

2023

HD Renewable Energy Co., Ltd.
Sustainability Report/ ESG Report



Contents

About this Report	4
Message from the Management	6

1 CH1 Sustainable Communication Listening and Engagement

1.1 About HD Renewable Energy (HDRE)	9
1.2 Stakeholder Engagement	22
1.3 Analysis of Material Topic	28

2 CH2 Sustainable Governance Integrity and Transparency

2.1 Corporate Governance	41
2.2 Business Performance	48
2.3 Corporate Integrity & Legal Compliance	51
2.4 Risk Management	54

3 CH3 Sustainable Innovation Green Intelligence

3.1 Green Energy Aggregators	61
3.2 Smarter Energy, Accessible Green	75
3.3 Strengthen Sustainable Value Chain	96



4

CH4 Sustainable Environment and Clean Energy

4.1 TCFD (Task Force on Climate-related Financial Disclosures)	109
4.2 Energy Policy and Management	120
4.3 Ecological Diversity Protection	126

5

CH5 Sustainable Talent Happy Workplace

5.1 Human Resource Management	134
5.2 Deep-rooted Talent Cultivation	146
5.3 Friendly Workplace Realization	150

6

CH6 Sustainable Feedback and Mutual Prosperity

6.1 Social Co-prosperity Strategy	168
6.2 Energy Education	169
6.3 Public Welfare Contribution	173
6.4 Local Symbiosis	175
6.5 Ecological Protection	176

About this Report

As a company committed to providing sustainable solutions, HD Renewable Energy Co., Ltd. values and supports sustainable development by giving a lead. For three consecutive years, we have proactively published sustainability reports to establish good communication with stakeholders. Through the disclosure of information in our sustainability reports, we strive to deepen our internal sustainability management and move towards a sustainable future.

Principles in Preparation

This report discloses the management policy and execution performance of HD Renewable Energy Co., Ltd. (referred to as “HDRE”) in the main aspects of governance, economy, society and environment, etc. This report is made in accordance with GRI Standards 2021, Task Force on Climate-Related Financial Disclosures (TCFD) and Sustainability Accounting Standards Board (SASB).

Period

This report covers from January 1st, 2023 to December 31st, 2023, with partial details including past performances and future prospects.

Scope

This report focuses on HDRE content and is disclosed within the boundaries of the Taiwan office or location. However, based on business integrity, certain sections will include disclosures of subsidiaries and overseas locations, which will be clearly indicated within this report.

Management Method



- Engaging with stakeholders on significant issues.
- Identifying the impact of significant issues.

The Sustainability Development Office has compiled information and prepared the manuscript based on the eight principles of the GRI Standards 2021:

- Accuracy
- Balance
- Clarity
- Comparability
- Completeness
- Sustainability context
- Timeliness
- Verifiability

1. Confirmed by each department the accuracy of the data.
2. Reviewed, finalized and approved for disclosure by the Sustainability Development Office and the Chairman.
3. Data verification conducted by a third-party assurance provider.





Quality

External Assurance

Ernst & Young (EY) Taiwan, an independent firm with credibility, is retained by HDRE to conduct Limited Assurance on this report and to ensure the reliability of the disclosed information in the 2023 Corporate Sustainability Report. It is in accordance with GRI Standards and the provision of “Assurance Case of Non-historical Financial Information Audited or Reviewed” of ISAE 3000 standard. Relevant results after the completion of assurance have been communicated with the governance unit. Please refer to the independent third party assurance statement at Appendix 5 of this report (P.135).

Data Quality Management

All the information and details disclosed in this report have been verified by an independent third party. Financial data, quality, information security, occupational safety and health, environment and energy management, greenhouse gas emissions data are included.

Financial Data	KPMG
Quality Management System ISO 9001	BSI
Occupational Safety and Health Management System ISO 45001	BSI
Greenhouse Gases ISO 14064-1	BSI
Environmental Management System ISO 14001	BSI
The third party certificate	

Edition Release History

The Chinese report and English summary report are released annually and are available through enquiring and downloading from the sustainable website of the Company. The release date is:

This edition	August 2024
Next edition	August 2025

For historical data and other sustainability information, please refer to the following sources :

HDRE Website



HDRE Instagram



HDRE2016

HDRE YouTube



Contact Information

Shall you have any suggestions or feedback on this report, please contact us:

HD Renewable Energy Co., Ltd.	
Unit	Sustainable Development Office
TEL	+886-2-2832-8057
Mailbox	esg@hdrenewables.com
Address	5F, No. 35, Dexing W. Rd., Shilin Dist., Taipei City
Company Website	https://www.hdrenewables.com/

Message from the Management

Message from the Chairman

In 2023, Taiwan and countries worldwide experienced significant upheavals and challenges across political, economic, and social domains. It was also the warmest year on record, with the global average temperature rising 1.4 degrees Celsius above pre-industrial levels. At the 2023 United Nations Climate Change Conference (COP28) held in Dubai, global representatives reached an unprecedented consensus by establishing a climate disaster compensation fund, underscoring the grave threat posed by extreme weather events to our society. COP28 also conducted the first Global Stocktake (GST) since the Paris Agreement, announcing that a 43% reduction in emissions by 2030 (based on the year 2019) must be achieved in line with limiting global warming to 1.5° C, prompting a collective global effort in setting carbon reduction targets.

At HDRE, we are committed to sustainability and environmental stewardship. We integrate sustainable actions within our operations and continue to expand our influence to our partners and the society. Aligning with G20 policies, we have adopted the Task Force on Climate-related Financial Disclosures (TCFD) to effectively manage climate change risks and seize opportunities for net-zero transition. HDRE also adheres to the United Nations Convention on Biological Diversity (CBD). Working with local environmental organizations, we preserve migratory bird habitats and mangrove ecosystems at our fishery and electricity symbiosis sites.

HDRE has voluntarily conducted audits of greenhouse gas emissions and is now expanding our carbon footprint assessments to include “Scope 3” emissions—the indirect emissions from activities not owned or controlled by us,

such as visitor carbon footprint. We affirm our commitment to reducing emissions and actively sharing our sustainability initiatives and achievements through various platforms. We leverage our corporate influence to prompt widespread participation in sustainable net-zero practices. Since our establishment, HDRE has abided by the principles of “balancing development and ecology; thriving together with society”. Therefore, we integrate SDGs into our operational strategies and will continue to foster a future where the environment, the ecosystem and our social culture can prosper together. We will address global challenges and contribute to our joint endeavors with unwavering dedication.

Our efforts have been recognized. In 2023, HDRE is presented several prominent sustainability awards, including the Taiwan Sustainability Action Awards (TSAA), Excellence in Corporate Social Responsibility, PwC Sustainability Impact Awards, the Copper-level Net Zero Certification from Taiwan Alliance for Net Zero Emission (TANZE), and the Taiwan Corporate Sustainability Awards (TCSA). HDRE takes the initiative and addresses social issues such as social disparities. Since 2022, HDRE has been a partner of Formosa 3D, and has donated over NT\$10 million to support programmes such as “Formosa 3D Film Car Rural Outreach Tour” and “Taiwan Superman Film Project.” Moreover, we combine fun with renewable energy education. By sending our remodeled “Solar Film Car” to rural areas, we show local children the solar energy applications in our everyday life, guiding them to imagine the infinite possibilities of our land and future, sowing the seeds of sustainable environmental conservation in every corner of Taiwan.

Chairman

謝源一





Message from the President

HDRE aims to be a “Smart Power Company”. Our vision is to lead a life using green electricity, and build a net zero future. The company’s collective responsibility aligns with the United Nations Sustainable Development Goals (SDGs) Goal 7 “Affordable and Clean Energy”. HDRE provides alternatives to reduce carbon emissions in three major fields: power generation, energy storage, and electricity sales, lowering the threshold of green energy usage for businesses and the public. We will continue to participate in achieving sustainability and meeting the RE100 targets. With our collective efforts, Taiwan will realize Net Zero by the year 2050.

In 2023, HDRE reduced 14.78 metric tons of CO₂, which is 17.7% lower than previous year. Moreover, we aim to use 100% green electricity in all our office locations in Taiwan by 2030. In addition to practicing sustainable goals on our own, HDRE encourages our partners to follow suit. We implement green procurement policies, and invite all suppliers to sign the “Supplier Code of Conduct”, initiating sustainable supply chain management in line with SDGs Goal 12 “Responsible Consumption and Production”.

HDRE is the first energy company to join the Taiwan Disaster Prevention Industry Association. The two key factors for enhancing flexibility and resilience in Taiwan’s power system are energy storage and demand-side electricity management. HDRE recognizes the importance of renewable energy for Taiwan’s grid, and takes action by collaborating with FamilyMart. The self-operated FamilyMart Pingfeng Store is built into a regional microgrid, with solar photovoltaic equipment, energy storage systems, charging stations, and AI management systems to generate electricity independently

during power outages. It can be disconnected from the grid when necessary to prevent incidents like the 303 blackout. Microgrids are energy-saving and sustainable. Thus, we aim to progressively increase the number of establishments, using them not only as local energy education centers but emergency electricity provisions in times of need..

“Production, Living, and Ecology in Coherence” is our ultimate goal in operating our fishery and electricity symbiosis sites. We aim to minimize ecological impact and landscape disturbance from construction to operation. By operating strictly on schedule, we ensure the ecosystem can begin its recovery phase as soon as possible. Our Ri Yun Green project, in Tainan, balances between developing renewable energy and preserving the ecological environment and the rights of local fishermen. Our efforts win us the Silver Award of 2023 Taiwan Sustainable Action Awards (TSAA) for achieving SDGs Goal 7 “Affordable and Clean Energy”. Traditional aquaculture in Taiwan has been declining, but the prospect of fishery and electricity symbiosis sites may bring new opportunities. HDRE will continue to integrate resources, improve the industry, and play a crucial role in sustainable development.

President

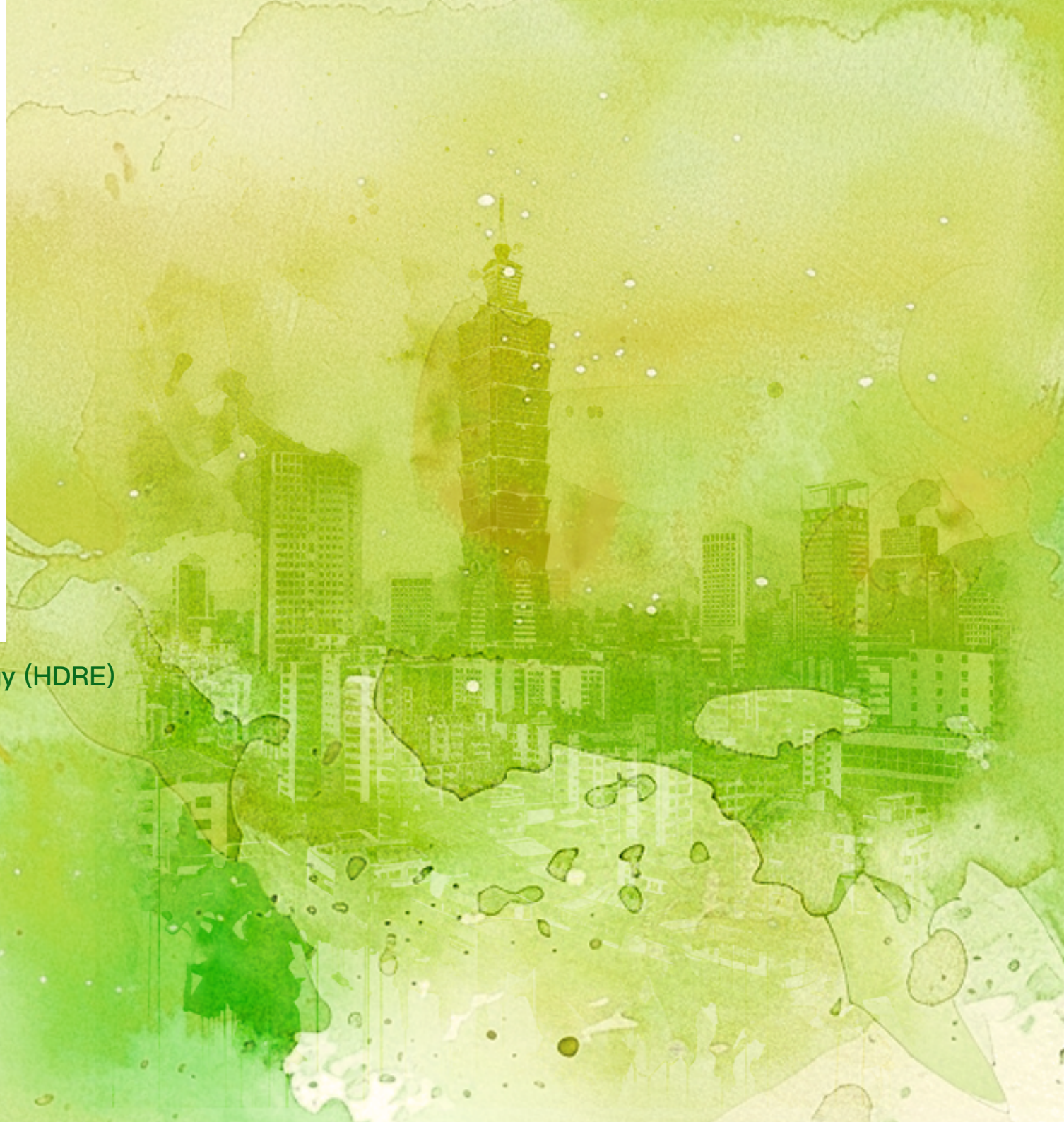
周仕昌



01

Sustainable Communication Listening and Engagement

- 1.1 About HD Renewable Energy (HDRE)
- 1.2 Stakeholder Engagement
- 1.3 Analysis of Material Topic



CH1 Sustainable Communication Listening and Engagement

Core Vision and Commitment

Since 2016, HDRE has started to provide integrated solar photovoltaic services, covering the fields of power generation, electricity sales, and energy storage. At HDRE, our vision is to use green electricity, and build a net zero future. We have developed into a provider of zero carbon emission solutions by providing one-stop services including green energy site development, operational management, and green electricity sales, enhanced with optimized smart management systems which coordinate green power supply and demand. Our goal is to lower the threshold of green energy usage and become a provider of Net Zero carbon emission solutions. To satisfy increasing green power demand in the market, we expand our electricity sales business and charging points operation service. HDRE will expand the possibility of various types of power applications to promote the popularization of green electricity under the objective of “Smarter Energy, Accessible Green”, in order to achieve the goal of becoming a “Smart Green Power Company”

Overview of Sustainability Performance in 2023

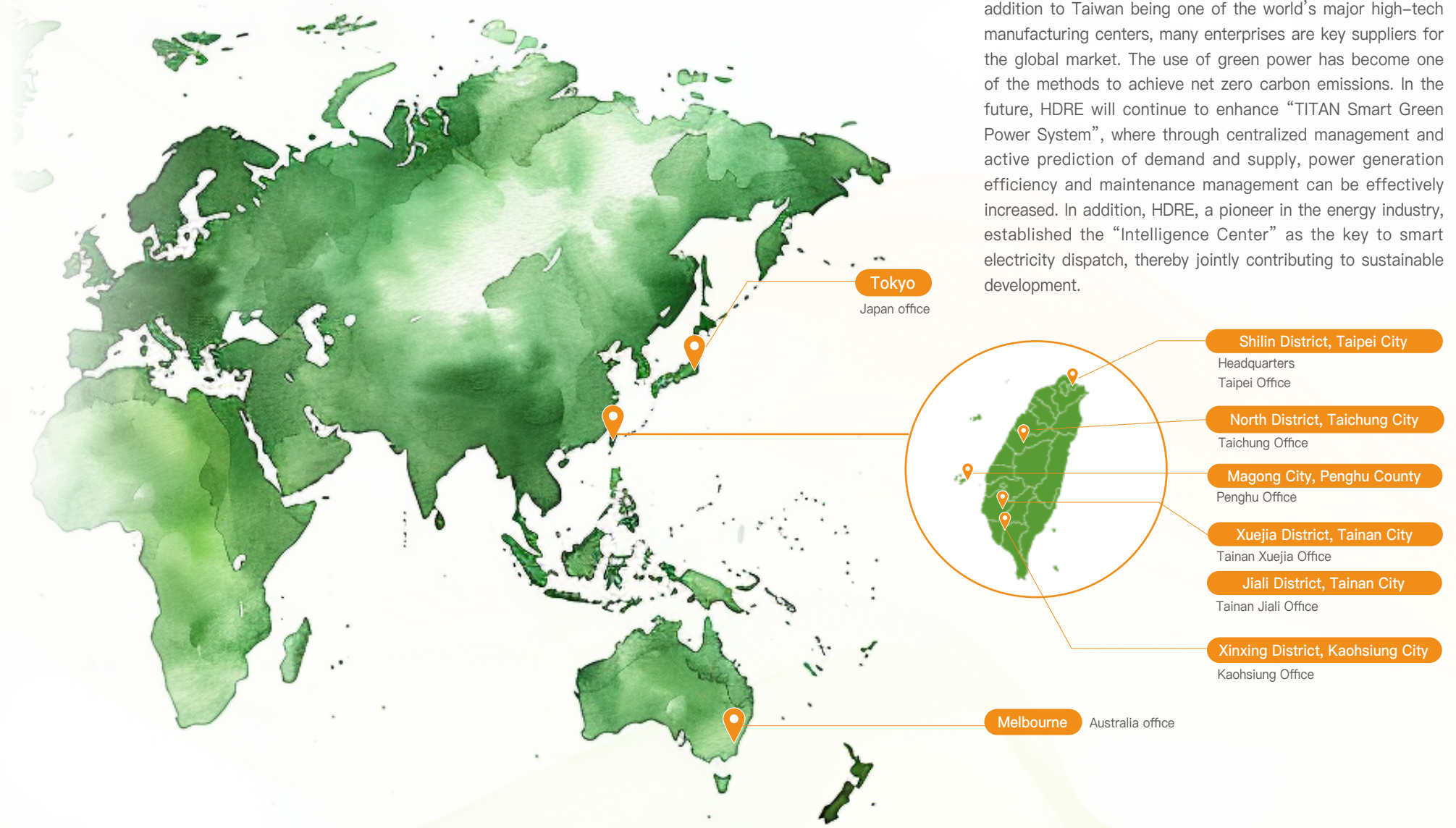
- 1 TSAA Taiwan Sustainability Action Awards–SDGs Goal 7 Affordable and Clean Energy Silver Award
- 2 TCSA Taiwan Corporate Sustainability Awards–Taiwan Top 100 Sustainable Model Enterprise Award
- 3 Excellence in Corporate Social Responsibility–2023 Top 100 ESG Performing Enterprises
- 4 Taiwan Alliance for Net Zero Emission–Copper-level Net Zero Certification
- 5 PwC Sustainability Impact Awards–Nominated
- 6 Continuously disclosing sustainability reports through international sustainability standards and frameworks such as GRI, TCFD, and SASB

1.1 About HD Renewable Energy (HDRE)

1.1.1 Introduction of HDRE

Full Name of Company	HD Renewable Energy Co., Ltd.
Stock Code	6873
Number of Official Employees	224 People
Capital Amount	NTD 1 billion
Ordinary Shares Outstanding	100,000,000 shares
Date of Establishment	16 May 2016
Chairman	Yuan-Yi Hsieh
President	Shih-Chang Chou
Services	Development and construction of electrical power, power station asset management, smart power services
Location of Headquarters	5F, No. 35, Dexing W. Rd., Shilin Dist., Taipei City
Company Website	https://www.hdrenewables.com/ 

- **Operating Locations of HDRE**



- **Development History**

To cope with climate change, a great number of international leading brands have announced joining RE100 and are committed to achieving carbon neutrality goals by 2030. In addition to Taiwan being one of the world's major high-tech manufacturing centers, many enterprises are key suppliers for the global market. The use of green power has become one of the methods to achieve net zero carbon emissions. In the future, HDRE will continue to enhance "TITAN Smart Green Power System", where through centralized management and active prediction of demand and supply, power generation efficiency and maintenance management can be effectively increased. In addition, HDRE, a pioneer in the energy industry, established the "Intelligence Center" as the key to smart electricity dispatch, thereby jointly contributing to sustainable development.



