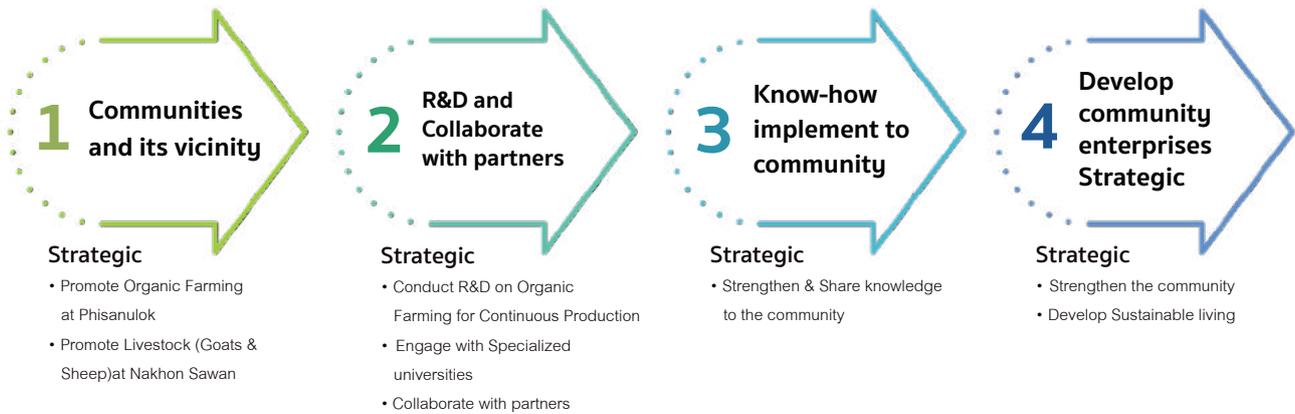
- Employees and contractors have to report Antigen Test Kit result every 7 days before entering into the workplace.
- Use the 'Bubble and Seal' system to take care of the workers in the factory to control and prevent the spread of the virus.
- Safety measures when entering into the workplace such as providing alcohol gel, temperature checks, touching point cleaning, wearing a mask and RT-PCR test before entering into the workplace.
- Support employees to find hospital beds and track the health of employees in case of home isolation.
- Accommodations for vaccination. COVID-19 vaccines are highly effective at preventing infection, serious illness, and death.
- Providing alcohol gel, temperature checks and increasing the rounds of cleaning at the dormitories.
- Educating employees on the seriousness of COVID-19 and steps they can take to avoid the spread of the disease.
- Coordinate with the relevant government sectors and hospital to investigate the infection and assess the number of close contact tracing.

# Creating Shared Value (CSV)

The company recognizes the business operations that are responsible for society and all stakeholders. Therefore, we have developed a principle to implement relevant projects with a focus on strengthening stability for a community and improving the quality of life, economic and environment for its people. Since 2015, EA Social Enterprise (SE) has been working to promote career opportunity and income stability through organic vegetable growing and goat farming projects. The goal is to support communities around the company’s power plant area and surrounding areas by promoting careers and generating sustainable income for local communities and farmers while encouraging stakeholder participation. Linking and promoting a strong local economy, as well as being able to actively participate in the development of communities and societies that contribute to sustainability and innovations that cover economic, social, and environmental dimensions, affect the community's strength and resilience in accordance with the SDGs and the GRI (Global Reporting Initiative).