• HDRE's Key Milestones

2016

HD Renewable Energy Co., Ltd. was established

2018

- First water surface-based solar photovoltaic system construction (4MW) was completed
- MOU was signed with Shin Kong Chao Feng Co., Ltd. to obtain the development right for 375ha of land of the Chao Feng Ranch and Resort, and constructed the largest single solar photovoltaic project (400 MW) in Taiwan
- Hongbo Technology and Energy Co., Ltd. was established for the expansion of solar photovoltaic maintenance and operation services

2023

- Listed on the Taiwan Stock Exchange Innovation Board for trading in March.
- Established STAR Energy Storage Co., Ltd., a joint venture with Taiwan Life, Global Life, Fubon Life, and Shihlin Electric to hold energy storage sites.
- Acquired Cloud Guardian Security Holdings Ltd., enhancing the TITAN Smart Green Energy System with AI technology for optimal electricity usage modeling, recruiting ICT talents to become a "Smart Power Company."
- HDRE's subsidiary, Huiju Energy Co., Ltd., completed a joint credit syndicated loan of NT\$4,100,000k, coordinated by Taichung Bank. Co-leading banks included Mega Bank, International Bills Finance Corp., Mega Bills Finance Corp., and China Bills Finance Corp. Participating banks were Kaohsiung Bank, Shanghai Bank, Agricultural Bank of Taiwan, and Cooperative Bank.
- HDRE's subsidiary, STAR Charger Co., Ltd., won the Taiwan Railways Administration's bid for the "Yilan-Hualien Public EV Charging Station Operation Lease Project", completing the layout of a nationwide charging network.
- Formed a joint venture platform, Fubon Energy, with Fubon Group, aimed at developing 700MW of solar and energy storage sites.

2019

Established a fishery company as a first mover in fishery and electricity symbiosis

2020

- Established SHORIZON Co., Ltd. together with Taiwan Life Insurance, TransGlobe Life Insurance, and AcBel Polytech to jointly develop power stations
- Established STAR Exchange Co., Ltd., a subsidiary.

2022

- Established Aqua Star Energy Co., Ltd. with Taiwan Life Insurance, TransGlobe Life Insurance, and Fubon Life to jointly develop fishery and electricity symbiosis
- Established the Intelligence Center for smart electricity dispatching and initiated facelift for new power company
- The Board of Directors passed resolutions on the application for public listing of the Company stock
- Expanded the operating scale of the Company by a capital increase of cash infusion on 15,000,000 shares
- First edition of Sustainability Report was published
- Established STAR Aquaculture Co., Ltd. and engaged in ecological aquaculture, aiming to create the first "National Taiwan Fishery Team" through production and marketing strategies.
- Developed the "TITAN Smart Green Power System" by incorporating AI algorithms to analyze power generation and consumption data, thereby simulating the optimal power generation and usage model.
- Aqua Star Energy Co., Ltd. subsidiary, Ri Yun Green Energy

2021

- Subsidiary STAR Exchange Co., Ltd. obtained an electricity permit issued by the Ministry of Economic Affairs
- Contracts were signed with Taiwan Mobile and E.SUN Bank for the sale of electricity through a power wheeling arrangement
- Subsidiary STAR Charger Co., Ltd. was established to start the electric vehicle charging business
- Public offering and listing at the emerging stock market for trading was approved by Taipei Exchange (TPEX)

Co., Ltd., has completed a joint loan project of Qigu, Tainan, worth NT\$2,089,000k. For more details, please refer to:



- Passed the review by the Securities Listing Review Committee of Taiwan Stock Exchange Corporation for the listing application on the Innovation Board. The applied capital for listing is NT\$850,000k, making it the first energy company to be registered on the Innovation Board.



- 2023 Sustainability Performance

TSAA Taiwan Sustainability Action Awards
SDGs Goal 7 Affordable and Clean Energy

Silver Award

7 AFFORDABLE AND
CLEAN ENERGY
可負擔的
清潔能源



此次泓德能源以「漁電與候鳥共存共榮」專案，獲選「SDG7可負擔能源 - 銀獎」。



TCSA Taiwan Corporate
Sustainability Awards

Taiwan Top 100 Sustainable
Model Enterprise Award



Excellence in Corporate
Social Responsibility

2023 Top 100 ESG
Performing Enterprises



Taiwan Alliance for Net Zero Emission

Copper-level
Net Zero Certification



PwC Sustainability Impact Awards

Nominated





- Sustainability Initiative

RE100

RE100
CLIMATE GROUP

We promise to

Use 100% green electricity in all our offices in Taiwan by 2030

CDP

CDP
DISCLOSURE INSIGHT ACTION

We promise to

Set a schedule for future integration and has begun the CDP gap assessment in 2024

- Philosophy and Vision

HDRE has branched out the field of solar power and wind power generation and has planned for fishery and electricity symbiosis, energy storage and EV charging markets. We are becoming a “smart green energy company” through the three main business units, electricity development, asset management and smart power service. We maximize green energy utilization rates and are committed to green energy popularization. In addition, customized and integrated services are provided to create a green living circle jointly and facilitate energy transformation.

Core Philosophy of HDRE



- **Strategic Objectives**

HDRE's long-term plan is to become an international green energy brand. Having previously focused on solar and energy storage site development and construction, we have already become Taiwan's most prominent green energy brand. We will carry on to solve current EV charging problems, while developing AI and edge computing technologies. Thus allowing us to have full acquisition of the green energy data from generation end to consumption end. This will be our next goal — to develop the charging business and plan a Smart Grid 4.0 business layout.

Progress in Smart Grid 4.0 Deployment



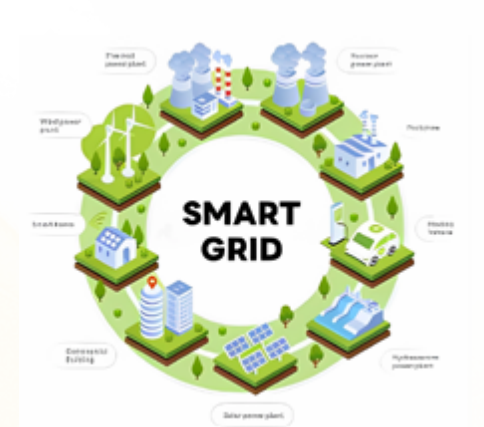
1.0 Generation



2.0 Storage



3.0 Charging



4.0 Consumption

- **International Market Strategic Layout**





• **ESG Management Mechanism**

Each year, HDRE takes in the issues valued by all stakeholders and conducts rolling adjustments. Issues are categorized within the ESG framework (Environmental, Social and Governance), and short to long-term goals are set. We track the goals and regularly report back to stakeholders. For detailed strategy formulation, please refer to section 1.3.3: Benchmarking Against the United Nations Sustainable Development Goals.

Introduction of Three Main Business Units



- Operational highlights and future plans by 2023

Photovoltaic Field

- Established solar farms in Taiwan totaling over 400MW.
- Projects under development in Taiwan exceed 1.5GW.
- Projects under development in Japan exceed 100MW.
- Projects under development in Australia exceed 300MW.

Renewable Energy Distribution

- Signed green electricity supply Power Purchase Agreements (PPAs) for 13.9B kWh.

Wind Power Field

- Wind power generation plans are still in preparation.

Power Plant Operation and Management

- Signed operational contracts for photovoltaic installations totaling over 300MW.
- Goal: Manage photovoltaic installations with the total capacity of 1 GW.

Charging Sites

- Goal: Develop 1,000 sites.

Energy Storage

- Projects under development in Taiwan exceed 550MW.
- Projects under development in Japan exceed 200MW.
- Projects under development in Australia exceed 270MW.

Investment Management

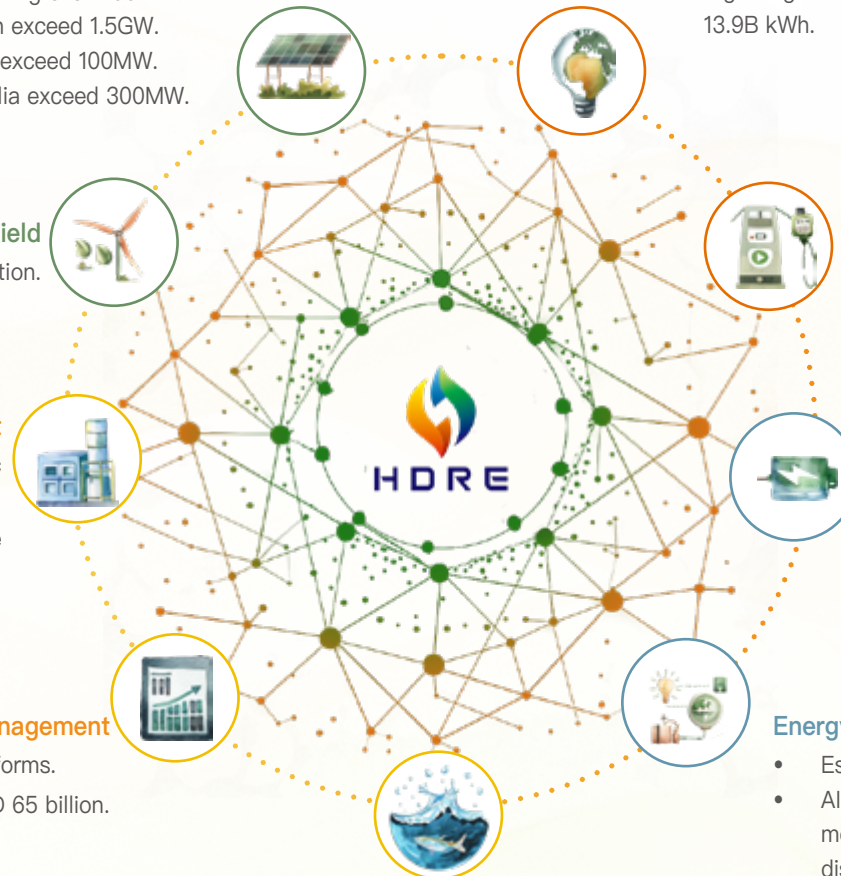
- Established 4 joint venture platforms.
- Managed assets exceeding NTD 65 billion.

Energy Aggregator

- Established the TITAN Smart Green Energy System.
- AI-managing photovoltaic, fishery-driven power, front-of-meter energy storage, demand management, green energy distribution, and charging site operations.
- Virtual power plants under development following the process of electricity liberalization.

Fisheries Management

- Established sites covering over 1,000ha.





1. Electric Power Development and Construction

HDRE provides services based on project development and Engineering Procurement Construction (EPC), and we have developed our own projects with team members who have professional backgrounds to design and customize exclusive plans for different types of fields. As the ecological environment in Taiwan is complicated and diverse, in addition to the conventional roof and ground type projects, our engineering team is also equipped with exclusive and special techniques and technologies for special terrains, such as land subsidence areas, salt pans, floating platforms on water surfaces etc. In addition, we also have expertise in the construction of ultrahigh voltage systems which comprehensively consider various aspects of design, construction, civil works, machinery, electrical and mechanical systems, etc. in relevant fields, hence reducing risks and costs.

• Roof Type

Solar photovoltaic (PV) modules are constructed on the roof of existing buildings, and solar panels can be directly installed on the roof or shed frame which can be constructed before the installation of solar panels, which is the construction method adopted by fishery and electricity symbiosis sites. Covered playground in school, users with large power consumption, RE100, and corporates with green power demands are all business partners of HDRE.



Rooftop solar PV project (Zhuxing Elementary School Basketball Court), Zhunan, Miaoli

• Ground Type

Solar PV modules and steel points are installed on the floor (including sun tracking type) or on the ground. The system is typically installed on farmlands, parking lots, and all-weather open-top stadiums. From the early days, ground-type was mainly for fields with areas under 2ha. It has now become suitable for large PV area developments areas above 30ha. Through active participation in the government agency tender projects and state-owned land development, we aim to assist in the achievement of the 2025 green energy goal set out by the government.



Ground type field, Sheng-Feng, Hualien

• Water Surface Type

Solar PV modules are installed on water surface, typically of reservoir and detention basin. The structure contains no steel pile, but water resistant and weather resistant buoys made of special material to install solar PV modules on the water surface, followed by the anchoring and securement to prevent displacement. HDRE has been actively participating in public sector tender processes on detention basins and also undertaking water surface type EPC projects.



Water surface type field, Hsinchu

• Ultra High Voltage

For power transmission systems with voltages exceeding 25,000V, i.e., above 20MW, “Ultra High Voltage (UHV) Power Stations” are required to convert the voltage before delivering the electrical power.



Ground type and UHV field, Beimen, Tainan

• Fishery and Electricity Symbiosis

HDRE responds to the “Green Power Added Value for Fishery” initiative actively promoted by the government in recent years. From the development stage, fishery operations are considered and included in various management regulations and integrated with solar PV technologies and maintenance plan to achieve balanced development in both solar power and fishery industries, thus promoting local symbiosis and co-prosperity. HDRE’s goal for fishery–electricity symbiotic power generation is 4.4GW, and they have announced a fishery–electricity symbiotic zone covering an area of 12,533ha in Changhua, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung.



Ri Yun Fishery and Electricity Symbiosis Site, Qigu, Tainan

2. Power Station Asset Management

The asset management consulting service provided by HDRE focuses on the financial and legal related consulting service. With HDRE's extensive experience in project development, assessment, solar power station system construction and maintenance management capability, we aim to provide professional and comprehensive services to customers for the period from their early development stage to the in-service operation of twenty years to maximize the asset value.

• Fishery Management

We focus on the ecological diversity and natural water circulation cultivation technique, and adhere to the lower density cultivation principle, along with the implementation of biological techniques and probiotics to maintain a safe and eco-friendly cultivation environment.

With the integration of AI and the fish pond management, along with the use of sensors, computer/smartphone, cloud, and big data, a smart cultivation trend is established.



Aquaculture experimental station, Qigu, Tainan

3. Smart Power Services

• Energy Storage Dispatch

Energy storage systems refers to electrical energy storage equipment and is able to store renewable energy, so that the excess electrical energy generated during daytime can be stored for the use at night, thereby optimizing the energy storage and avoiding the loss during transmission. It can hasten the progress to reach RE100. HDRE actively prepares and participates in the Taipower AFC frequency modulation auxiliary service, and uses quick charging/discharging energy storage equipment and power regulating system to mitigate the occurrence of unstable power supplies and power abnormalities so that Taipower's power supply stability can be enhanced, and the power generation benefit can be maximized.

• Smart Charging Points

To overcome air pollution and greenhouse gasses, the government has carried out a series of policies of EV. HDRE actively establishes brand new living models and provides net zero carbon emissions solutions. HDRE has become a pioneer of green-energy EV charging points, and we aim to integrate environment and sustainability into our daily life.

• Construction achievements

The best solutions-Mid-size communities demonstration in northern Taiwan To provide complete EV charger solutions, the concept of "Full Zone Planning" has been introduced to assist the existing community in planning and modifications, and to ensure the safety of charging points and power consumption. The planning also facilitates uniform control and management, hence providing the best solutions to community management and household charging needs.



•Green Power Supply

As many countries have established their carbon reduction goals, the demand for green power has increased rapidly. HDRE understands the difficulty in the accessibility of green power and is committed to assisting corporate customers by providing the best green power plan to achieve fast power wheeling and implementing RE100 precisely, reaching the goal of green energy utilization.





1.1.2 Industry Value Chain

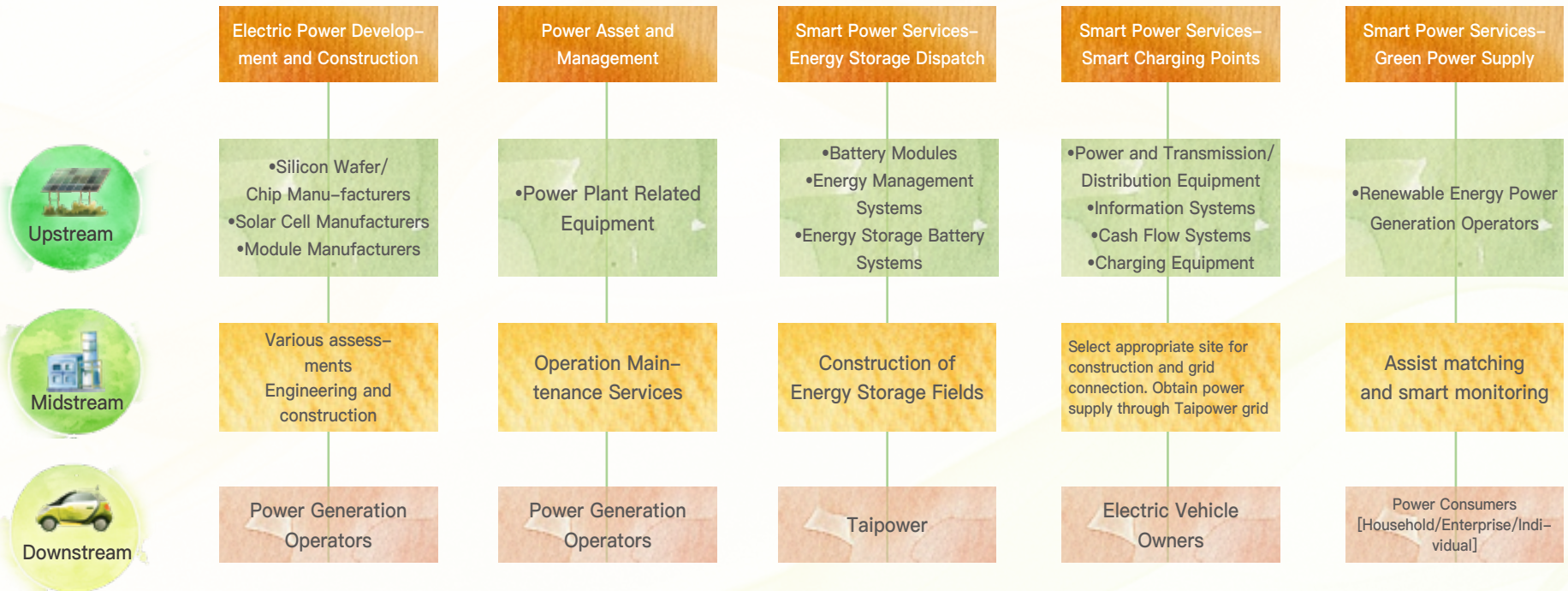
As countries around the globe face the issue of global climate change, they have also started a new wave of green energy revolution. Taiwan also follows this new wave, and the government has set the carbon neutrality goal by 2050 and establishes the 2025 energy transformation key indicators. In addition, the development of renewable energies and non-nuclear homes have been implemented as key administrative governance directions.