## Strategy

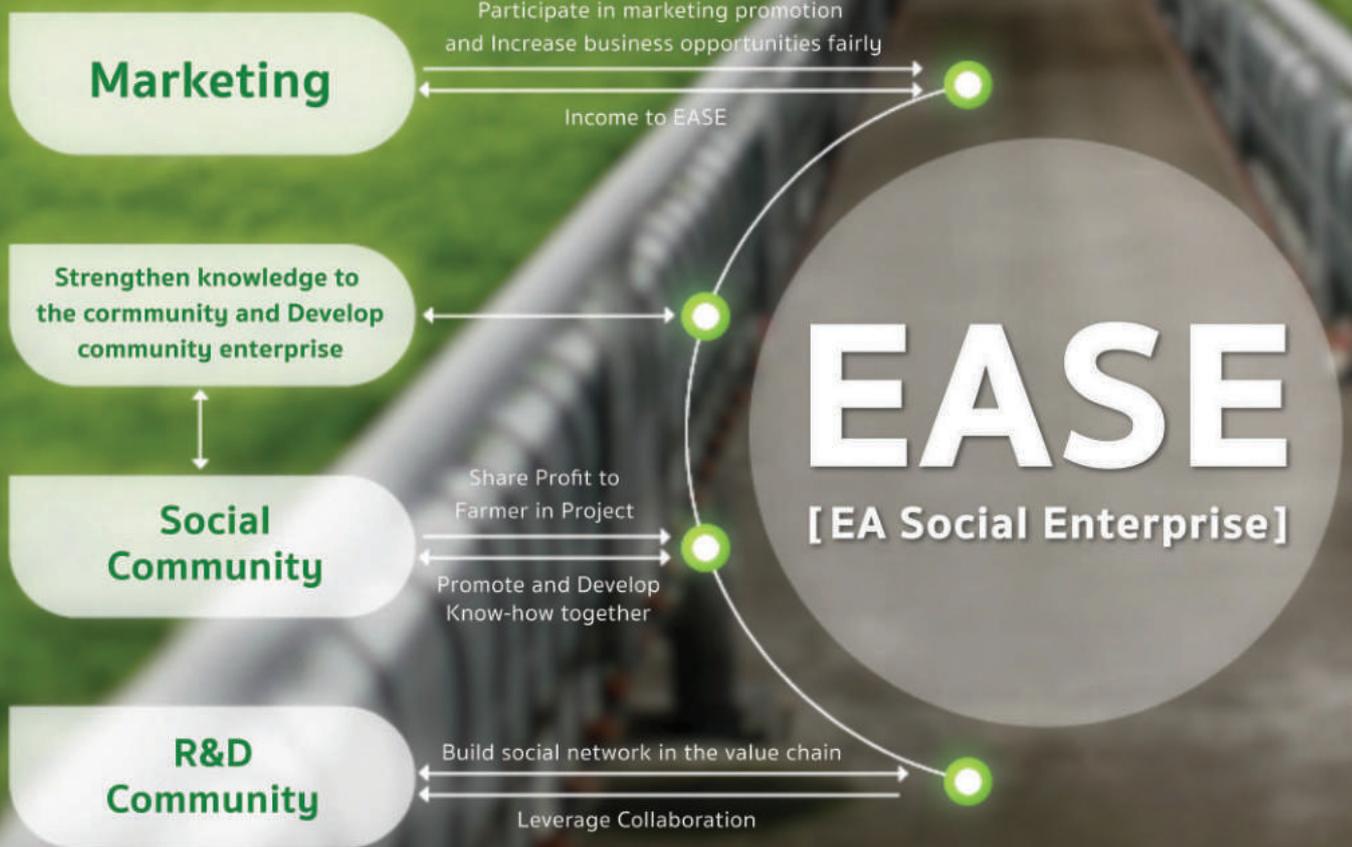
EASE (EA Social Enterprise), or EA Social Enterprise, operates projects that prioritize improving people quality of life over profit maximization, by beginning with communities surrounding the company’s power plants as pilot project areas in order to create «good jobs» in the community, which is defined as a stable income. As a consequence, precarious employment is retained, along with stability, well-being in life, and the sustainable development of the local community. Over the last seven years, EASE has been working with local farmers, organizations, universities, and related partner networks to strengthen communities and develop self-sufficient through the promotion of knowledge, skill development, and competitiveness, as well as support to improve the quality of output and promote a fair market. We are continuing to extend partnership and further research and development for future growth.





# Ease Organic™

Good health & Blissful heart



The project implementation centers on promoting the participation of local farmers from upstream to downstream in order to foster ownership and shared values for social innovation.

1. Start with the needs of the community and the surrounding context
2. Design and plan projects together.
3. Assist with project implementation and promote knowledge, particularly future innovation skills.
4. Joint evaluation and scale up continuously



# EASE Organic Farm Project

The EASE Organic Farm Project aims primarily to foster job creation and create career opportunities for local farmers in communities around the company's power plant area in Phrom Piram District, Phitsanulok Province, through organic farming. We support communities and low-income farmers to earn a stable income and have a secure job. It can improve the quality of life of people in the community sustainably in the long run by promoting and supporting it across the value chain. From upstream to downstream, we facilitate the management of organic vegetable farming areas, cultivation processes, product processing development, and new product development to create high-value products. In collaboration with networks, such as shopping malls, shops, and restaurants, both retail and wholesale, provide a broad distribution and product channel for the community, ensuring a continuous and steady income distribution.



## 2022 Outcome

- Organic farm projects can generate a continuously stable income for farmers, averaging 340 baht/day, which is 10 percent higher than the minimum wage estimate of the area's daily income and 1–2.5 times higher than the income of typical local farmers. The project provides minimum income for local farmers and share the profit for revenue
- Career are created for the elderly, with 20% of seniors among farmers in all projects.
- Farmers in the project obtain the knowledge and skills to manage organic agriculture sustainably, as well as fundamental business and marketing, including the application of innovation and technology in organic farming.

### Compliance with the Sustainable Development Goals (SDGs)

<p>1 : No Poverty (end poverty in all its forms everywhere)</p>	<p>Establishing the project with local farmers could generate revenue of 340 baht/day, which is 10 percent higher than the minimum wage estimate of the area's daily income and 1–2.5 times higher than the income of typical local farmers. In addition, the company develop and increase productivity by adopting technology to facilitate local farmers. This could further develop to be Smart Farm. The main purpose, local farmers can harvest crops and deliver them to market sufficiently. It could generate local farmers' revenue and ensure stable income sustainably</p>
<p>2 : Zero Hunger (end hunger, achieve food security and improve nutrition and promote sustainable agriculture)</p>	<p>Farmers have access to safe food sources and to apply the knowledge gained from organic vegetable cultivation to family farming, which will encourage farmers to have lower costs and promote continued access to healthy food sources.</p>
<p>3 : Good Health and Well-being (ensure healthy lives and promote well-being for all at all ages)</p>	<p>Establish agricultural product standards by focusing on maintaining the quality of produce at a consistent standard and ensuring that the produce is safe, hygienic, and beneficial to consumer health while also promoting the health of local producers or farmers.</p>
<p>8 : Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	<p>We promote fair employment and comply with good governance principles. In 2022, the company hired an unemployed group to join the project, which created a career for people in the community in a comprehensive and inclusive way, especially for older people. This amounted to 20 percent of the farmers within the entire project.</p>
<p>17 : Partnership for the Goals (strengthen the means of implementation and revitalize the global partnership for sustainable development)</p>	<p>The company promote the collaboration with partners and stakeholders for establishing trust among local farmers that the projects could ensure stable incomes and create sustainable jobs for farmers in the project, we promote collaboration with the restaurants, supermarkets, and retail and wholesale distribution channels.</p>



### Short-term goal (3 years)

- The company has continued to develop and increase the productivity of organic vegetable through a smart farm operation so that farmers can harvest more products and have a large quantity with the goal of generating income for farmers in the amount of 400 baht per day per person. This will have a positive impact on farmers' incomes and sustainable income stability and train farmers to be smart farmers, as well as cultivate entrepreneurs' skills to be able to sustainably their careers in the future

### Long-term goal (5 years)

- Expand the target group to support more farmers and encourage them to run their own businesses.

# Goat and Sheep Farming Project

The company initiated a sheep and goat farm in the area around the solar power plant in Takhli District, Nakhon Sawan Province, by encouraging the community to acquire new knowledge and enhance their competitiveness in diverse occupational skills. We assist farmers in generating income through a variety of occupations and provide greater financial security. The first phase (2022-2023) the company attempt to participate with local community continuously. In the next phase, we will establish a community learning center to share knowledge with other communities interested in developing skills and building livestock careers, with a long-term goal (2022–2027) of expanding to neighboring areas, thereby increasing income distribution and career opportunities for other communities.



## 2022 Operational results

- The project can generate an average of 473 baht per day in goat farmer income, which is 48 percent higher than the minimum wage estimate of the area's daily income and is about 1.5–2.5 times higher than the income of typical local farmers.
- The goat farmers in the project have knowledge of goat farming and livestock skills that can be further developed into expertise and careers in the future.