HDRE, being a green energy integrator, has three main business service items. They range over site development, engineering construction, power generation, electricity sales, and smart power applications.

With regard to the electric vehicle charging point business, HDRE needs to collaborate with the power and transmission/distribution operators, the suppliers of charging equipment and information and cash flow services to provide charging service to electric vehicle owners. HDRE is committed to assisting all industries to use clean and green energy in their operations. We also look forward to encouraging all business partners in the value chain to contribute to efforts in both sustainable development and carbon reduction.

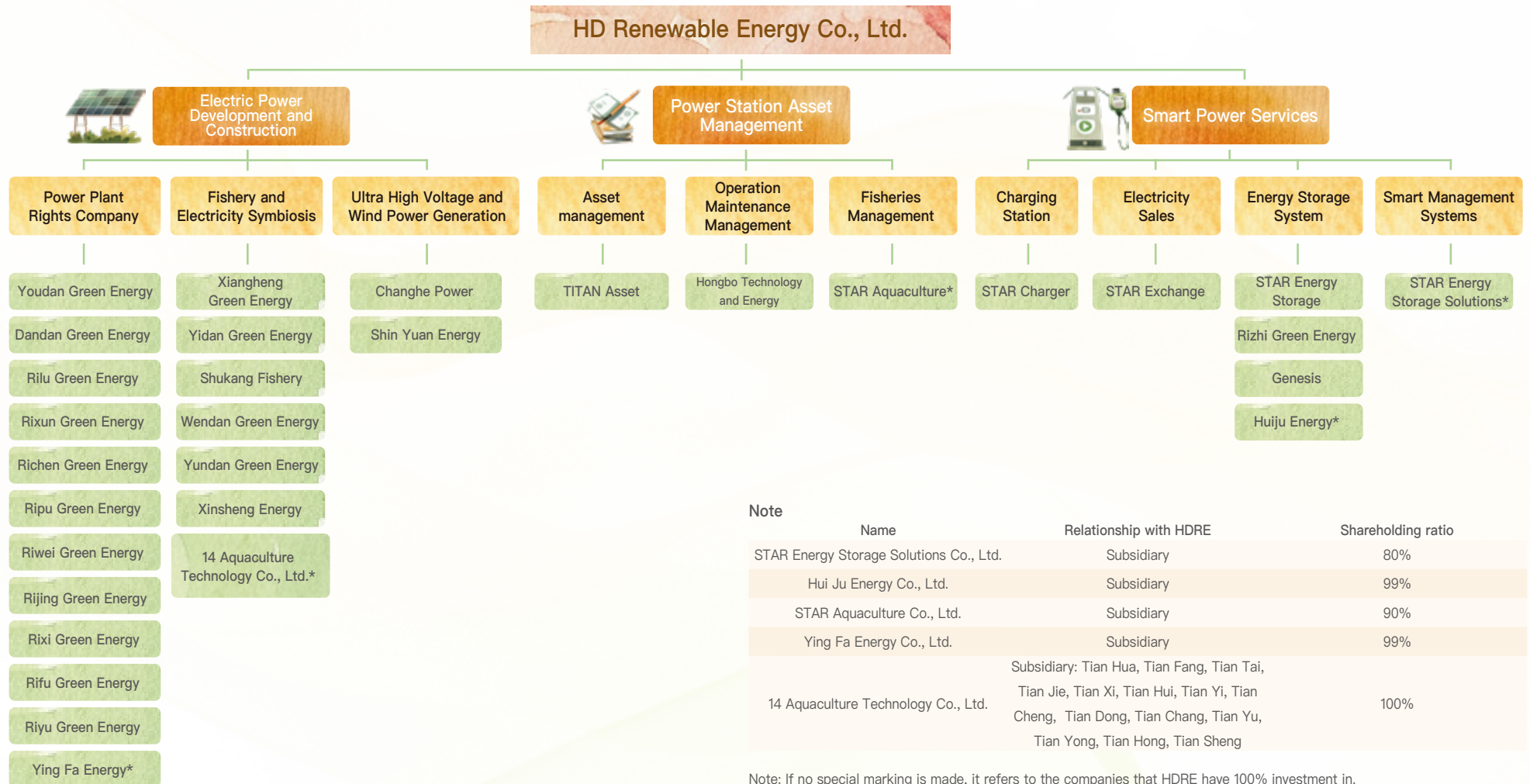


• HDRE Value Chain



1.1.3 Business Development Group (Subsidiaries and Investees)

HDRE engages in investment for the purpose of green power business development needs. The financial business management policy of investees mainly refers to relevant internal management regulations. Nevertheless, we have established the “Procedures for Subsidiary Supervision and Management” as a guideline for investees’ investing in the subsidiary.



Note

Name	Relationship with HDRE	Shareholding ratio
STAR Energy Storage Solutions Co., Ltd.	Subsidiary	80%
Hui Ju Energy Co., Ltd.	Subsidiary	99%
STAR Aquaculture Co., Ltd.	Subsidiary	90%
Ying Fa Energy Co., Ltd.	Subsidiary	99%
14 Aquaculture Technology Co., Ltd.	Subsidiary: Tian Hua, Tian Fang, Tian Tai, Tian Jie, Tian Xi, Tian Hui, Tian Yi, Tian Cheng, Tian Dong, Tian Chang, Tian Yu, Tian Yong, Tian Hong, Tian Sheng	100%

Note: If no special marking is made, it refers to the companies that HDRE have 100% investment in.



- HDRE four major subsidiaries: Please refer to CH3 Sustainable Innovation Green Intelligence.



Green energy sales

Integrated energy storage systems

Electric vehicle charging service operator

Professional aquaculture



1.2 Stakeholder Engagement

1.2.1 Stakeholder Identification

The starting point of stakeholder identification is based on the daily business partnership from each unit of HDRE. Through analyzing numerous stakeholders, HDRE identifies the stakeholders with the greatest influence. Following the AA1000 Stakeholder Engagement Standard (SES), HDRE

assesses stakeholders based on five dimensions: dependency, responsibility, tension, influence, and frequency. Eight major stakeholders are identified based on their relationship significance with HDRE. These stakeholders are ranked in order of significance, with employees being ranked first, followed

by suppliers/contractors, customers, government agencies, shareholders/investors, communities/non-profit organizations, unions/associations, and media.

- **Five assessment dimensions**

Stakeholders who directly or indirectly rely on HDRE's products, activities, or services.

Dependency

Stakeholders of HDRE who have legal, commercial, operational, or ethical responsibilities towards it.

Responsibility

Tension

Influence

Diverse perspectives

Stakeholders who are concerned about HDRE's financial performance, economic, social, and environmental issues.

Stakeholders who have influence over HDRE's strategies and business decisions.

HDRE communicates with all stakeholders and explores diverse perspectives and aspects.



1.2.2 Key Stakeholders

HDRE has established diverse communication channels for stakeholders to actively understand the attitudes, thoughts and concerns of stakeholders. In addition, the Company’s business strategy is also adjusted on a timely and dynamic basis, thus achieving a win-win situation in both sustainable corporate operations and with stakeholders.

<p>Employees</p> 	<p>Importance and Meanings</p> <p>We value our employees’ opinions and feedback, and consider our employees as important assets. By establishing a “Diverse Culture Inclusion and Happy Workplace” in conjunction with our employees, we implement employee care thoroughly and provide a safe and secure workplace.</p> <p>Communication Channel and Frequency</p> <table border="0"> <tr> <td data-bbox="461 667 806 831"> <p>【Regularly】</p> <ul style="list-style-type: none"> • labor-management meetings [quarterly] • Safety and Health Committee [quarterly] • Sustainable Newsletter [monthly] • Employee Ecological Tour [semiannually] </td> <td data-bbox="875 667 1220 799"> <p>【Occasionally】</p> <ul style="list-style-type: none"> • Diverse Communication and Complaint Channels • Care Conference </td> </tr> </table>	<p>【Regularly】</p> <ul style="list-style-type: none"> • labor-management meetings [quarterly] • Safety and Health Committee [quarterly] • Sustainable Newsletter [monthly] • Employee Ecological Tour [semiannually] 	<p>【Occasionally】</p> <ul style="list-style-type: none"> • Diverse Communication and Complaint Channels • Care Conference 	<p>Issues of Concern</p> <ul style="list-style-type: none"> • Local community • Risk management • Product quality and responsibility <p>2023 Communication Key Results</p> <ul style="list-style-type: none"> • Held 4 labor-management meetings. • Out of the 15 members on the Safety and Health Committee, 5 are labor representatives, which is in compliance with the regulatory requirements (one-out-of-three). • Total training hours for general staff education amounted to 3087.5 hours. • Accident-free work hours amounted to 559,620 hours. • No significant employee complaint incidents occurred.
<p>【Regularly】</p> <ul style="list-style-type: none"> • labor-management meetings [quarterly] • Safety and Health Committee [quarterly] • Sustainable Newsletter [monthly] • Employee Ecological Tour [semiannually] 	<p>【Occasionally】</p> <ul style="list-style-type: none"> • Diverse Communication and Complaint Channels • Care Conference 			
<p>Suppliers</p> 	<p>Importance and Meanings</p> <p>Suppliers are the critical partners of HDRE and the key for us to provide high-quality services and products. Together, we can build a sustainable supply chain.</p> <p>Communication Channel and Frequency</p> <table border="0"> <tr> <td data-bbox="461 1208 806 1401"> <p>【Regularly】</p> <ul style="list-style-type: none"> • Supplier and contractor evaluation [annually] • Project meetings [monthly] • Regulatory compliance audit [quarterly] </td> <td data-bbox="837 1208 1252 1433"> <p>【Occasionally】</p> <ul style="list-style-type: none"> • Toolbox talks • Occupational safety education and training • On-site inspection of critical materials • supplier and contractor management procedures </td> </tr> </table>	<p>【Regularly】</p> <ul style="list-style-type: none"> • Supplier and contractor evaluation [annually] • Project meetings [monthly] • Regulatory compliance audit [quarterly] 	<p>【Occasionally】</p> <ul style="list-style-type: none"> • Toolbox talks • Occupational safety education and training • On-site inspection of critical materials • supplier and contractor management procedures 	<p>Issues of Concern</p> <ul style="list-style-type: none"> • Biodiversity • Local community • Talent retention and attraction <p>2023 Communication Key Results</p> <ul style="list-style-type: none"> • Conducted Health and Safety Education Training for Contractors amounted to 1,722 hours, with around 290 participants. • Performed Health and Safety Assessments and Inspections on 56 manufacturers. • Conducted initial audits on 55 suppliers and contractors, and regular assessments on 26 suppliers and 14 contractors. • Conducted visits and inspections at 23 factories. • Held 15 STAR Aquaculture visiting sessions.
<p>【Regularly】</p> <ul style="list-style-type: none"> • Supplier and contractor evaluation [annually] • Project meetings [monthly] • Regulatory compliance audit [quarterly] 	<p>【Occasionally】</p> <ul style="list-style-type: none"> • Toolbox talks • Occupational safety education and training • On-site inspection of critical materials • supplier and contractor management procedures 			

Customers



Importance and Meanings

We are committed to providing quality services to our customers, and we also strive to ensure both high quality and customer satisfaction as we implement customer privacy protection and information security management.

Communication Channel and Frequency

【Regularly】

- Establish business, assets, electricity sales, and management procedures [annually]
- Conduct customer satisfaction questionnaire survey [annually]

【Occasionally】

- Electronic complaint mailbox or hotline

Issues of Concern

- Local community
- Employee compensation and benefit
- Risk management

2023 Communication Key Results

- Completed satisfaction surveys from 26 key clients.
- The proportion of “satisfied” and “very satisfied” in the surveys is Electricity Sales (97%), Sales Management (70%) and Assets (100%).
- Held 11 investment review meetings.
- Implemented information security system access control to ensure customer information is not maliciously leaked, stolen, and recorded.

Government Agencies



Importance and Meanings

We promise to follow the requirements of local laws and decrees. Moreover, we will actively disclose all of our products and services, which will be complied with regulations and supervised by authorities.

Communication Channel and Frequency

【Regularly】

- Reviewing updates on the latest regulations [monthly]
- Compliance checks for regulatory requirements [annually]
- Government reporting platform [annually]

【Occasionally】

- Document circulation
- Participation in government public information activities

Issues of Concern

- Corporate governance
- Risk management
- Innovation management

2023 Communication Key Results

- Updated 124 regulations, 75 of which are applicable and under go regular audits.
- Held 15 STAR Aquaculture visiting sessions.
- No significant penalty incidents occurred.



Stakeholders and Investors



Importance and Meanings

Achieving best construction quality and generating maximum profits are the goals of the Company. These goals can increase the trust and cohesion of both shareholders and employees in the Company, and they are also considered as key matters to sustainable development and business operation.

Communication Channel and Frequency

【Regularly】

- Shareholders' Meeting [annually]
- Annual Report [annually]
- Sustainability Report [annually]

【Occasionally】

- Earnings call

Issues of Concern

- Corporate governance
 - Biodiversity
- Local community

2023 Communication Key Results

- Held 4 shareholders' meetings to provide updates on operations, policy implementation progress, etc.
- Conducted Board of Directors Educational Trainings 4 times, totaling 45 hours.
- Held 19 board meetings.
- Achieved project sites' operational management targets.
- Held 15 STAR Aquaculture visiting sessions.
- No negative feedback or complaints from shareholders or investors.
- Established the Sustainable Development section on the HDRE official website to provide sustainability information.
- Continue to upload sustainability-related information through the Instagram account of HDRE.

Communities/ Nonprofit Organizations /Non- Governmental Organizations



Importance and Meanings

We uphold the principles of contribution and giving back to the society through core technologies and capabilities, thus preventing impacts on the local ecology, therefore achieving the goal of wonderful living with green power and innovation. We also promote awareness of green power and organize various public welfare events to convey our passion and positive energy.

Communication Channel and Frequency

【Regularly】

- Environmental and Social Impact Assessment [annually]
- Environmental Due Diligence Investigation [annually]
- Water and Soil Assessment [quarterly]

【Occasionally】

- Local Briefing Sessions
- Public Welfare Activities
- External Seminars/Conferences
- Site Visits

Issues of Concern

- Local community
- Innovation management
- Talent retention and attraction

2023 Communication Key Results

- Conducted ESDD (Environmental & Social Due Diligence) for energy storage projects.
- Commission environmental organizations to conduct assessments of environmental and social aspects, in order to gain credibility.
- Hired external ecological consultants to inspect and monitor activities.
- Ensured that each local project hires local residents. For example, out of the 66 employees in the Tainan office, 15 are local residents.

Industrial Unions and Associations



Importance and Meanings

In addition to participating in the open events of government agencies, we also actively participate in events announced by the unions, including courses and field on-site visits to achieve operation safety management exchange, and also promote industrial safety and development of maturity in health management.

Communication Channel and Frequency

【Regularly】

- Public education and training sessions [quarterly]
- Participation in counseling activities [quarterly]
- Membership meetings [annually]

【Occasionally】

- Participation in government agency events
- Attendance at external conferences and seminars

Issues of Concern

- Corporate governance
- Talent retention and attraction
- Occupational health and safety

2023 Communication Key Results

- Participation in 21 government public information courses and events
- Membership in various public associations, trade unions, or external organizations (refer to section 2.2.3 for details on external participation)

Media



Importance and Meanings

Through media exposure, press conferences, brand activities and media gathering events, we hope that important information on HDRE can be conveyed to all stakeholders to use media as an important channel for our communications with the general public.

Communication Channel and Frequency

【Regularly】

- Media luncheons/gatherings [annually]
- Press releases [monthly]

【Occasionally】

- Press conferences
- Interviews
- Media tours

Issues of Concern

- Biodiversity
- Product quality and responsibility
- Corporate governance

2023 Communication Key Results

- Hosted the “Beseye” media luncheon.
- Organized a media tour to “Ri Yun Green project and FamilyMart Pingfeng Store”.
- Organized a media tour to “2023 Energy TAIWAN”.
- Presented at the 2023 Energy TAIWAN X Net-Zero Taiwan Forum.
- Held 15 STAR Aquaculture visiting sessions.



• Stakeholder Contact Window and Communication Channels

Spokesman

President Shih Chang Chou

Tel.: +886-2-2832-8057

Deputy Spokesman

**Manager, Business Analysis
Department, Tzu Ching Hsu**

Tel.: +886-2-2832-8057

Direct Customer Service Line

Sales Division

Tel.: +886-2-2832-8057
Email: hd.sales@hdrenewables.com

Employee Complaint Channels

**Human Resource and
Administration Department**

Tel.: +886-2 2832 8057
Email: equality@hdrenewables.com

Fraud Report Section

Audit Department

Tel.: +886-4-2255-8858
Email: hd.ac@hdrenewables.com

**Integrity Management Reporting
Channel**

Audit Department

Tel.: +886-4-2255-8858 # 220
Email: hd.ac@hdrenewables.com

Investor Section

Marketing Department

Tel.: +886-2-2832-8057
Email: ir@hdrenewables.com

ESG Section

**Sustainable Development
Office**

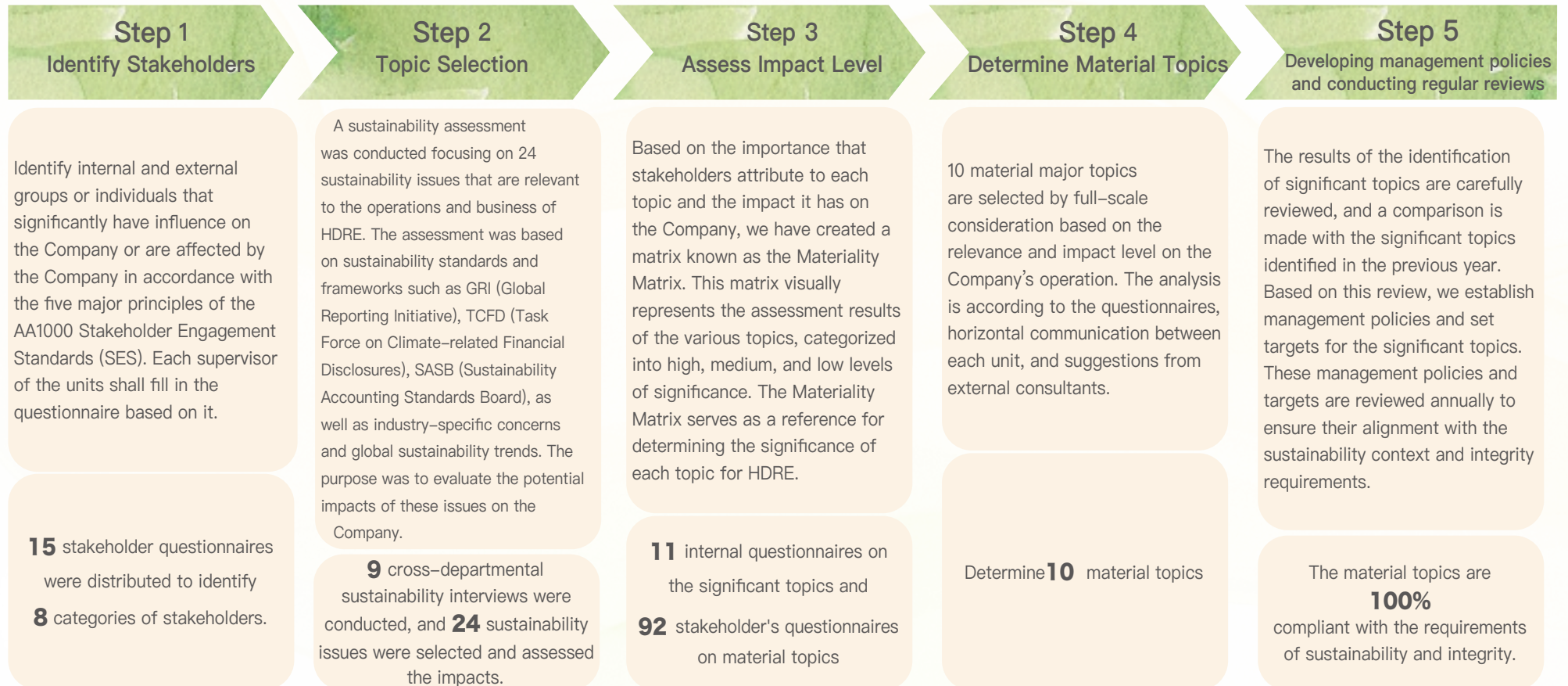
Tel.: +886-2-2832-8057
Email: esg@hdrenewables.com

1.3 Analysis of Material Topic

1.3.1 Material Process Analysis

HDRE values communication with stakeholders and upholds the principles of transparency and openness. We provide diverse communication channels to facilitate effective two-way communication. Through regular communication with stakeholders, we disclose relevant information and gather their opinions. We actively seek feedback and suggestions from stakeholders regarding our operations to ensure continuous adjustment and improvement on the path of sustainable management and to address the expectations of the wider society.