### Compliance with the Sustainable Development Goals (SDGs)

<p>1 : No Poverty (end poverty in all its forms everywhere)</p>	<p>encouraging communities to have a quality of life and well-being by generating income for farmers from livestock and other agriculture. It can make farmers an average of 473 baht a day, which is more than the minimum wage. They can use the knowledge they've learned or developed to make money from processing, making, or integrating community businesses and giving it to their neighbors in the future.</p>
<p>2 : Zero Hunger (end hunger, achieve food security and improve nutrition and promote sustainable agriculture)</p>	<p>fostering and expanding the implementation to the establishment of further projects, such as a community sheep and goat learning center to share with other communities. Neighbors who are interested in goat farming can develop various skills and apply them in their communities, which can generate income from agriculture and livestock, and also access nutritional sources.</p>
<p>3 : Good Health and Well-being (ensure healthy lives and promote well-being for all at all ages)</p>	<p>People in the community have more stable careers and incomes, which allows them to have better access to food sources and greater wellbeing.</p>
<p>17 : Partnership for the Goals (strengthen the means of implementation and revitalize the global partnership for sustainable development)</p>	<p>Encourage collaboration among businesses, government agencies, civil society, and related educational institutions, which focus on joining forces to promote cooperation throughout the value chain. We are collaborating with Mahidol University, Nakhon Sawan Campus to promote and support goat and sheep farming. Furthermore, we cooperate with a local organization to develop and improve communities, as well as study the possibility of promoting community-based cooperation in the form of "Community Sharing and Networking," with the aim of strengthening the community and enhancing cooperation in all dimensions at the community level.</p>

## Compliance to international standards

GRI Standard	Disclosure	SDGs	Economic Performance
GRI 103 Management Approach 2016	103-3	Evaluation of the management approach	Evaluation of the management approach
GRI 201: Economic Performance 2016	201-1 , 203-1	Economic value generated and distributed	SDGs 1 – Economic performance (No Poverty) SDGs 2 – Infrastructure investment (Zero Hunger) SDGs 3 – Good Health & Well-being in Value Chain SDGs 11 – Infrastructure investment & Research and Development SDGs 17 – Partnerships
GRI 413 Local Community 2016	413-1	Operations with local community engagement, impact assessment and development programs	SDGs 1 No Poverty SDGs 2 Zero Hunger SDGs 3 Good Health and Well-being SDGs 17 Partnership for the Goals

### Short-term goal (3 years)

Foster and expand the outcome to the establishment of other projects, such as the establishment of goats and sheep learning center to provide support and distribute opportunities to neighboring communities who are interested in raising goats and sheep, developing skills, and adapting expertise in their community. Generating income from agriculture and livestock for commerce, cookery, and food security.

### Long-term goal (5 years)

Develop the application of knowledge to run their own businesses and generate income from the privatization of production or the integration of community enterprises and distribute income to nearby communities in a sustainable future.



## Corporate Social Responsibility (CSR)

Energy Absolute Group (EA Group) dedicate to the business principle by focusing on sustainability in diverse dimensions: economics, society, and environment. For living with local communities sustainably, the company established CSR department to communicate with communities around the company's factories. According to the organizational policy and principle of responsibility to stakeholder, the company attempt to develop and improve the quality of well-being through organizational operations. CSR department created activities in various dimensions such as occupation, quality of life, education, environment, religion, culture and tradition. The company also provides beneficial projects to local communities.

As a guideline for business process management (CSR-in-Process), EA group established a "Corporate Social Responsibility Policy" with the following seven principles.

Principle 1: Good Corporate Governance

Principle 2: Conduct Business with Fairness

Principle 3: Human Rights and Treatment to Employees

Principle 4: Responsibility to Consumers

Principle 5: Environment and Safety

Principle 6: Participation in Development of Community and Society

Principle 7: Development and Dissemination of Innovation from Social Responsibility

## CSR Strategy

CSR department adopts a framework which focuses on sustainable development in 3 dimensions: Economics, Social and Environment under the operation with fairness and equality, interdependence and balance. Our direction focuses on participation with the community to discuss and evaluate a satisfied solution both directly and indirectly. In addition, we cooperate to find acceptable conditions by allowing communities to share their opinions and requirements. This could lead the solutions to solve any issues that happened. It could show that EA group adopt the framework of sustainable corporate social responsibility.

### Sustainable Development Framework



## CSR action plans

CSR department constitutes plans and indicators which can evaluate the result of CSR projects in various areas, with an emphasis on community participation and sustainable development, with the following objectives.



## Participation in Community development

The company is aware of the effect that might occur from operation to stakeholder, especially local communities who live near the factories. The department creates activities and builds a relationship between the company and communities also provides opportunities to receive an opinion when communities are concerned about the organizational operations for the establishment of trust and unity.

## Company action toward stakeholders and community awareness surrounding the site

CSR created the public hearing for community opinions prescribed by authorities before investing in building a power plant and continuously closely following up on community opinions, recommendations and needs by assigning CSR staff for each plant to follow and report any issues or requirements that occur in the community. After this process, the team will discuss and plan the projects that are suitable for each community.

According to the Code of Practice (COP) report, the following measures for increasing community understanding of power plant operations are recommended:

1. Survey of opinions and recommendations of stakeholders.
  - 1.1 Assign a team to monitor and control environment quality and safety in factory to undertake such task closely continually.
  - 1.2 provide knowledge and organize training for staffs, communities, students and other interested people to gain knowledge and understanding in the company's business operation including understanding of clean energy and proper use in daily life.
  - 1.3 organize budget for helping and supporting communities' activities including education, culture, tradition, hygiene and the environment to improve the well-being
  - 1.4 Provide water storage in the solar power plant projects and share the surrounding communities to be used as a reserved water in times of shortage.
  - 1.5 Support the hiring of full-time and temporary employees from the community based on their potential, ability, and aptitude to create employment and knowledge development both during the construction phase and during the operation period.

In addition to requiring Operation & Maintenance department to submit a performance report to the Executive Committee, the Company's Audit Committee and the Internal Audit Department plan factory and project audits of the Group in the annual audit plan, with the goal of inspecting and visiting factories and various projects of the company group to ensure that various operations of the company group are compliant with standard, requirement, rules, regulation included vision

## Performance/Success indicators

The company group has adhered to a policy that must be carried out with care and seriousness to various stakeholders, including shareholders, customers, trading partners, creditors, communities around the factory locations, employees, regulatory agencies, and the government sector, based on the group's business results. The lists that mentioned individuals or organizations are critical to the company's operations, as are the principles of the Sustainable Development Goals. To meet the needs and expectations of society and communities in 2022, the Company has divided its operating results into three key areas, as follows:



## Economy

Partnership cattle school project for improving knowledge for student or local community who interest about livestock. This project could encourage local people who work in another province come back to their province because of occupation in their home. Chaiyaphum province.



Filming documentary about Cosmos flower field, to promote and encourage tourist know the local tourist attraction. It could raise income of local people from tourists. Chaiyaphum province.



Livestock activity, giving weed and grass in site area for local cattleman to reduce cost of animal feed. Phitsanulok province.



Technological transfer for improving knowledge in the farming season. Nakhon Si Thammarat province.



Seafood festival for tourism engagement to increase local community's income by selling seafood. Nakhon Si Thammarat province.



## Social

Volunteer public area improvement with local communities and CSR club in industrial area. Rayong province. This project could help the ecosystem in local area by collecting garbages.



Scholarship on Children's Day for supporting local students. Chaiyaphum province.



Supporting beverages for local staffs during Songkran festival to facilitate staffs. Nakhon Si Thammarat Province.



Company staff visit for checking up electric safety system and changed broken electric wires in a poverty community. Chaiyaphum province



Fixing the public road near the project from flood for facilitating local people who need to transport via the road. Chaiyaphum province



14th July 2022, Mr.Patpong Thong-on, HR manager of Amita Technology (Thailand) co., Ltd. and employees attended the Asalha Puja Day and Buddhist Lend day at Bang Pueng, Bang Pueng subdistrict, Bang Pa Kong district, Chachoengsao province.