HDRE utilizes multiple channels to communicate with stakeholders and combines them with significant thematic analysis to identify the most important issues for stakeholders and the Company. Furthermore, we are committed to establishing the foundation for sustainable operations and continuously improving areas of weakness while enhancing information disclosure.









1.3.2 Material Topics Analysis and Matrix

• Sources of Sustainability Issues

HDRE identifies potential significant topics for the Company's sustainability by referring to international sustainability standards and frameworks, such as the United Nations Sustainable Development Goals (SDGs) and Responsible Investment. Industry trends and stakeholder engagement also play a crucial role in identifying these sustainability issues. The identified topics are then narrowed down to 24 sustainability topics, and further investigation is conducted to assess the impacts associated with each topic.

 <p>International sustainability standards and frameworks</p>	<p>Referring to international sustainability standards such as the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, Sustainability Accounting Standards Board (SASB), Responsible Business Alliance (RBA), Task Force on Climate-related Financial Disclosures (TCFD) and other relevant guidelines.</p>
 <p>Sustainable Development Goals (SDGs)</p>	<p>Evaluate the 17 Sustainable Development Goals (SDGs) and their corresponding 169 targets, and identify how HDRE can contribute to them through specific actions.</p>
 <p>International sustainability ratings</p>	<p>Refer to rating indicators such as the MSCI ESG Leaders Indexes and the Carbon Disclosure Project to assess HDRE's performance in ESG (Environment, Social, and Governance) criteria.</p>
 <p>Industry development trends</p>	<p>Trends and developments in specific industries.</p>
 <p>Stakeholders' concerns</p>	<p>Stakeholder concerns include issues related to employees, suppliers, customers, government agencies, shareholders/investors, communities/non-profit organizations/non-governmental organizations, industry associations, and media.</p>

• Sustainability Issues

After internal discussions within the Sustainable Development Department of HDRE and consultation with stakeholders, we conducted an analysis based on four dimensions: governance, environment, social, and products/services. Through this process, we identified 24 sustainable topics. We will continuously refine our governance policies and drive the Company's sustainability efforts in line with these sustainable topics.

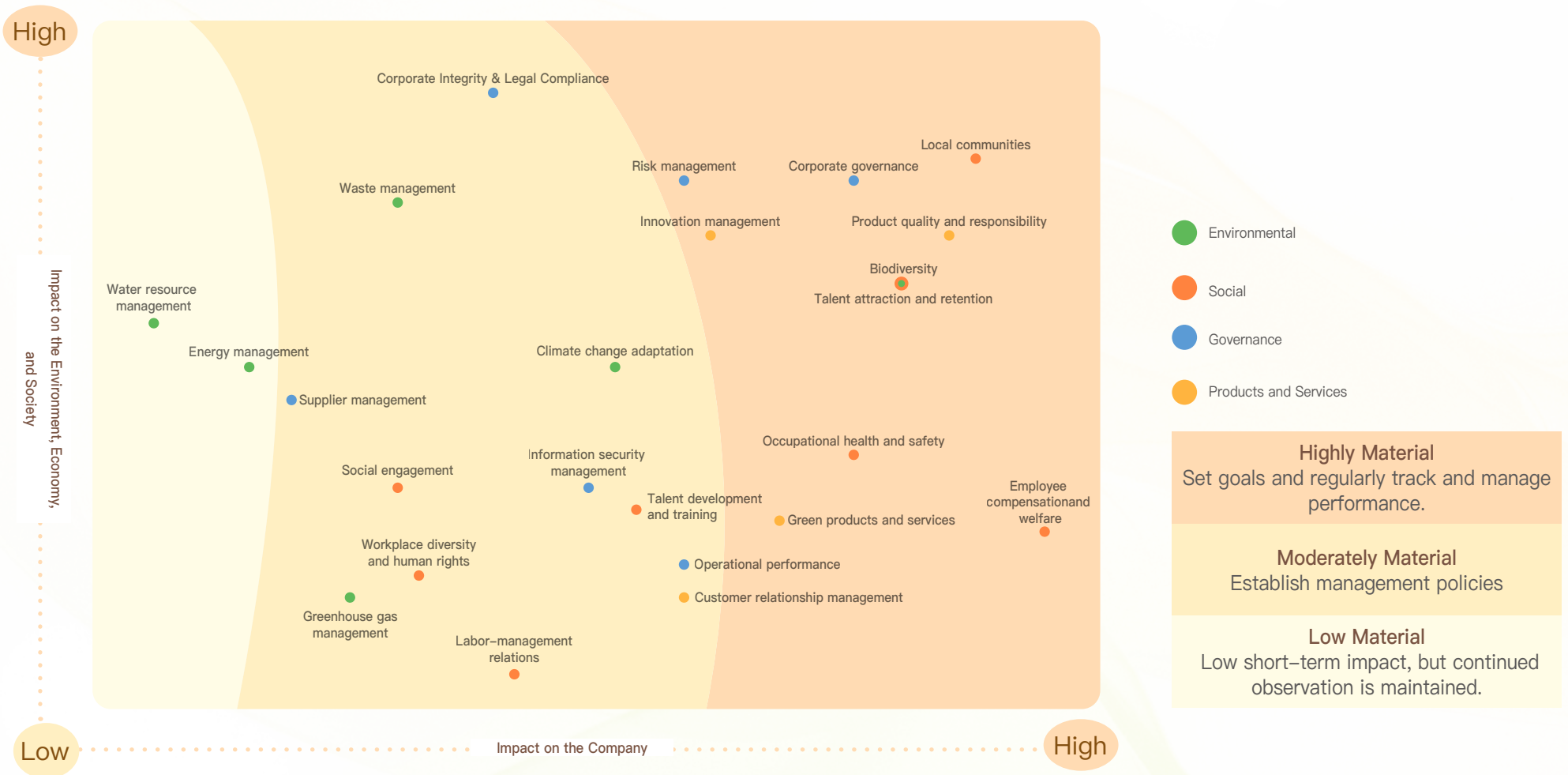
 <p>Governance</p> <ul style="list-style-type: none"> •Corporate governance •Corporate Integrity & Legal Compliance •Risk management •Operational performance. •Information security management •Supplier management 	 <p>Environment</p> <ul style="list-style-type: none"> •Climate change adaptation •Biodiversity •Energy management •Waste management •Greenhouse gas management •Water resource management
 <p>Social</p> <ul style="list-style-type: none"> •Talent attraction and retention •Talent development and training •Labor-management relations •Workplace diversity and human rights •Social engagement •Occupational health and safety •Employee compensation and welfare •Local communities 	 <p>Products and Services</p> <ul style="list-style-type: none"> •Innovation management •Green products and services •Product quality and responsibility •Customer relationship management

Material Topic Matrix

HDRE has conducted a materiality analysis of the 24 sustainability issues based on their impact on the economy, environment, and people (human rights), as well as their impact on the Company's operations. The results have been visualized in the form of a materiality matrix, as shown below. With this analysis, HDRE has developed its

sustainable development strategy and periodically reviews its performance and goal achievements. The credibility of performance improvement is ensured through internal verification and independent third-party verification. Based on the management policy for material issues, performance management indicators have been established

to track the progress and status of goal achievements. Consistency between the performance management indicators and sustainability principles is ensured. Issues that have a significant impact on both operational and economic, environmental, and social aspects are defined as "highly material issues". The following definitions and management strategies are applied:





• 2023 Top 10 Material Topics

No.	Material Topics	Ranking Movements	2023 Issue Adjustment Explanations	6	Corporate governance	downward	HDRE's listing this year marks a relative maturity in governance operations compared to last year, resulting in a slight decline in rankings.
1	 Local community	unchanged	-	7	 Occupational safety and health	downward	Measures to improve occupational safety for employees have been determined and ready for implementation, resulting in a slight decline in rankings.
2	 Product quality and responsibility	upward	Listed this year, HDRE is actively expanding its operations in power generation, energy storage, and electricity sales, aiming to enhance product management and responsibility as these activities progress.	8	 Risk management	upward	With rising demands for green energy services and rapid changes in the energy market, the Company faces increased risk management challenges compared to previous years.
3	 Employee compensation and welfare	upward	The development of green energy industries driven by domestic regulations has led to a shortage of relevant talent, making competitive salaries and benefits crucial in attracting talent and boosting rankings.	9	 Innovation management	upward	The Company is committed to innovation and breakthroughs in various products, highlighting the importance of managing outcomes effectively.
4	 Biodiversity	downward	In HDRE's development projects across Taiwan, biodiversity has always been our first priority. This fiscal year, we have succeeded in striking a balance between land development and ecology, therefore, resulting in a slight decline in ranking.	10	 Green products and services	upward	Since listing, HDRE has actively expanded into various green product developments — from power generation, energy storage, to system integration — and has witnessed significant progress.
5	 Talent retention and attraction	upward	With domestic carbon reduction regulations coming into effect, the market demand for green energy has outpaced supply, making technical talent a valuable asset and attractive retention strategies critical for competitiveness within the industry.				

1.3.3 The Value Chain of Material Topics

Through internal and external impact assessments and incorporating stakeholder perspectives, we have identified 10 material topics for HDRE. We will continue to engage with stakeholders, monitoring whether there are any changes in the positive and negative impacts of these material topics on HDRE's stakeholders. We will also follow up on stakeholders' expectations of HDRE. By setting goals and reviewing material topics, HDRE can ensure the growth of our Company as well as ESG (environmental, social and governance) performance.

• Benchmarking Against the United Nations Sustainable Development Goals

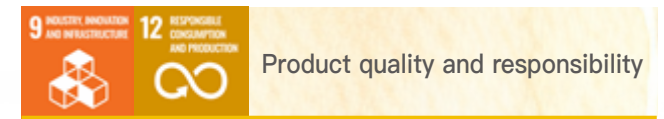


2023 Performance

1. Conducted energy education workshops around elementary schools in Taitung, Chiayi, and Miaoli, accumulating a total of 310 participants.
2. Collaborated with Formosa 3D Association to promote cultural and energy education. Beyond the local elementary schools, expanded outreach to rural areas nationwide, with a total of 11,397 participants.

Medium to long-term goals

Reduced negative impacts on the environment and society, worked towards mutual benefits with local communities by providing employment and other resources, and jointly promoted the coexistence and mutual prosperity of photovoltaics and communities.

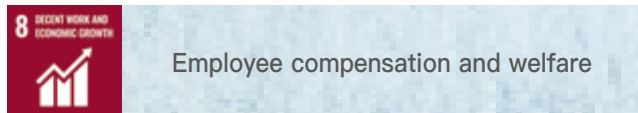


2023 Performance

Before commencing each project, a quality and environmental health and safety briefing is held with all contractors to ensure compliance with the quality standards and environmental protection during the construction process, mitigating environmental impact during later power generation.

Medium to long-term goals

1. Develop a digital internal quality management system, with functions such as employee training and education, certification management, document control, and internal announcements.
2. Achieve ISO 9001 management system certification for similar project sites.
3. Assist subsidiaries in completing management system verification.
4. Assist contractors in developing quality risk assessment capability.



2023 Performance

1. The gender pay gap, compared to the previous year, has decreased by 10.6%.
2. Female non-supervisory employees have seen a salary increase of 7.14%.

Medium to long-term goals

Provide higher compensation and rewards than industry peers to shape a thriving work environment.



2023 Performance

Regularly review site ecological monitoring reports, continue to invest in salt field restoration, and strengthen the group's consensus on biodiversity conservation through employee field participation and enhanced environmental education.

Medium to long-term goals

Proactively assess related impacts, invest in marine and terrestrial habitat conservation, actively engage in ecological restoration, and maintain biodiversity through employee participation and environmental education.



2023 Performance

1. Guest instructors are brought in to enhance leadership skills for our group executives.
2. The number of employees has increased by 28 people.
3. Turnover rate has decreased by 3.64%.
4. Human rights due diligence process has been initiated.

Medium to long-term goals

Provide higher compensation and rewards than industry peers to shape a thriving work environment.



8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Corporate governance

2023 Performance

The Company’s governance regulations and standards have been placed on the official website and internal shared folders, allowing both internal and external stakeholders to access them at any time and understand the Company’s governance objectives.

Medium to long-term goals

Continue to participate in corporate governance evaluations and improve governance strategies based on the results.

3 GOOD HEALTH AND WELL-BEING

Occupational safety and health

2023 Performance

1. Accident-free work hours amounted to 559,620 hours, and has successfully obtained an Accident-free Work Hours Certificate.
2. ISO 14001, ISO 45001, and ISO 9001 management systems have been implemented and obtained third-party verification.
3. Environmental, health, and safety (EHS) performance goals are set, and will continue to track and evaluate.

Medium to long-term goals

1. Develop a digital internal EHS management system with functions such as employee training and education, certification management, document control, and internal announcements by the year 2024, and launch by 2025.
2. Achieve ISO 45001 management system certification for similar project sites.
3. Assist subsidiaries in completing management system verification.
4. Continue to accumulate accident-free hours, and obtain the 720,000-hour Certificate.
5. Assist contractors in developing quality risk assessment capability.
6. Promote health and safety through workshops and educational training.

8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION

Risk management

2023 Performance

Thorough review and approval procedures are conducted before any contract and legal document signing, including risk assessments, internal audits and internal controls.

Medium to long-term goals

Manage operational risks effectively to establish trust with stakeholders and business partners, thereby building the Company’s brand image.

8 DECENT WORK AND ECONOMIC GROWTH

Innovation management

2023 Performance

Over NTD 50 million has been allocated annually for research and development.

Medium to long-term goals

Achieve ICT leadership in the smart energy sector, and differentiate ourselves in technology, functionality, and service to secure market share and customer loyalty, thereby achieving sustainable growth.

8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Green products and services

2023 Performance

6 hours of employee training for newly hired and current ones, 2 educational training programs, and 1 external educational training are required annually.

Medium to long-term goals

Continue to develop professionals in all aspects, strengthen and improve our organization, and boost team competitiveness.











• Material Topics and Stakeholders

The impact hotspots and influences on the value chain






Aspects	Material Topics	The impact hotspots and influences on the value chain							The relation between material topics and stakeholders	Corresponding sections	
		Upstream	Down-stream	Internal HDRE	External						
		Suppliers	Customers	Employee	Government Agencies	Shareholders/ Investors	Communities/ NPOs/NGOs	Industrial Union/ Association	Media		
	 Local Communities									1. HDRE actively engages in local community energy education and environmental conservation, regularly discusses collaborative solutions with community and non-profit organizations, and communicates with the society through media releases. 2. HDRE ensures local policies and objectives are met by implementing supplier and contractor assessments for health and safety inspections. 3. To enhance employees' understanding of local community conservation, HDRE organizes regular staff eco-trips to raise awareness of local community issues.	6.1 Mutual Prosperity in Society
Social	 Employee compensation and welfare									1. Each year, the employees are given two performance appraisal evaluations. The results are used as crucial references for salary adjustment, bonus, incentives, promotion, rotation, educational training, and career development. 2. Retention rates, turnover rates, and reasons for turnover are analyzed, reported and discussed in quarterly management meetings. 3. Labor-management meetings are held on a quarterly basis to provide a platform for regular communication between the two sides. 4. The Employee Welfare Committee will hold quarterly gatherings to enhance well-being, improve job satisfaction, and build a closer relationship between the Company and the employees.	5.1 Human Resource Management



The impact hotspots and influences on the value chain











Aspects	Material Topics	The impact hotspots and influences on the value chain							The relation between material topics and stakeholders	Corresponding sections	
		Upstream	Down-stream	Internal HDRE	External						
		Suppliers	Customers	Employee	Government Agencies	Shareholders/ Investors	Communities/ NPOs/NGOs	Industrial Union/ Association	Media		
Social	 Talent retention and attractionw									<ol style="list-style-type: none"> 1. Hold labor-management meetings to communicate with employees about working conditions, benefits, and environmental improvements. 2. In the annual corporate governance evaluation, explain to government agencies the changes in employee turnover and new hires. 3. Communicate with shareholders/ investors through annual reports, earnings call, shareholders' meetings, and sustainability reports to provide talent review. 	5.1 Human Resource Management 5.2 Deep-rooted Talent Cultivation 5.3 Friendly Workplace Realization
	 Occupational safety and health									<ol style="list-style-type: none"> 1. Disclose occupational safety and health information to employees by establishing the Occupational Safety and Health Committee, setting up the complaint mailbox and hotline, holding labor-management meetings, conducting stakeholder surveys, and sending information via email. 2. Promote occupational health and safety policies and standards to suppliers (contractors) through environmental and safety management surveys, pre-operation hazard notice, and periodic supplier evaluations. 3. Communicate with the media with external feedback communication record analysis forms. 4. Stay informed about the latest occupational safety regulations through regular correspondence with government agencies, industry unions/associations via mail and written communications, documents, seminars, and educational training sessions. 	5.3 Friendly Workplace Realization