## Environment

Reforestation project to increase green area outside the factories to absorb Green House Gas (GHG) and conserve green area around factories, in case of not available area company staffs would seek available and suitable area with local community to plant. Phitsanulok province, Nakhon Sawan province, Chaiyaphum province and Lopburi province



28th July 2022, employees and E-Bus joined Zero CO<sub>2</sub> walking rally by the Chachoengsao Chamber of Commerce. Also student from local school in Chachoengsao province.

## Alternative Energy with local communities

Energy Absolute PCL. established training and sharing knowledge activity about energy in various area for improving knowledge and aware of alternative energy. In each project also Solar power plant and Wind power plant are welcome companies or organizations to come to factory for demonstration and learning the process of energy production and how to obtain the energy that not affect to environment. EA appreciate that could be the represent of Clean Energy company who can raise an awareness of alternative energy.



## Supporting to access alternative energy

Energy Absolute PCL. create projects by giving and installing solar panels in public areas for reducing the energy cost of local communities. The project could raise awareness of alternative energy by demonstrating the process of energy production. In addition, the project could help the community understand the company's business and operation.



# GRI Index

GRI 102: General Disclosures		
GRI	Disclosure	Page / Website / Omission
<b>Organizational Profile</b>		
GRI 102: General Disclosures	102-1 Name of the organization	SD Report 2022 Cover Page
	102-2 Activities, brands, products, and services	SD Report 2022 Page 29, 4-24
	102-3 Location of headquarters	56-1 One Report / Annual Report 2022 Back Page, Page 119
	102-4 Location of operations	56-1 One Report / Annual Report 2022 Page 119 - 121
	102-5 Ownership and legal form	56-1 One Report / Annual Report 2022 Page 23, 52-54, 64-65
	102-6 Markets served	56-1 One Report / Annual Report 2022 Page 31
	102-7 Scale of the organization	56-1 One Report / Annual Report 2022 Page 116 SD Report 2021 Page 10-11
	102-8 Information on employees and other workers	SD Report 2022 Page 81-82
	102-9 Supply chain	SD Report 2022 Page 57-58
	102-10 Significant changes to the organization and its supply chain	SD Report 2022 Page 12-24
	102-11 Precautionary principle or approach	SD Report 2022 Page 64
	102-12 External initiatives	SD Report 2022 Page 4, 31
	102-13 Membership of associations	SD Report 2022 Page 60, 68-69
<b>Strategy</b>		
GRI 102: General Disclosures	102-14 Statement from senior decision-maker	SD Report 2022 Page 4
	102-15 Key impacts, risks, and opportunities	SD Report 2022 Page 49-50
<b>Ethics and Integrity</b>		
GRI 102: General Disclosures	102-16 Values, principles, standards, and norms of behaviour	56-1 One Report / Annual Report 2022 Page 10
<b>Governance</b>		
GRI 102: General Disclosures	102-18 Governance structure	SD Report 2022 Page 39
<b>Stakeholder Engagement</b>		
GRI 102: General Disclosures	102-40 List of stakeholder groups	56-1 One Report / Annual Report 2022 Page 84-85
	102-41 Collective bargaining agreements	EA does not have a trade union. However, the Company has its welfare committee which is composed of representatives from all levels of employees with similar responsibilities to a trade union
	102-42 Identifying and selecting stakeholders	SD Report 2022 Page 25-26,29
	102-43 Approach to stakeholder engagement	SD Report 2022 Page 25-26,29
	102-44 Key topics and concerns raised	SD Report 2022 Page 25-26,29
<b>Reporting Practice</b>		
GRI 102: General Disclosures	102-45 Entities included in the consolidated financial statements	56-1 One Report / Annual Report 2021 Page 58-63
	102-46 Defining report content and topic boundaries	SD Report 2022 Page 2-6, 28,36-37
	102-47 List of material topics	SD Report 2022 Page 35
	102-48 Restatements of information	No restatements of information given in previous report
	102-49 Changes in reporting	No significant changes from previous reporting periods
	102-50 Reporting period	SD Report 2022 Page 5
	102-51 Date of most recent report	SD Report 2022 Page 5
	102-52 Reporting cycle	SD Report 2022 Page 5
	102-53 Contact point for questions regarding the report	SD Report 2022 Page 5
	102-54 Claims of reporting in accordance with the GRI Standards	SD Report 2022 Page 5
	102-55 GRI content index	SD Report 2022 Page 113-115
	102-56 External assurance	SD Report 2022 Page 5
<b>Topic-specific Standards</b>		
GRI	Disclosure	Page / Website / Omission
<b>Economic Performance</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 6,28,36-37
	103-2 The management approach and its components	SD Report 2022 Page 6,28,36-37
	103-3 Evaluation of the management approach	SD Report 2022 Page 6,28,36-37
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	56-1 One Report / Annual Report 2022 Page 159
<b>Indirect Economic Impacts</b>		
GRI 103: Management	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 96-104
	103-2 The management approach and its components	SD Report 2022 Page 96-104

Approach	103-3 Evaluation of the management approach	SD Report 2022 Page 96-112
GRI 203: Indirect Economic Impacts 2016	203-2 Significant Indirect Economic Impacts	SD Report 2022 Page 96-112
<b>Procurement Practices</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 57-58
	103-2 The management approach and its components	SD Report 2022 Page 57-58
	103-3 Evaluation of the management approach	SD Report 2022 Page 57-58
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	SD Report 2022 Page 57-58
<b>Anti-corruption</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 51-52
	103-2 The management approach and its components	SD Report 2022 Page 51-52
	103-3 Evaluation of the management approach	SD Report 2022 Page 51-52
GRI 205: Anti- corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	SD Report 2022 Page 51-52
	205-3 Confirmed incidents of corruption and actions taken	SD Report 2022 Page 51-52
<b>Materials</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 35-37
	103-2 The management approach and its components	SD Report 2022 Page 35-37
	103-3 Evaluation of the management approach	SD Report 2022 Page 35-37
GRI 301: Materials 2016	301-1 Materials used by weight or volume	SD Report 2022 Page 35-37
<b>Energy</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 73-75
	103-2 The management approach and its components	SD Report 2022 Page 73-75
	103-3 Evaluation of the management approach	SD Report 2022 Page 73-75
GRI 302: Energy 2016	302-4 Reduction of energy consumption	SD Report 2022 Page 73-75
<b>Water and Effluents</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 74-75
	103-2 The management approach and its components	SD Report 2022 Page 74-75
	103-3 Evaluation of the management approach	SD Report 2022 Page 74-75
GRI 303: Water and Effluents 2018	303-5 Water consumption	SD Report 2022 Page 74-75
<b>Emissions</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 65-68
	103-2 The management approach and its components	SD Report 2022 Page 65-68
	103-3 Evaluation of the management approach	SD Report 2022 Page 65-68
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	SD Report 2022 Page 65-67
	305-2 Energy indirect (Scope 2) GHG emissions	SD Report 2022 Page 65-67
	305-3 Other indirect (Scope 3) GHG emissions	SD Report 2022 Page 65-67
	305-5 Reduction of GHG emissions	SD Report 2022 Page 65-67
<b>Wastes</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 72
	103-2 The management approach and its components	SD Report 2022 Page 72
	103-3 Evaluation of the management approach	SD Report 2022 Page 72
GRI 306: Waste 2020	306-3 Waste generated	SD Report 2022 Page 72
<b>Supplier environmental assessment</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 57-58
	103-2 The management approach and its components	SD Report 2022 Page 57-58
	103-3 Evaluation of the management approach	SD Report 2022 Page 57-58