The impact hotspots and influences on the value chain

Aspects	Material Topics	Upstream	Down-stream	Internal HDRE	External				The relation between material topics and stakeholders	Corresponding sections	
		Suppliers	Customers	Employee	Government Agencies	Shareholders/ Investors	Communities/ NPOs/NGOs	Industrial Union/ Association			Media
Governance	 Corporate governance									<ol style="list-style-type: none"> 1. Actively take notice of the updates in government regulations and adjust company rules and regulations timely in order to let the employees comply with the latest updates. 2. Set up a corporate governance and sustainability development page on the official website and provide contact information to enable shareholders/ investors to understand the Company's governance status. 	2.1 Corporate Governance
	 Risk management									<ol style="list-style-type: none"> 1. Ensure risk management in site development meets regulatory requirements through meetings, supplier/ contractor evaluation systems, and during contract negotiations. 2. Conduct customer satisfaction surveys to assess service performance and mitigate future default risks. 3. Update risk management in site development with government agencies through correspondence and physical audits. 4. Organize regular corporate briefings with investors to report risk issues and solutions. 5. Mitigate operational risks for employees through advocacy, announcements, and educational training. 	2.4 Risk Management



The impact hotspots and influences on the value chain

Aspects	Material Topics	The impact hotspots and influences on the value chain							The relation between material topics and stakeholders	Corresponding sections
		Upstream	Down-stream	Internal HDRE	External					
		Suppliers	Customers	Employee	Government Agencies	Shareholders/ Investors	Communities/ NPOs/NGOs	Industrial Union/ Association		
Environmental	 Biodiversity								<ol style="list-style-type: none"> 1. Publish E-newsletters regarding sustainable issues and provide environmental education to ensure employees have a comprehensive understanding of HDRE's biodiversity policies and related actions. 2. Communicate with shareholders/investors through annual reports, official websites, and sustainability reports. 3. Utilize press releases and non-periodical media interviews to ensure the media is aware of HDRE's commitment to biodiversity and its tangible efforts and achievements. 4. To communicate with the local community, we emphasize the co-prosperity of ecological and renewable energy. The community and NGO could understand HDRE's dedication to biodiversity and facilitate their support to resource contributions. 	4.3 Ecological Diversity Protection
Industrial	 Product quality and responsibility								<ol style="list-style-type: none"> 1. Conduct regular satisfaction surveys to gather feedback from customers regarding product quality. 2. Request suppliers/contractors to cooperate in self-inspections, random inspections, and quality checks to ensure the quality of materials and services. 3. Establish a supplier/contractor evaluation system to improve product quality. 	3.3 Strengthen Sustainable Value Chain

The impact hotspots and influences on the value chain

Aspects	Material Topics	Upstream	Down-stream	Internal HDRE	External				The relation between material topics and stakeholders	Corresponding sections	
		Suppliers	Customers	Employee	Government Agencies	Shareholders/ Investors	Communities/ NPOs/NGOs	Industrial Union/ Association			Media
Industrial	 Innovation management									<ol style="list-style-type: none"> 1. Establish R&D management mechanisms, an artificial intelligence center, and data analysis and modeling management systems to oversee employee R&D and intelligent analysis outcomes, ensuring that research results are sustainable and expandable. 2. Review supplier performance and business scale to assess the technical content and supply capabilities of suppliers, carefully select partners to avoid risks related to technology and supply chains that could impact the company's innovation momentum. 	3.1 Green Energy Aggregators 3.2 Smarter Energy, Accessible Green
	 Green products and services									<ol style="list-style-type: none"> 1. Conduct irregular training courses and implement technology diffusion within the company's internal R&D units to ensure technological leadership. 2. Conduct in-depth research on market demand, actively identify customers' operational pain points to provide comprehensive solutions, help clients establish operational advantages, and increase customer loyalty. 3. Showcase important R&D outcome and innovative products and services through exhibitions, press releases, and other formats. 	3.1 Green Energy Aggregators 3.1 Smarter Energy, Accessible Green 3.3 Strengthen Sustainable Value Chain



1.3.4 The Significance of the Material Topics for HDRE

Each material topic impacts the economy, environment, society, and the Company itself. Therefore, HDRE takes the initiative to establish relevant policies. All material topics are crucial to our management. With timely assessment and management, HDRE will have better risk management capabilities, create a positive social image, increase competitiveness, and enhance the Company's overall sustainability.

Regarding the material topics, HDRE has planned out short, medium, and long-term management policies and response measures. Specific action plans and goals are formulated for each topic, and progress is tracked regularly. We iteratively adjust our plans. For detailed information on the management policies regarding each material topic, please refer to the respective sections at the beginning of each chapter.



Material Topics

 **Local community**

The Meanings to HDRE

We are committed to reducing our negative impact on the local environment and society, and we aspire to co-create a better quality of life with the local community. We respect the original land use and the lifestyle of local residents, and strive to provide employment opportunities and other contributions to the local community, fostering mutual prosperity and coexistence between the solar energy industry and the local community.

 **Product quality and responsibility**


The concept is to ensure quality throughout the entire process, from upstream procurement of raw materials to quality control during site building and construction, and all the way to the completion and operation of the project in the later stages. We prioritize quality assurance at every step of the process.

 **Employee compensation and welfare**

With the increasing domestic emphasis on sustainability driving the growth of the green energy industry, talent scarcity has become a common challenge for enterprises. We are listed this fiscal year. We are set on research and development innovation and are actively expanding our market share. Employees are integral to our strategic positioning; therefore, we provide higher compensation than industry peers and timely adjust our benefits package. This approach aims to attract and retain long-term human capital for the Company.

 **Biodiversity**

We value the balance between natural ecology and development. We are committed to ensuring that local ecosystems are not harmed by our project development and services. We assess the potential impacts, engage in habitat conservation and provide environmental education for employees to protect and maintain the diversity of the natural environment.

 **Talent retention and attraction**


We are committed to creating a work environment that is horizontal, diverse and inclusive. We value the opinions of our employees and consider them as important assets. We establish internal management systems and motivation systems to build long-term human capital.

 **Corporate governance**

With HDRE being listed this year, more expectations from multiple stakeholders must be met. Therefore, by enhancing diversity, establishing the roles and responsibilities of the board, and promoting division of labor in the management hierarchy, we aim to enhance the Company's overall governance practices and see better scores in corporate governance evaluation.

 **Occupational safety and health**


We care for our employees. From coming to work to leaving, we want our employees to be safe and well at all times. Therefore, we ensure the safety and compliance of our working areas and operational sites. Regarding employee care, we provide health consultations and maternity support. We consider human factors in risk assessments and eliminate illegal violations to ensure the well-being of our employees.

 **Innovation management**

Risk management is the key factor of a company's growth and sustainable operation. Our Company collects internal and external data to analyze the potential risk factors each business and investment may face. We categorize different types of risks and propose corresponding measures.

 **Innovation management**

With domestic regulations emphasizing carbon reduction and carbon pricing, there is high demand for green energy. From power generation and energy storage to electricity sales, our own TITAN platform integrates and provides smart management solutions. We continue to innovate and optimize system functionalities to accommodate market demand.

 **Green products and services**

We continue to develop new sites across Taiwan to increase energy storage capacity and actively expand the installation of charging stations. Through HDRE's TITAN platform, we integrate diverse services to position ourselves for the future high-demand green energy market.

02

Sustainable Governance · Integrity and Transparency

- 2.1 Corporate Governance
- 2.2 Business Performance
- 2.3 Corporate Integrity & Legal Compliance
- 2.4 Risk Management



CH2 Sustainable Governance Integrity and Transparency

Core Vision and Commitment

With HDRE being listed, we will continue to improve our corporate governance, sustainable development, integrity operation, and risk management policies. While achieving operational growth, we are dedicated to enhancing our performance and achievements in corporate governance, fostering ecological and environmental co-prosperity through sustainable development, and creating opportunities and benefits of risk management.

2023 Achievements and Performance

- 1 2023 Internal board of directors, director members, and functional committee performance evaluations were conducted, with evaluation scores ranging from **92.00~95.27**
- 2 Director members accumulated a total of **45** hours of sustainability-related training.
- 3 The investment in research and development amounted to NT\$40,665,000, representing a growth of **3.3** times compared to the previous year.
- 4 **No** significant legal violations occurred.
- 5 **No** information security incidents were reported.

2.1 Corporate Governance

Material Topic : Corporate Governance

Strategic Objectives



Positive impacts (opportunities) on the economy, environment, and society)

We have established standards and regulations to continue the Company's sustainable development. We proactively address the internal and external expectations for corporate governance to create a positive impact on society.



Negative impacts (risks) on the economy, environment, and society

Either the management level or the employees unfamiliarity with corporate governance regulations may lead to regulatory violations, which will negatively impact the corporate image.



The resources invested in 2023

Corporate governance regulations and standards have been placed on the official website and internal shared folders, allowing both internal and external stakeholders to access them at any time and understand the goals of corporate governance.



Company Policies and Commitments on corporate governance

While pursuing the company's business growth, we adhere to corporate governance standards and actively engage with internal and external stakeholders to achieve our goal of sustainable development.



Short-term goals (1 year):

1. No significant violations of economic, environmental, and sociological regulations.
2. Evaluation of corporate governance falls within the range of 21% to 35% among listed companies.



Medium to long-term goals (3-5 years):

Continuously participate in corporate governance evaluations and improve the governance strategies based on the evaluation results.

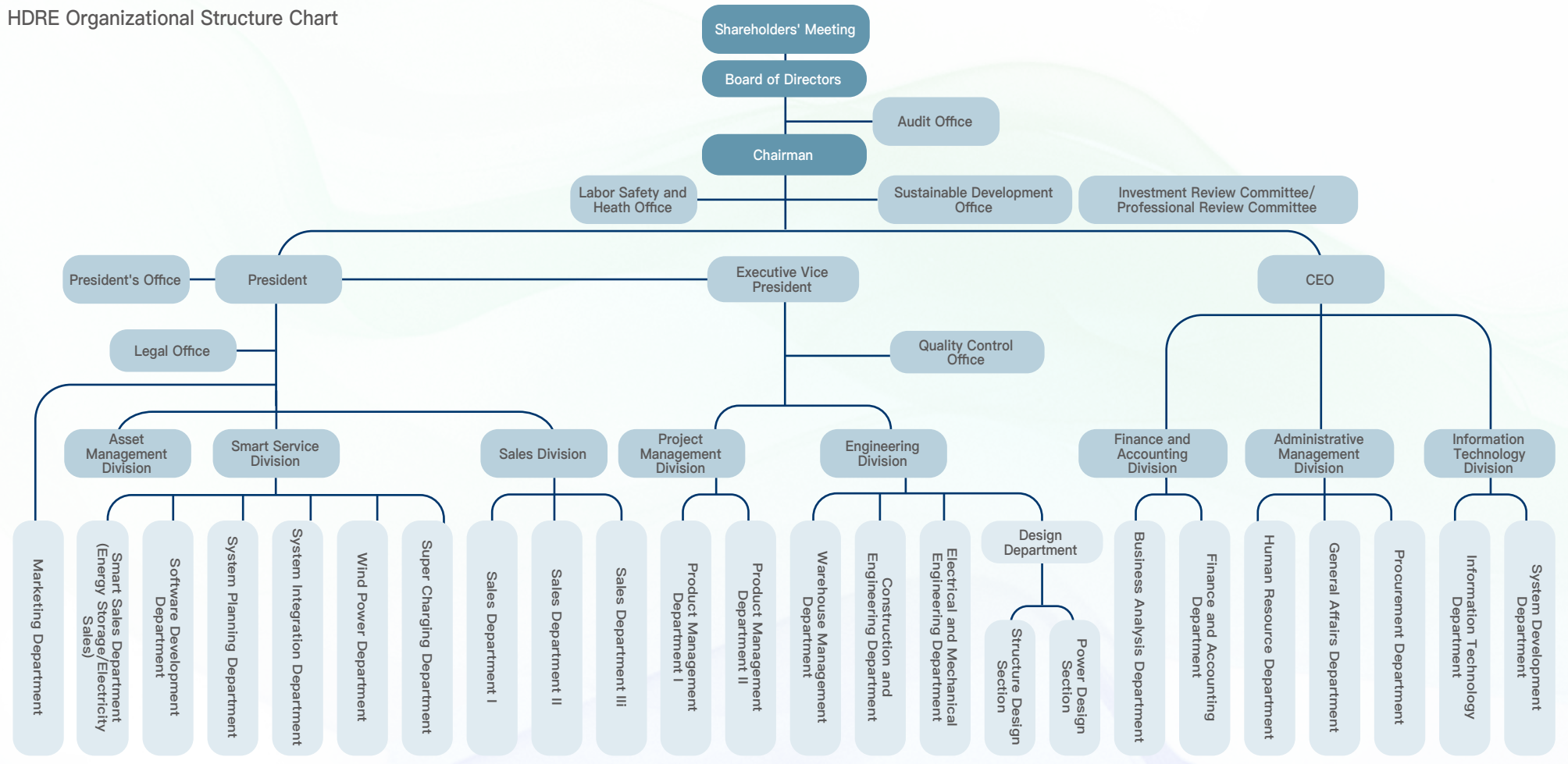
2.1.1 Governance Structure

• Corporate Governance Based on Sustainable Development

HDRE expands its corporate footprint year by year and adjusts its corporate governance structure in a timely manner according to the company's business development status. From development and construction of electric power to asset management of power stations, we will continue to expand our corporate footprint by promoting our smart power business and strive to realize the vision of electricity liberalization.

To better respond to the changes in the domestic market, HDRE has established a Sustainable Development Department to strengthen the company's sustainable governance. HDRE implements its corporate sustainability responsibility and contributes to society and the environment while obtaining more business opportunities. We hope to create more value through sustainable development.

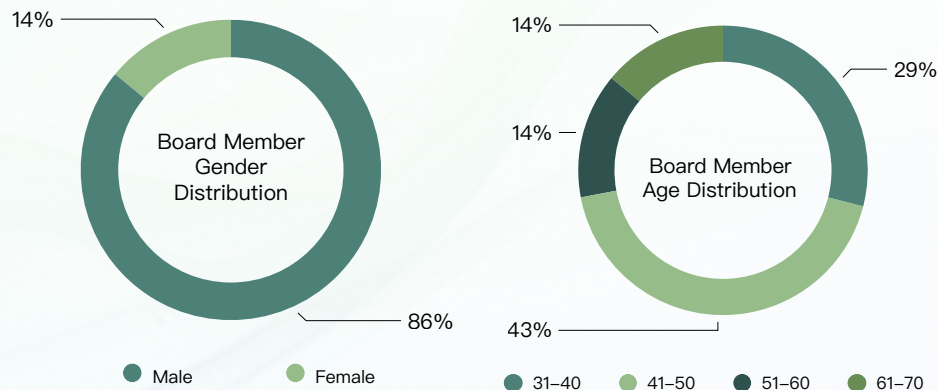
HDRE Organizational Structure Chart



2.1.2 Board of Directors

HDRE follows the principle of integrity governance and is committed to establishing a genuine and transparent corporate culture to implement comprehensive corporate governance and continuously strengthen the corporate governance efficacy. The Board of Directors of HDRE is the highest decision-making and governance team of the company. It is responsible for HDRE’s overall operation and supervises the outcomes of the operation team’s execution of policies. The board members are nominated and elected according to the Articles of Incorporation, thereby achieving sound function and operation of the Board. In addition, we also comply with the “Principles of Corporate Governance Practice” to ensure the diversity and independence of board members. Furthermore, we implemented the “Procedures for Performance Evaluation of the Board of Directors” to review and evaluate the performance of the board. All resolutions made by the Board of Directors are recorded in detail, and the resolution methods are also indicated to protect the rights and interests of shareholders.

In 2022, the Board of Directors of HDRE consisted of 7 directors which included 3 independent directors, 1 female director and 2 directors who are employees of the company. The age range of directors is wide, and five of the directors are under 50 years old, which is a demonstration of HDRE’s corporate governance vitality. In addition, with the goal of the ratio of female directors reaching 25%, the Company emphasizes gender equality of the Board.



• Composition of the Board of Directors

Diverse Composition/ Director Name	Gender	Age	Seniority		Industry Experience			Professional Competencies	
			More than 3 year	Business Management	Venture Capital	Green Energy Application and Registration	Construction Development	Finance and Accounting	Securities Finance
Yuan-Yi Hsieh	Male	41-50	✓	✓	✓	✓	✓		
Shih-Chang Chou	Male	41-50	✓	✓	✓	✓	✓		
Yi-Neng Hsu	Male	41-50	✓	✓	✓		✓		
Han Cheng	Female	31-40	✓	✓				✓	
Liang-Yu Chang	Male	31-40		✓	✓			✓	✓
Feng-Sheng Wu	Male	61-70		✓	✓				
Ren-Hao Deng	Male	51-60					✓	✓	

• **Functional Committee**

Name of the Committee	Audit Committee	Remuneration Committee
Process and Principles of Selection	In accordance with the "Regulations Governing the Exercise of Powers by the Audit Committee of Public Issuing Companies," the Board of Directors shall be composed of all independent directors, with a minimum of three members. One of them shall serve as the convener, and at least one member should possess accounting or financial expertise.	In accordance with "Regulations Governing the Establishment and Exercise of Powers of Remuneration Committee for Companies Listed on the Stock Exchange or Engaging in Securities Business," the committee shall consist of no fewer than three members appointed by the Board of Directors, with a majority of the members being independent directors.
Composition of the Committee	Composed of all three independent directors of the Board, with Liang-Yu Chang serving as the convener.	Composed of all three independent directors of the Board, with Liang-Yu Chang serving as the convener.
Responsibilities of the Committee	Assist the Board of Directors to supervise the quality and integrity of the Company in its execution of accounting, auditing, financial reporting and financial control-related works. Continuously to both strengthen the operational efficiency of the Board and establish a sound corporate governance culture.	Conduct preliminary review of Board of Directors' proposals on the policies, systems, standards and structure pertaining to directors and managers' performance evaluation. Ensure that the performance evaluation and remuneration of both directors and managers are closely linked to the Company's implementation of business strategies and outcomes of corporate sustainability responsibility execution, in order to improve overall operation performance of the Company while demonstrating the Company's commitment to sustainable development.
Operation Status (Times)	100 %	5
Attendance Rate (Including Proxy Attendance)	100 %	100 %
Articles of Association	Please refer to HDRE official website under the section- "Corporate Governance" for more details. https://www.hdrenewables.com/investor-3.html	

Note 1: Proposals are submitted to the Board of Directors for approval after being reviewed by functional committees, and relevant information is disclosed in the company's annual report.

• **Director Nominations**

The director appointment is based on a candidate nomination system, and the procedures are carried out in accordance with the "Director Election Regulations." The company actively seeks external professional talents and prepares for the succession planning of directors. To cultivate important management personnel and their deputies, the company periodically organizes internal and external training programs. These programs focus not only on developing professional skills but also on fostering power of judgment, management abilities, and problem-solving skills. This aims to enhance the decision-making quality of the management team and prepare a high-quality workforce necessary for the company's long-term development.

• **Diversity of Competencies in the Board of Directors**

HDRE has established a policy for the diversification of board members in Article 23 of the "Practical Guidelines for Corporate Governance." The suitability and diversity of the professional backgrounds of board members should be immediately taken into consideration while planning the composition of the board. Board members possess the necessary expertise, experience, and qualities to fulfill their duties, including areas such as finance and accounting, business management, and also possess extensive industry experience. They demonstrate a global perspective, decision-making and leadership abilities, as well as skills in crisis management to adapt to changes in the economy, environment, and society.

• **Avoidance of Conflicts of Interest in the Board of Directors**

The company has established policies to prevent conflicts of interest and to identify, supervise, and manage the risks of dishonest behavior that may arise from such conflicts. We also provide appropriate channels for directors, executives, and other stakeholders to attend or participate in board meetings to proactively disclose any potential conflicts of interest they may have with the company.

Directors, executives, and other stakeholders attending or participating in board meetings who have a vested interest, whether personally or through their represented entities, in matters being discussed by the board, are required to disclose the significant details of their interests during the meeting. If there is potential harm to the company's interests, they are not allowed to participate in the discussion or voting. They should abstain from voting and discussions and are not permitted to act as proxies for other directors' voting rights. Directors should also exercise self-discipline and avoid improper mutual support. Furthermore, directors, executives, employees, appointees, and substantial controllers of the company are prohibited from using their positions or influence within the company to obtain undue benefits for themselves, their spouses, parents, children, or any other individuals.

• **Important Board Resolutions in 2023**

The important decisions made by the Board of Directors in 2023 covered various areas including business development, organizational restructuring, employee compensation and director's remuneration, financial reporting, internal control system statements, and investment in subsidiary companies.

• **Continuing Education for Board of Directors**

We provide the board members with various continuing education courses to strengthen the skills and capabilities needed for performing duties, including topics such as ESG and Sustainable Governance, Crisis Management, Integrity in Management and Corporate Governance Practical Regulations, etc, all aiming to optimize corporate governance. In 2023, the board members attended 45 hours of continuing education in total.

Course Name	Description	Hours	Numbers of Participants
ESG Governance – From Awareness to Action	1. The latest development trends in ESG investment and sustainable finance, ESG performance ratings driven by the financial industry, and the business implications of CSR reports.	3	6
	2. The direction of industrial and enterprise transformation and actual examples on low-carbon businesses and circular innovation.		
2023 Trends in ESG/ CSR and Sustainable Governance	Introducing the global risks brought on by COVID-19, the trends of CSR, and achieving CSR through ESG	3	7
Discussing Ethical Business Operations, Corporate Governance, Three Major Principles and Practical Regulations	Since the announcement of Corporate Governance 3.0, changes are gradually made to strengthen and reform the direction of corporate governance. A closer look at Corporate Governance 3.0 will show many of the trends are closely related to the indicators for corporate governance evaluation.	3	1
Corporate Crisis and Business Management	Taken from different perspectives, including the investors, credit rating agencies and sustainability frameworks, a wholesome observation is provided to show the latest global trends, as well as the challenges and needed responses.	3	1

• Board Performance Evaluation

HDRE uses the results of board and functional committee performance evaluations as a reference for selecting or nominating directors and committee members. Additionally, the individual performance evaluation results of directors and committee members are used as a reference for determining their compensation. The internal performance evaluations of the board, directors, and functional committees for the year 2023 were completed in the first quarter of 2024 and will be reported to the board at the 21st meeting of the 4th board of directors. The scores ranged from 92.00 to 95.27, indicating an overall excellent performance.

Areas of assessment for director performance evaluation include:

- 1 Mastery of the company's objectives and tasks
- 2 Responsibilities of Directors Awareness
- 3 Company Operations Participation
- 4 Internal Relationship Management and Communication
- 5 Directors' Expertise Continuing Education
- 6 Internal Controls

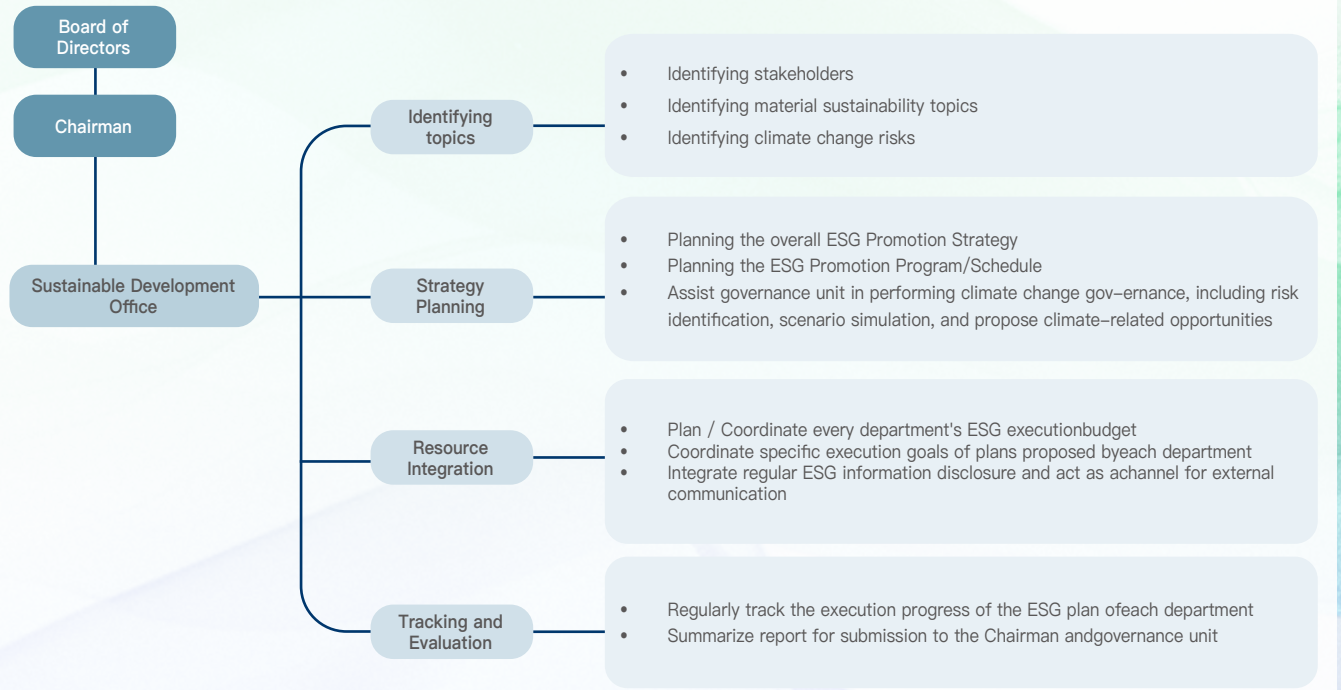
• Remuneration Policy for Directors and Executives

Directors: The remuneration of directors and supervisors is determined in accordance with the provisions of the company's articles of incorporation. It is decided by the Remuneration Committee and the Board of Directors, and distributed after submission to the shareholders' meeting.

Executives: The salary and compensation of the General Manager and Deputy General Managers are determined based on the company's remuneration policy and refer to industry standards at the time of appointment. Subsequently, adjustments are made based on the company's annual salary adjustment policy and performance evaluation results. Bonuses and employee compensation are allocated in accordance with the company's articles of incorporation and considering the operating performance of the current year and their contribution to the company. All relevant distribution proposals are reviewed and discussed by the Remuneration Committee.

2.1.3 Sustainable Development

In 2021, the Board of Directors of HDRE passed a resolution on the establishment of a Sustainable Development Office under the Chairman. Its duties and authorities include issue recognition, strategic planning, resource integration, and evaluation tracking. The office assists the Board of Directors in continuously promoting the implementation of corporate sustainable management. Hold quarterly meetings with senior executives to review sustainability performance and present the final results to the board of directors annually.



With the SDGs as our blueprint, the Sustainable Development Office integrates the concept of Environmental, Social, and Governance (ESG) into our business strategy. We aim to enhance our corporate governance system, promote environmental protection, and achieve sustainable development. Aligning with the United Nations' Sustainable Development Goals (SDGs), we have established short, medium, and long-term goals, and developed corresponding plans to move closer to our vision of sustainable HDRE. Additionally, we have formulated "Sustainable Development Policies" that encompass seven key areas, enabling us to advance toward low-carbon operations and foster a sustainable future characterized by ecological friendliness, social inclusiveness, and economic growth.

• HDRE Sustainable Development Blueprint



HDRE's Seven Main Sustainable Development Policies

HDRE upholds the core values of professionalism, innovation, passion and integrity, and is dedicated to the provision of sustainable clean energies. In addition, we are also committed to reducing ecological damage and to implement environmental safety and health measures while creating economic values, throughout the process of power station development, EPC engineering, maintenance, and the research and development of green technologies such as smart monitoring systems. We provide quality and satisfactory services to customers and make joint efforts towards the sustainable development of the corporation, environment and society, aiming to become an outstanding enterprise in the industrial supply chain.

- ### HDRE commits to and implements the following sustainable development policies
1. Establish corporate sustainable development goal, and implement execution and periodic performance review
 2. Comply with relevant government laws and regulations, international human rights standards and other requirements
 3. Provide necessary resources and trainings to maintain the effective operation of company policies and management systems
 4. Promote circular economy, improve environmental energy performance, and effectively reduce environmental impact
 5. Establish safe and secure workplace, enhance prevention of hazards, and promote employee well-being and mental health
 6. Ensure unobstructed communication with stakeholders through diverse negotiation channels and transparent disclosure of relevant information
 7. Promote all employees to participate in activities related to quality control, environmental and occupational health and safety, health promotion and energy efficiency enhancement, and continuously improve them



To enhance the sense of identification among our company colleagues towards sustainable policies, we distribute the HDRE Sustainable Development Policy cards and display the ESG Lifestyle Charter on bulletin boards, strengthening internal communication and fostering a greater awareness and understanding of ESG among our colleagues.

2.2 Business Performance

2.2.1 Operational Performance

Based on the concept of smart green energy, our company strengthens its core capabilities and establishes robust decision-making mechanisms. Establishing a transparent and fair supervision system to prevent internal corruption, fraud, and other misconduct. Our goal is to ensure accurate and transparent financial reporting, minimize financial risks, and mitigate the impact of market fluctuations on the company. Additionally, we enhance communication with stakeholders. Through proactive deployment, risk reduction, and deepening our involvement in AI, we explore and develop the renewable energy market, thereby achieving operational growth for the company.



- **Market recognition and listing**

HDRE aims to become a smart power company, and to promote the popularization of smart green energy. In 2023, HDRE was recognized by the market and officially listed, becoming the second company in Taiwan to be listed on the Innovation Board. We will continue to improve and contribute to Taiwan's net-zero goal by 2050.



Public Listing

- **Increasing site developments year by year**

Since 2022, HDRE has been committed to the development of fishery and electricity symbiosis. We constructed a fishery and electricity symbiosis project in Qigu, Tainan, harboring species such as blackfish, clams, and white shrimp. With the data of weather and water quality gathered by the Fishery E-cloud, future aquaculture management could be adapted based on past data. This year, HDRE expanded the project map to include Huxi, Penghu and Gukeng, Yunlin. Notably, the Huxi project site is the first time we achieved submarine cable transmission, marking an important milestone. Moreover, The Yunlin site has been recognized by the Ministry of Agriculture as a net-zero demonstration, where we can continue our pursuit of sustainable development.



Project Site, Huxi, Penghu



Fishery and Electricity Symbiosis Site, Qigu, Tainan



Project Site, Gukeng, Yunlin

• **Expand Revenue, Strong Alliance**

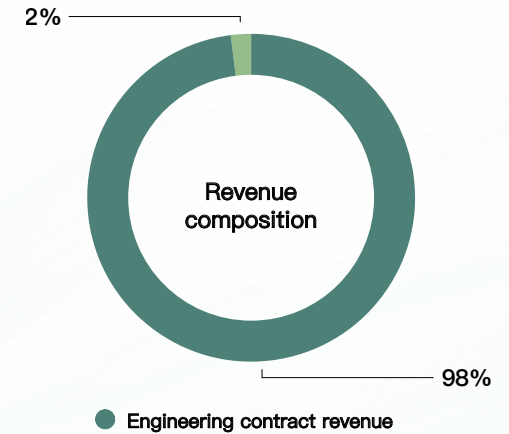
In 2021, we initiated a collaboration with eTreego Co., Ltd., which holds over 60% market share in Taiwan, to lead the deployment of the electric vehicle charging market. In 2022, a total of 12 charging stations were installed, and 20 more this year. In three years, we aim to install 1,000 charging stations in Taiwan and sell 8,600 supply equipment, which will be included in the smart power service business revenue. In 2023, we collaborated with well-known businesses such as FamilyMart, PX Mart, and Qingjing Farm, and cooperated with government agencies such as Taiwan Sugar and Taiwan Railway. By building strong alliances, we build more charging station facilities. We will continue to expand our network and achieve our new energy goals.



HDRE Headquarters

2.2.2 Financial Performance

According to HDRE’s 2023 Individual Company Financial Statements, the EPS was NT\$8.36 and the revenue was NT\$5,770,414 thousand, growing by nearly 20% compared to last year. An investment of NT\$40,665 thousand was allocated to research and development (R&D) technology, accounting for 0.8% of the revenue. It is of great significance to provide customers with the most efficient and energy-saving technological solutions, enhance the efficiency of renewable energy utilization, and contribute to the future goals of green development and energy conservation and carbon reduction. In 2023, the majority of HDRE’s revenue came from engineering contracts, primarily focusing on the construction of projects in Taiwan. The sales regions for 2023 were all within Taiwan.



• **Overview of Three-Year Operational Results (Consolidated Financial Statements)**



Unit: NT\$1,000

• Three-Year Business Performance (Accompanying financial statements)

Regarding tax policies, HDRE ensures compliance with tax regulations through internal control mechanisms and management practices. Tax risks and impacts are taken into consideration in important decision-making and transactions.

Composition	Basic Element	2021	2022	2023
Direct economic value generated	Income (including net sales, income from financial investments, income from sale of assets)	2,655,474	5,052,656	5,770,414
Economic value distributed	Operating expenses	143,572	282,540	382,929
	Operating costs	2,184,926	3,729,337	4,373,691
	Employee salary and welfare	132,224	246,038	258,011
	Dividend and dividend payment (cash dividend)	100,000	170,000	400,000
	Expenses of income tax payment	19,214	100,995	293,231
Economic value preserved	"Direct economic value generated" minus "Economic value distributed"	75,538	523,746	320,563

Unit: NT \$1,000

• Profitability Analysis (Accompanying financial statements)

Composition	2021	2022	2023
Return on asset (%)	6.82	15.4	10.64
Return on shareholders' equity (%)	14.00	26.02	18.36
Net income before tax to paid-in capital ratio (%)	32.12	95.66	100.95
Net profit margin (%)	6.22	12.87	14.13
Earnings per share	3.02	8.18	8.36

• Tax Policy

HDRE ensures compliance with tax laws and regulations through internal control mechanisms and management practices. Tax risks and possible impacts are fully considered in all important decisions and transactions. We assess the applicability of tax regulations and we uphold transparency and compliance when undertaking any tax-related activities.

	2019	2020	2021	2022	2023
Pretax profit	189,918	230,421	224,823	813,092	1,009,480
Income tax expense	39,761	39,081	59,540	162,986	194,069
Effective tax rate (%)	20%	20%	20%	20%	20%
Income tax	28,564	7,163	19,214	100,995	293,231
Cash tax rate (%)	15%	3%	9%	12%	29%
Income tax to operating revenue (%)	21%	17%	26%	20%	19%



For detailed operational performance and financial information, please refer to the HDRE official website- Financial.
<https://www.hdrenewables.com/investor-2.html>

2.2.3 External Organization Participation

HDRE aspires to keep pace with external organization partners and actively establish collaborative relationships. Through exchange of ideas and promotion of key issues, we aim to lead the industry in upward development. We will actively participate in domestic industrial unions and associations to obtain the latest industry information and research and development status of diverse innovative technologies through industry exchanges. This will enhance the industry competitiveness and continuously refine our sustainable strategy.

- **Organization Name**

Organization Name	Participating Units / Departments	HDRE Identity
PVGSA(Photovoltaic Green Sustainable Association)	Sales Division	Member
SEMI(Semiconductor Equipment and Materials International)	President office	Member
TAEDT(Taiwan Energy Digital Transformation Industry–Academia Technology Alliance)	Star Energy Storage Solutions Co., Ltd.	Member
TEGA(Taiwan Energy Digital Transformation Industry–Academia Technology Alliance)	HDRE	Member
TPiSA (Taiwan Photovoltaic Industry Sustainable Development Association)	President office	Council
Taiwan Electrical Engineering Industrial Association	Sales Division	Member
Taiwan Power and Energy Engineering Association	Star Energy Storage Solutions Co., Ltd.	Member
Green Impact Academy	Star Energy Storage Solutions Co., Ltd.	Member
Taiwan Solar Photovoltaic Industry Association	President office	Member
Taiwan Franchise and Chain Store Association	Star Charger Co., Ltd.	Member
Aquaculture Seed Association of the Republic of China	President office	Member
Aquaculture Development Association of the Republic of China	President office	Member

2.3 Corporate Integrity & Legal Compliance

2.3.1 Corporate Integrity

Our company has established the "Corporate Integrity Principles" and "Code of Corporate Integrity Procedures and Conducts," which clearly state that company personnel are prohibited from directly or indirectly providing, promising, requesting, or accepting any form of improper benefits or engaging in other dishonest behaviors that violate integrity, laws, or entrusted obligations. The Audit Department, which reports to the Board of Directors, is designated as the responsible unit. It is equipped with adequate resources and competent personnel to carry out auditing, verification, and supervision of various operational procedures, and regularly reports the audit results to the Board of Directors and the Audit Committee.

HDRE has established appropriate oversight mechanisms to ensure the implementation of integrity policies and takes necessary preventive and corrective measures. If any violation of the Code of Conduct is detected, immediate action is taken, and a review is conducted to prevent the recurrence of similar incidents. In business activities, we adhere to the principles of integrity and establish contracts with agents, suppliers, customers, or other business partners, specifying terms that comply with the Code of Conduct and provisions for contract termination. This helps create a fair and transparent business environment, fostering sustainable development.

- **Risk Assessment Mechanism for Dishonest Behavior**

The Company has established a mechanism for assessing the risks of dishonest behavior, and regularly analyzing and evaluating business activities within their operational scope that carry a higher risk of dishonest behavior. Based on these assessments, preventive measures are formulated, and the adequacy and effectiveness of these measures are regularly reviewed.

1	Prohibition of bribery and acceptance of bribes.
2	Prohibition of providing illegal political donations.
3	Prohibition of improper charitable donations or sponsorships.
4	Prohibition of offering or accepting unreasonable gifts, hospitality, or other improper benefits.
5	Prohibition of infringement on trade secrets, trademark rights, patent rights, copyright, and other intellectual property rights.
6	Prohibition of engaging in unfair competition practices.
7	Prohibition of products and services that directly or indirectly harm consumers in their research and development, procurement, manufacturing, provision, or sale.