GRI 308: Supplier environmental assessment 2018	308-1 New suppliers that were screened using environmental criteria	SD Report 2022 Page 57-58,64
<b>Employment</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 81-82
	103-2 The management approach and its components	SD Report 2022 Page 81-82
	103-3 Evaluation of the management approach	SD Report 2022 Page 81-82
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	SD Report 2022 Page 81-82
<b>Occupational Health and Safety</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 93-95
	103-2 The management approach and its components	SD Report 2022 Page 93-95
	103-3 Evaluation of the management approach	SD Report 2022 Page 93-95
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SD Report 2022 Page 93-95
	403-2 Hazard identification, risk assessment, and incident investigation	SD Report 2022 Page 93-95
	403-3 Occupational health services	SD Report 2022 Page 93-95
	403-4 Worker participation, consultation, and communication on occupational health and safety	SD Report 2022 Page 93-95
	403-5 Worker training on occupational health and safety	SD Report 2022 Page 93-95
	403-6 Promotion of worker health	SD Report 2022 Page 93-95
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SD Report 2022 Page 93-95
	403-8 Workers covered by an occupational health and safety management system	SD Report 2022 Page 93-95
	403-9 Work-related injuries	SD Report 2022 Page 93-95
<b>Training and Education</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 97-88
	103-2 The management approach and its components	SD Report 2022 Page 97-88
	103-3 Evaluation of the management approach	SD Report 2022 Page 97-88
GRI 404: Training and Education	404-1 Average hours of training per year per employee	SD Report 2022 Page 97-88
	404-2 Programs for upgrading employee skills and transition assistance programs	SD Report 2022 Page 97-88
<b>Human Rights Assessment</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 83-84
	103-2 The management approach and its components	SD Report 2022 Page 83-84
	103-3 Evaluation of the management approach	SD Report 2022 Page 83-84
GRI 412: Human Rights Assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	SD Report 2022 Page 83-84
<b>Local Communities</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 96-112
	103-2 The management approach and its components	SD Report 2022 Page 96-112
	103-3 Evaluation of the management approach	SD Report 2022 Page 96-112
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	SD Report 2022 Page 96-112
	413-2 Operations with significant actual and potential negative impacts on local communities	SD Report 2022 Page 96-112
<b>Supplier Social Assessment</b>		
GRI 103: Management Approach	103-1 Explanation of the material topic and its boundary	SD Report 2022 Page 57-58,80
	103-2 The management approach and its components	SD Report 2022 Page 57-58,80
	103-3 Evaluation of the management approach	SD Report 2022 Page 57-58,80
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	SD Report 2022 Page 57-58,80

# Reader Survey of Sustainability Report

The information from this questionnaire is brought forward as a reference for improvement and preparation of the report in the next year. Energy Absolute Public Company Limited hereby expresses its sincere gratitude.

## 1. Please specify your group

- |  |                                  |   |                                  |
|--|----------------------------------|---|----------------------------------|
| <input type="radio"/> Shareholder/Investor                 | <input type="radio"/> Customers  | <input type="radio"/> Business partners     | <input type="radio"/> Employees  |
| <input type="radio"/> Creditors                            | <input type="radio"/> Mass media | <input type="radio"/> Academic / Researcher | <input type="radio"/> Student    |
| <input type="radio"/> Government agency / State enterprise | <input type="radio"/> Community  | <input type="radio"/> General public        | <input type="radio"/> Other..... |

## 2. Please specify how you receive this Sustainability Report

- |   |                                       |   |
|---|---------------------------------------|---|
| <input type="radio"/> in the Annual General Meeting of Shareholders | <input type="radio"/> Company website | <input type="radio"/> Obtain from the Company |
| <input type="radio"/> Obtain from the Company's employee            | <input type="radio"/> Other.....      |   |

## 3. Satisfaction on the format of the report

- |  |                            |                                |                              |
|--|----------------------------|--------------------------------|------------------------------|
| • The content is easy to read                              | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Little |
| • The design is aesthetic, and illustrators are consistent | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Little |
| • The appropriateness of arranging the content             | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Little |
| • Total satisfaction                                       | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Little |

## 4. Please select the top three of the most important sustainability topics according to your opinion

- |   |  |
|---|--|
| <input type="radio"/> Good Corporate Governance     | <input type="radio"/> Pollution, waste and water resource management |
| <input type="radio"/> Risk management               | <input type="radio"/> Efficient use of electricity/energy            |
| <input type="radio"/> Ethics in business operations | <input type="radio"/> Human resource management and development      |
| <input type="radio"/> Customer relations management | <input type="radio"/> Occupational health and safety                 |
| <input type="radio"/> Supply chain management       | <input type="radio"/> Social Responsibility                          |

## 5. Additional suggestions (if any)



Please submit the survey in person or by post at the address below

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