- **Educational Training and Promotion**

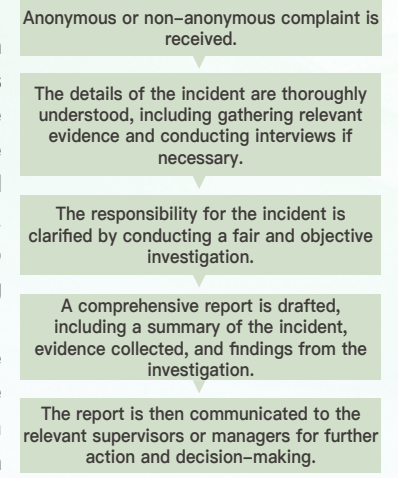
The corporate integrity requirements for employees, customers, suppliers and contractors have been established in the corresponding management regulations. Such as conveying the company’s policies on corporate integrity and anti–corruption through intranet and e–mails. Members of senior management or managerial level and above are required to sign the declaration for compliance with corporate integrity policy. In addition, the employment contract also specifies provisions related to compliance with the corporate integrity principles.

Training Courses	Course Description	Hours	Number of Participants
Self-Assessment Practice Module	The course covers the fundamental principles of self-assessment, regulations, and internal controls on projects and declarations. It also covers the preparation and guidelines for effective operating procedures.	6	2
Subsidiary Audit Practice Module	The course first covers the law and regulations regarding the subsidiaries, allowing auditors to have a complete understanding and be able to assist the subsidiaries and each department to carry out tasks correctly.	6	1
Audit Skills Practice Module	The course first covers the audit tools and techniques, allowing auditors to utilize different skills and procedures to carry out audits. Moreover, it guides auditors to plan audit work and complete reports according to the situation at hand.	6	1

- **Complaints and Handling**

Operation Process of Reporting Mailbox

The Company has established and published a disciplinary and complaint system for handling violations of corporate integrity regulations and shall make immediate disclosure on the company's internal website of the job title and name of the violator, the date and details of the violation, and the actions taken in response. We encourage both internal and external individuals to report any acts of dishonesty or misconduct. During the handling process, strict confidentiality is maintained regarding the identities of the informant and the reported individuals. Only authorized personnel have access to the reported information. Upon receiving a report, a tracking committee is formed to conduct an anonymous investigation. An informant protection policy is also established in our Integrity Code and Complaint Reporting Procedures.



Reporting Channels:
 Complainants can file their complaint through the following channels:
 Email: hd.au@hdrenewables.com
 Hotline: 04-2255-8858#220
 Handling Unit: Audit Department

2.3.2 Legal Compliance

Our company is committed to ensuring compliance with relevant laws and regulations. We regularly review government regulations and conduct company assessments to ensure that our internal procedures and regulations comply with the latest legal requirements. We have also established a compliance system and procedures to promote regulatory compliance to all employees through document revisions, educational training, announcements, and other means. This helps strengthen awareness of legal compliance within the company, and regular supervision is conducted to monitor the implementation status of various units.

Furthermore, for significant changes in domestic and international policies and regulations, we engage consultants, lawyers, accountants, and other relevant experts to assess, provide recommendations, and plan appropriate measures. This ensures that HDRE complies with the law and minimizes adverse impacts on our financial and business operations.

To ensure the realization of corporate integrity culture, we strictly monitor our daily operations and actively promote and educate our employees on the values and attitudes of integrity, including honesty, fairness, transparency, self-discipline, and responsibility. We firmly believe that such efforts can prevent corruption, violations of laws and regulations in the social and economic spheres, as well as anti-competitive, antitrust, and monopolistic behaviors. There were no incidents related to anti-competitive behavior, antitrust, or monopolistic practices in 2023.

Our company is committed to complying with environmental protection policies, adhering to government regulations and industry requirements to control and minimize the impacts on the environment while ensuring compliance with regulations. To achieve this, we have implemented various management procedures to ensure that the entire factory premises comply with legal requirements. In 2023, Bureau of Energy, Ministry of Economic Affairs, fined NT\$1,500,000 for failing to renew the power generation license in accordance with the Electricity Act.

Regarding intellectual property rights management, we have established an intellectual property rights control system and regularly assess the status of trademarks. Moving forward, we will continue to enhance our contract management system, control contract progress, and implement systematic document management. We will also provide consulting and recommendations on risk management to business units, transforming our corporate culture from being business-oriented to compliance-oriented with a focus on risk control.

Note: A significant violation event is defined as having a significant adverse impact that causes serious damage, loss, expenses, or liabilities affecting the company and/or its subsidiaries' operations, business performance, conditions (including business, technical, legal, or financial conditions), assets, or liabilities.



For detailed information on our management of relevant regulations and policies, please refer to HDRE official website under the "Corporate Governance" section: <https://www.hdrenewables.com/investor-3.html>

Handling of Litigation Cases in 2023

In 2023, we handled a total of two cases. One case involved a defendant's failure to fulfill contractual obligations, and we initiated legal proceedings against them. The other case arose from a dispute over unpaid project fees. Currently, both cases are still in the legal process. Our legal department will regularly communicate with the appointed lawyers to track the progress and provide relevant information to safeguard the company's interests.

- Legal-Related Education and Training in 2023

Course Name	Description	Number of Participants	Hours	Organizers
Retrospective and Prospective Series of Seminars on Key Issues in Offshore Wind Power Development and Operation	Analyzing the nature and issues of administrative contracts in offshore wind power development and operation, the framework and process of power purchase agreements, and exploring the current international and Taiwanese status of renewable energy development and the potential challenges faced.	4	8	Arbitration Association of the Republic of China, Taipei Bar Association, Taipei Bar Association Energy Law Committee, Taipei Bar Association Cross-Border Transactions and Dispute Resolution Committee.
Energy Storage System Auxiliary Services	Analyzing the changes and challenges in the power generation structure of Taiwan's power system, and explaining the architecture, operational models, and current development status of energy storage systems.	4	4	HDRE

2.4 Risk Management

Material Topic : Risk Management



Positive impacts (opportunities) on the economy, environment, and society

- A high proportion of the proprietary core technologies can allow the Company to respond to rapid market changes correspondingly, thereby maintaining service stability and product market share.
- Constructing a complete information security protection and system backup mechanism can prevent business loss and reputation damage caused by random attacks or targeted information theft. With high-level protection measures, service stability can be a key selling point



Negative impacts (risks) on the economy, environment, and society

- Core technology outsourcing will result in low flexibility and market adaptability, and require additional investment in human resources to acquire skills and expand services, which means extra expenditures
- Random attacks may interrupt service and cause operational damage. If a backup mechanism is not established in case of ransomware attacks, service information will be lost, affecting service quality and reputation, and can lead to losing customers and business opportunities.



The resources invested in 2023

- The R&D team now has 30 people and has been integrated.
- The software service platforms are independently planned and designed, near semi-autonomous developed.
- In 2023, Cloud Service Capital Security Plan is initiated, and an upgrade to comply with ISO27001 cybersecurity regulations is expected to be established in 2024.

Trategic Objectives



Company Policies and Commitments on Risk Management

1. Continue to increase the proportion of the proprietary core technologies and reduce external dependence.
2. Adapt cross-border domain network service system to improve the information security protection structure and backup system.



Short-term Goals (1 year)

1. Expand the R&D team and increase the proportion of independent development of core technologies.
2. Ensure the independently developed services comply with ISO27001 information security and backup standards.



Medium to Long-term Goals (3-5 years)

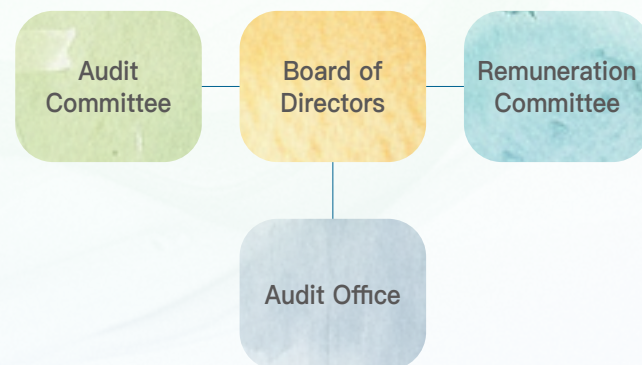
1. Cease all outsourcing of core technology, conduct independent development and only outsource contracted projects.
2. Ensure all services comply with ISO27001 information security and backup standards.

2.4.1 Risk Management Mechanism

Risk management is a crucial factor in pursuing stable growth and sustainable operations for enterprises. HDRE establishes, implements, and maintains an internal control system. By collecting internal and external data and information, analyzing potential risk factors faced by each department, defining various types of risks, and proposing corresponding management measures. Within the acceptable range of risks, efforts are made to prevent potential losses and optimize resource allocation, aiming to reasonably ensure the achievement of the company's strategic objectives. Ensuring the effective operation of risk management mechanisms is an important responsibility of the internal management hierarchy of our company. We strive to internalize risk management in the daily operations of each department, ensuring the company's normal business operation and creating maximum value for shareholders, employees, customers, and society. Thus, achieve the objective of sustainable business operation.

Regularly report the status of risk management and audit results to the Board of Directors, allowing the Board to oversee and provide guidance on risk management, thereby reducing the adverse impact of risks on the organization.

- Risk management framework












Responsible Unit	Business Risk Management
Board of Directors	Review and approve overall risk management policies and major decisions.
Audit Committee	<ol style="list-style-type: none"> 1. Proper presentation of the financial statements of the Company. 2. Effective implementation of internal control of the Company. 3. Company's compliance with relevant laws and regulations. 4. Control of existing or potential risks of the Company.
Remuneration Committee	Evaluate the remuneration policies and systems for the directors and executives of the company from a professional and objective standpoint, and provide recommendations to the board of directors.
Audit Office	<ol style="list-style-type: none"> 1. Ensure the internal control system is effectively and continuously implemented, and assist the management staff in fulfilling their responsibilities. 2. Assist the Board of Directors and management staff in establishing management directives and achieving business objectives.

• Risk Management of Key Events

The risk management organization of our company is led by the Board of Directors, which serves as the highest authority for risk management. Its goal is to comply with laws and regulations, promote and implement overall risk management within the company. In addition, it also ensures a clear understanding of the risks faced by the company's operations and ensures the effectiveness of risk

management. Through the collection of internal and external data and information, we identify the potential risk factors that may be encountered by each department periodically. We define various types of risks and, based on the "probability of occurrence" and "impact on the company," propose corresponding management measures. We provide regular reports to ensure that risks can be addressed in a timely manner when they occur.

The impact of risks on operations, their financial implications, and the potential opportunities created can be found in various chapters. The following provides an explanation of the risks commonly encountered in our daily operations, as well as the risk management mechanisms in place. It also outlines the actions taken by the risk management unit and the board of directors.

Risk	Risk Management Mechanism	Future Goals	Role of the Board of Directors	Unit in Charge	Reporting Frequency
 Supply Chain Risk	Monitor fluctuations in raw material prices, devise hedging strategies, and develop procurement strategies. Engage with multiple suppliers through the procurement department to understand market demand.	Collaborate on research and development to allocate appropriate resources, equipment, and development projects based on site characteristics.	Conduct reviews and evaluations of investment/bidding projects.	President	Weekly
 Occupational Health & Safety, and Environmental Risks	1. Provide occupational health and safety education and training for on-site construction personnel. 2. Thoroughly complete and submit occupational health and safety forms.	Assign dedicated personnel from the occupational health and safety office to ensure compliance and oversight.	Stay informed and supervise through regular reporting from the management team.	Procurement Department	Daily
 Business Operation Risks	1. Increase market share. 2. Enhance brand exposure. 3. Continuously analyze and optimize energy policies.	1. Develop production lines to diversify customers. 2. Improve market share. 3. Optimize systems to increase matching efficiency.	1. Regularly review the proportion of sales from the top ten customers. 2. Conduct financial modeling analysis and decision-making. 3. Conduct reviews and evaluations of investment/bidding projects.	Occupational Health and Safety Office	Weekly
 Information Security Risks	1. Establish firewalls. 2. Conduct regular cybersecurity assessments. 3. Provide regular employee cybersecurity education and training.	Assign dedicated personnel from the IT department to manage information security.	Stay informed and supervise through regular reporting from the management team.	President Software Department Operations Department Star Energy Storage Solutions Co., Ltd.	Weekly
 Quality Risk	1. The acceptance period will be supported by the engineering department or contractor to ensure completion. 2. During the operational period, the contracting unit will provide warranty and improvement.	By implementing a procurement supplier evaluation mechanism, higher-risk suppliers will be filtered out to reduce the risk of product quality issues.	Stay informed and supervise through regular reporting from the management team.	Asset Management Division	At least once a month
 Protests from Local Residents/ Environmental Groups	1. Conduct inquiries with relevant administrative authorities regarding land sensitivity during the initial development phase. 2. Hold local briefings to obtain consent and evidence compliance with regulatory requirements.	Strive to prevent conflicts with local residents or environmental groups.	Stay informed and supervise through regular reporting from the management team.	Asset Management Division	Quarterly Operational Reports
 Biodiversity Risk	Conduct environmental and social assessments to identify the scope of impact. Perform land sensitivity analysis, water quality and ecological surveys to ensure that the project site does not affect the surrounding environmental biodiversity.	Committed to reducing environmental impacts.	Stay informed and supervise through regular reporting from the management team.	Asset Management Division	Quarterly Operational Reports
 Regulatory Risk	1. Strictly control customer information to protect customer privacy, avoid legal disputes, and reduce the risk of reputational damage to the company. 2. Periodically promote compliance with laws and regulations to prevent employees from violating laws and causing harm to the company.	In the event of new regulations being issued in the future, the company will conduct rolling reviews and communicate them to employees.	Stay informed and supervise through regular reporting from the management team.	Legal Office	Irregular
 Natural Disaster Risk	1. Strengthen disaster and flood prevention mechanisms to minimize losses to power generation equipment. 2. Harvest seafood in advance for processing and preservation.	1. Enhance protective measures before the rainy season or typhoons. 2. Develop processing and freezing capabilities for preserving products.	Stay informed and supervise through regular reporting from the management team.	Engineering Division Asset Management Division Star Aquaculture Co., Ltd.	Irregular

2.4.2 Internal Control

Based on the " Regulations Governing Establishment of Internal Control Systems by Public Companies " by the Financial Supervisory Commission, our company has established the principles and policies for enterprise risk management. We have integrated the eight major operational cycles and management systems of internal control to establish a robust and efficient internal control system.

• Internal Control System

1. HDRE understands that the establishment, implementation, and maintenance of an internal control system are the responsibility of the company's Board of Directors and managers of management. The purpose is to achieve the effectiveness and efficiency of operation (including profitability, performance and safeguarding of assets, etc.), reliability of financial reporting and compliance with relevant laws, in order to provide reasonable assurance to the company's stakeholders.
2. The internal control system has inherent limitations, and no matter how well-designed it may be, an effective internal control system can only provide reasonable assurance regarding the achievement of the three aforementioned objectives. In addition, due to changes in the environment and circumstances, the effectiveness of an internal control system may also be influenced. Nevertheless, our company has established a self-monitoring mechanism within the internal control system. If any deficiencies are identified, immediate corrective actions are taken.
3. The Company evaluates whether the design and implementation of its internal control system are effective based on the criteria for internal control system effectiveness specified in the "Regulations Governing Establishment of Internal Control Systems by Public Companies". The internal control system assessment criteria used in the "Guidelines" are based on the management control process. The internal control system is divided into the following five components:

• Five Components of Internal Control System

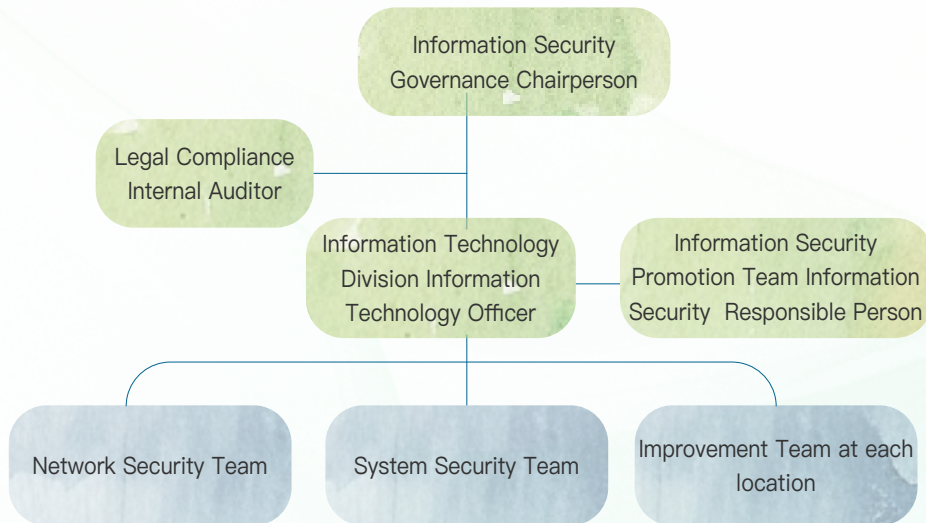


• Internal Control Process



2.4.3 Information Security Management

Information Security Framework



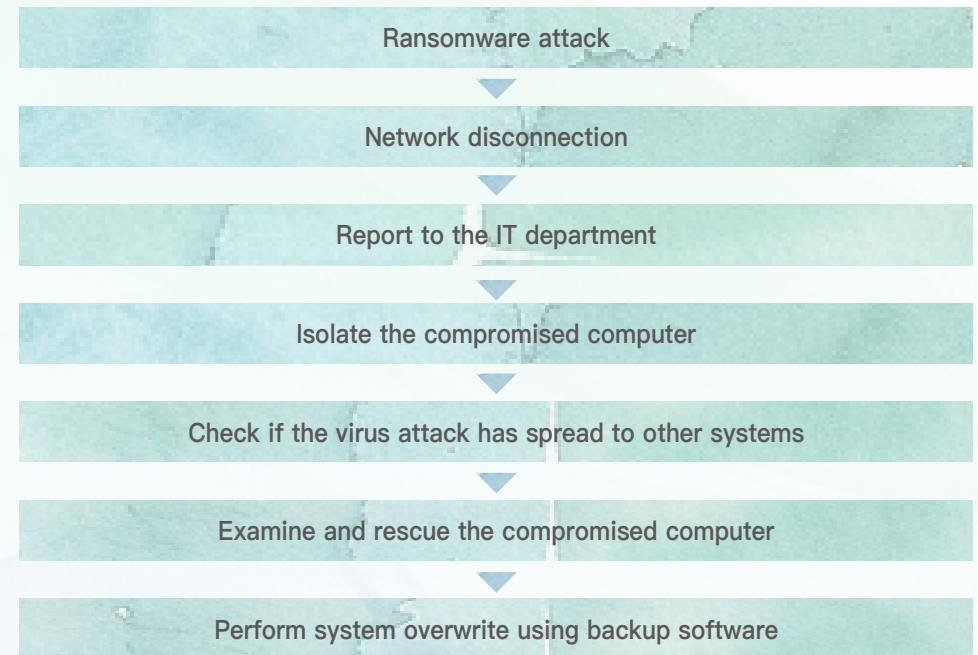
HDRE has an Information Department and a Cybersecurity Promotion Team responsible for planning, implementing, monitoring, and improving information security management. Various layers of controls and protection mechanisms have been established in areas such as system servers, operating systems, and network systems to prevent disasters, data loss, and confidential information theft. In the event of a cybersecurity incident, the company has an Information Security Incident Emergency Response Plan to ensure a swift recovery and resumption of normal operations. Additionally, HDRE places great importance on physical environment security and mitigating the risks of malicious data leakage, theft, and recording.

In 2023, HDRE invested NT\$5,234,000 in information security management, and a budget of NT\$10,400,000 has been allocated for 2024 to further enhance information security and reduce the risks of hacking and system attacks. To reduce network security risk and maintain the security of company and customer data, HDRE has been progressively establishing relevant information security management mechanisms in recent years. By having the information security governance unit develop the information and communication security policies, we are continuously promoting cross-departmental collaboration to implement the company's information security policies and protect and handle ISO documents. In addition, regular reports are provided to the board of directors to ensure the secure use of information within the company and maintain a trusted information environment. In 2022, there were no significant information security incidents.

Purposes of Information Security Enhancement



SOP for Preventing Virus Attacks



Information Security Control

To implement information security management, in terms of the policy aspect, we perform relevant protective and control measures based on the company’s internal control system. We have fully implemented a confidential document encryption system to reduce the risk of data leakage. On the technical front, we strengthen the use of information technology and implement technological and organizational security measures to manage business confidential data. It scope covers the core technologies, trade secrets and customer personal data, etc. Furthermore, we also set up network firewalls, e-mail security systems and antivirus protection systems, and other measures to enhance information security management in various aspects. Moreover, our internal auditors and independent audit unit also conduct assessments on the information security policy at least once annually.

HDRE Information Security Reporting Process



Note : Alerts detection includes unauthorized software/phishing email links/wsoftware

HDRE regularly disseminates internal communications via email to raise awareness among colleagues. In addition to advising against the installation of unauthorized software, the company also plans and conducts educational training sessions, along with coordinated drills, to reinforce colleagues' understanding of cybersecurity. This comprehensive approach ensures that we are well-prepared to prevent and respond to security risks effectively.

Information Security Awareness Content in 2023

- IT Department: Video equipment operation and setting instruction
- IT Department: ERP Basic Operation Instructions
- IT Department: Courses— Information Office/Sustainable Development Office
- IT Department: Online session— Business trip application form
- IT Department: Newly added EasyFlow Agent Operation Manual
- IT Department: Conference room reservation system upgraded
- IT Department: [2023.10.02] 4 EasyFlow electronic forms
- IT Department: [2023.10.02] 6 EasyFlow electronic forms
- IT Department: Forgot_password and password complexity enabled on EasyFlow
- IT Department: [2023.11.27] Non-company asset equipment cannot access intranet
- HR Department: Designate information security manager and personnel
- IT Department: Employee intranet — New address book function
- IT Department: Contact window during the New Year holidays
- IT Department: Clock-in and door access instructions
- IT Department: Guest WiFi instructions
- IT Department: Notice — Facial recognition system update at 11:00, April 23 (Tue)
- IT Department: Facial recognition system update (access control and APP)

Information Security Management Plan

Internal Control



- Implement access control measures for each system
- Regularly backup of systems/ important data
- Conduct backup data restoration drills
- Conduct cybersecurity awareness training and new employee education

External Defense

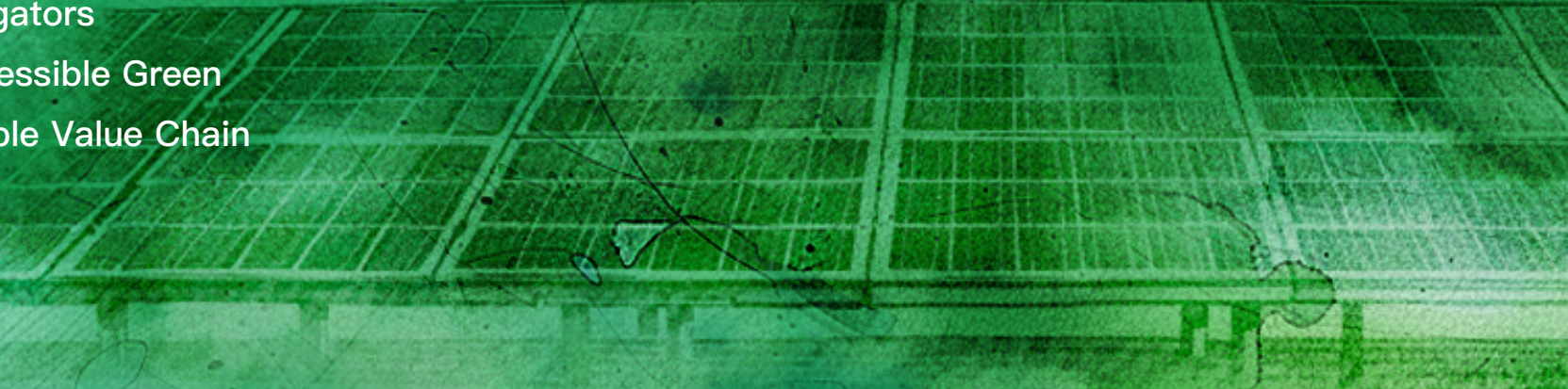


- Establish firewalls and antivirus software, regularly update system firmware and virus databases.
- Regularly update operating systems and software on personal computers
- Outsource cybersecurity vulnerability scanning and detection, and implement necessary improvements

03

Sustainable Innovation Green Intelligence

- 3.1 Green Energy Aggregators
- 3.2 Smarter Energy, Accessible Green
- 3.3 Strengthen Sustainable Value Chain



CH3 Sustainable Innovation Green Intelligence

Core Target and Vision

HDRE has years of extensive experience in the solar photovoltaic system field and continues to develop and construct various types of project sites. Through the field monitoring system, we are able to understand the field power generation status in real time and to provide professional green power consulting service, thus assisting users to obtain the most suitable and stable green power. Under the trend of rapid development of electric vehicles, the power consumption market for electric vehicles is optimistic, and implementing charging sites has growing importance. However, the intermittency of renewable energies puts pressure on the stability of the power grid. Coupled with the urgency to achieve RE100 swiftly, HDRE has incorporated energy storage investments into key initiatives. HDRE has taken into consideration all aspects and begun the transformation from engineering construction to smart power grid development, aiming to achieve Net Zero by 2050.

2023 Achievements and Performance:

- 1 This year's site installation capacity reaches **430MW**.
- 2 Star Charger expanded to **16** charging stations, with **33** additional sites under construction.
- 3 Star Energy Storage Solutions has developed totaling **578.9 MW**.
- 4 Star Aquaculture has applied for **3** patents this year.
- 5 TITAN EMS has upgraded to the level of **8 clouds**.

3.1 Green Energy Aggregators

Meaning of Material Topic: Green products and services

• Strategy and Goal



Positive impacts (opportunities) on the economy, environment, and society

To ensure comprehensive and professional green services through well-developed organizational structure, as well as to enhance employee skills with effective education and training, improving work efficiency and technical expertise.



Potential negative impacts (risks) on the economy, environment, and population

Disorganization in roles and responsibilities can lead to gaps in service, resulting in poor service quality and decreased customer satisfaction.



2023 Resource Allocation

1. Regularly review market demand and service performance to timely adjust or expand organizational manpower.
2. Plan education and training programs for both current and new employees.



Policy and commitment regarding green products and services of HDRE

1. Conduct regular internal employee education and technical sharing sessions each year.
2. Provide irregular subsidies for employees' external training courses and certification exams each year.



Short-term Goal (Within 1 Year)

Complete 6 hours of training for new or current employees annually, including 2 internal training sessions and 1 external training session.



Mid & Long-term Goal (Within 3-5 Year)

Diversify the development of professional staff, continuously enhance and improve the organization, and increase team competitiveness.

Meaning of Material Topic: Innovation management

• Strategy and Goal



Positive impacts (opportunities) on the economy, environment, and society

Continue to invest in artificial intelligence (AI) development in the smart energy sector to maintain market competitiveness and technological leadership.



Potential negative impacts (risks) on the economy, environment, and population

Address legal and intellectual property risks, supply chain risks, and cybersecurity risks, which could impact operations, increase costs, and reduce profitability.



2023 Resource Allocation

All developed systems and services will be planned and designed in accordance with the cybersecurity framework announced by the Information Department and in compliance with ISO 27001 standards.



Policy and commitment regarding innovation management of HDRE

Realize the company's vision by making green energy an easily accessible essential for the public.



Short-term Goal (Within 1 Year)

Invest at least NT\$50 million in research and development each year.



Mid & Long-term Goal (Within 3-5 Year)

Achieve leadership in information and communication technology within the smart energy sector, differentiate in technology, functionality, and services to gain market share and customer loyalty, and achieve sustainable growth.

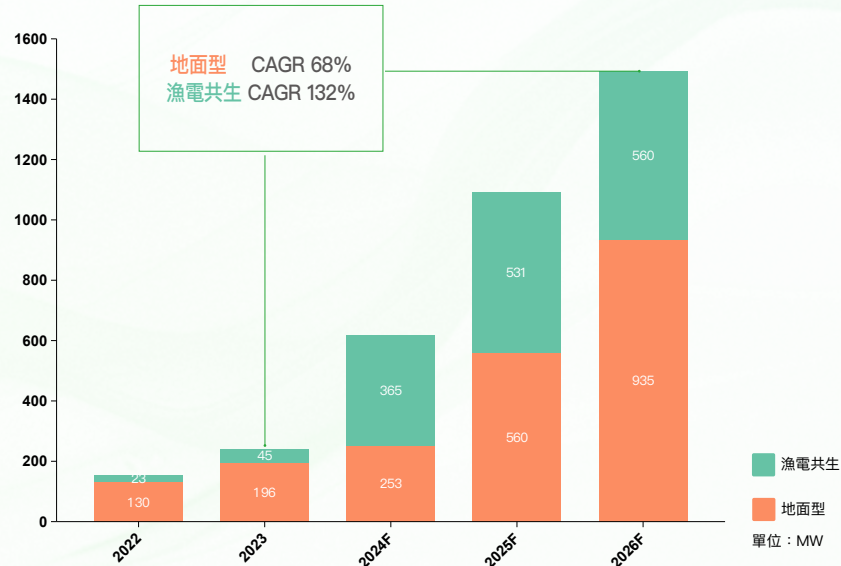
HDRE originated from engineering development and contracting. By the year 2023, HDRE has accumulated a total project site capacity of 430MW. In 2024, the volume is expected to reach over 350 MW. Now, HDRE has become one of the leading players in the photovoltaic industry, with a complete development and engineering team. This enables effective management of project investment risks, allows customized project construction, and provides operation and post-investment management. Our power grids and project sites extend across Taiwan. In the future, we will continue to work towards Sustainable Development Goal 7: Affordable and Clean Energy. We will refine intelligent services, promote green energy, and become a smart green energy company.



3.1.1 Power Plant Operation and Vertical Integration.

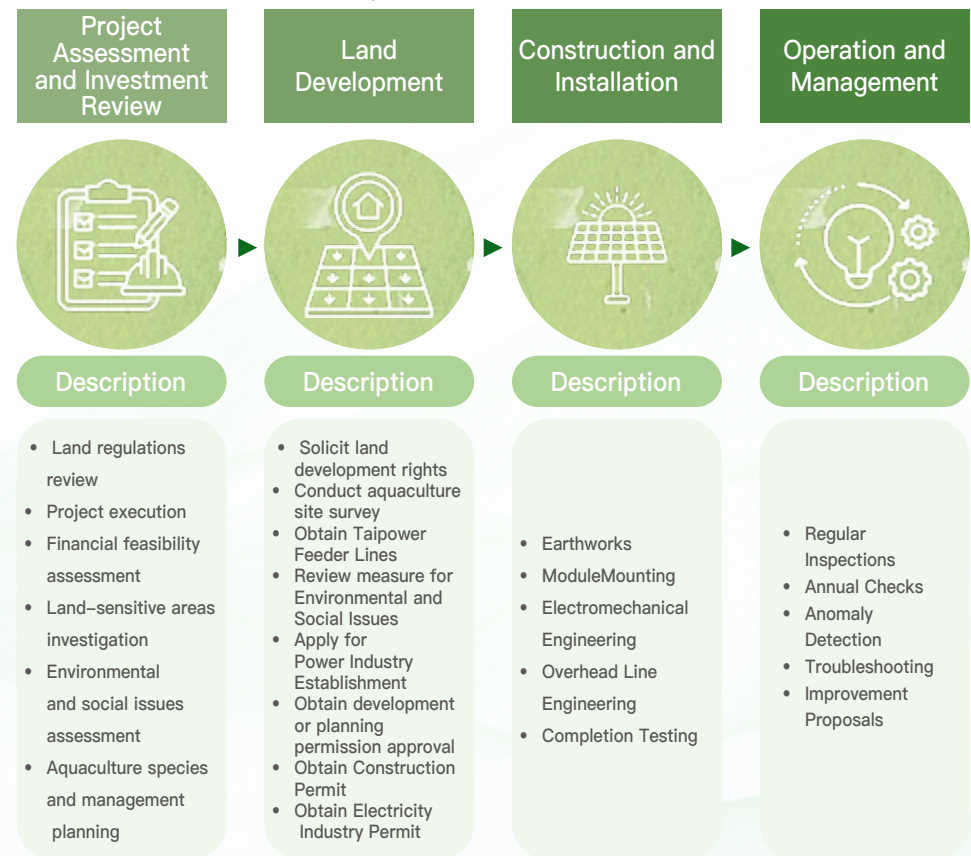
In the field of solar photovoltaics, HDRE plays the role of a vertically integrated supplier, providing comprehensive services to meet customers' diverse needs. Our team consists of interdisciplinary talents who prioritize analyzing geographical conditions and assessing the feasibility of project development. We then ensure regulatory compliance, evaluate financial aspects, and assess related risks. We offer professional legal consulting services and engage in discussions with customers to design customized projects. Our in-house engineering team takes charge of site preparation, installation, wiring, and grid connection. Moreover, HDRE maximizes the efficiency of assets during the 20-year operation and investment management of power plants, serving as a strong support for customers in terms of plant operation and post-investment management.

• Solar Photovoltaic Field Construction Objectives



Note 1: Capacity is estimated based on the installation ratio outlined in the schedule plan.
 Note 2: The development rights of the projects are still subject to factors such as policies and approvals from regulatory authorities, which may impact the actual implementation.

• Solar Photovoltaic Project Construction Procedure



Affiliated Subsidiary

STAR Aquaculture Co., Ltd.

HDRE provides solar photovoltaic fields of outstanding and stable quality and is able to provide comprehensive cross-sector professional services, in order to reduce risks caused from the field development and engineering and construction process along with cost reduction. Furthermore, to greatly promote the construction of solar photovoltaic fields, we engage in collaborative development with operators in the same industry and create a system with teamwork and mutual support. To facilitate the successful promotion process during different stages of the operation, we understand customer demands in depth and continue to maintain proper interaction and communication with government agencies and local residents, in order to reduce the risk of construction delay.

• Achievements in solar photovoltaic farm construction

Category	Installed before 2022	Installed in 2022	New Installations in 2023
Ground-mounted photovoltaic	111,677.18 kW	126,447.59 kW	39178.52 kW
Rooftop photovoltaic	17,932.89 kW	1,344.8 kW	No new installations
Water Surface photovoltaic	59,731.88 kW	No new installations	No new installations
Fishery and Electricity Symbiosis	No new installations	40,234.14 kW	42803.41 kW
Location	New Taipei City, Taoyuan City, Hsinchu County, Miaoli County, Changhua County, Taichung City, Yulin County, Chiayi County, Tainan City, Kaohsiung City, Pingtung County, Hualien County, Taitung County, Yilan County, Penghu County		
Total	189,341.95 kW	168,026.53kW	81,981.93 kW

• Newly added solar power generation sites in 2023

Status	Location	Type	Expected Completion
Completed	Qigu, Tainan	Fishery and Electricity Symbiosis	2023
Completed	Gukeng, Yunlin	Ground-mounted photovoltaic	2023
Under Construction	Dongshan, Yilan	Rooftop photovoltaic	2024

Locations	Penghu	Hualien	Tainan	Hsinchu	Tainan	Pingtung
Electricity generation	10MW	75MW	70MW	3.8MW	11MW	13.4MW

• Notable Sites



Ground-mounted photovoltaic, Gukeng, Yunlin

- Land area: 25.3 hectares
- Installed Capacity: 29.4 MW
- Electricity Generation (estimation): 42 million kWh per year
- Completion Date: Grid connected in December 2023
- Fishery and Electricity Symbiosis Site, Qigu, Tainan



Fishery and Electricity Symbiosis Site, Qigu, Tainan

- Land area: 57.7 hectares
- Installed Capacity: 42.8 MW
- Electricity Generation (estimation): 65 million kWh per year
- Aquatic Species: White shrimp, mullet, milkfish
- Completion Date: Grid connected in December 2023



Energy storage E-dReg, Xiulin, Hualien

- Land area: 1.4 hectares
- Installed Capacity: 20 MW + 40 MW
- Completion Date: Scheduled for grid connection in May and November 2024



• Joint venture project development

SHORIZON



Investment Project: Ground-mounted photovoltaic
 Establishment: 2020
 Installed Capacity: 96.5 MW
 Asset Management Scale: NT\$5 billion
 Shareholder Structure: Taiwan Life 30%, Transglobe Life 30%, AcBel Polytech 20%, HDRE 20%

Aqua Star Energy



Investment Project: Fishery and Electricity Symbiosis
 Establishment: 2021
 Installed Capacity: Phase 1/ 74 MW, Phase 2/ 189 MW
 Asset Management Scale: Phase 1/ NT\$4 billion, Phase 2/ NT\$11.3 billion
 Shareholder Structure: Taiwan Life 30%, Transglobe Life 30%, Fubon Life 30%, HDRE 10%

STAR Energy Storage



Investment Project: Front-of-the-meter energy storage
 Establishment: 2023
 Installed Capacity (estimation): 228.5 MW
 Asset Management Scale (estimation): NT\$5 billion
 Shareholder Structure: Taiwan Life 10%, Transglobe Life 10%, Fubon Life 10%, Shihlin Electric 3%, HDRE 67%

Fubon Green Power



Investment Project: Solar photovoltaic + front-of-the-meter energy storage
 Establishment: Planned for 2024
 Installed Capacity (estimation): over 350 MW from Solar PV and 350 MW into storage
 Asset Management Scale (estimation): NT\$40 billion

3.1.2 Power Plant Operation and Post-Investment Management

HDRE's operation and maintenance management team provides services for various types of power plant installations, including rooftop, ground type, and water surface type of solar projects. They offer comprehensive operations and maintenance services for the power plants after grid connection. Through a communication technology-based monitoring system, real-time generation data can be monitored. Whenever an alert notification is received via the mobile app, personnel can be dispatched to address the situation promptly. In addition, the team carries out rigorous scheduled inspections and preventive measures on a regular basis. The services cover both internally owned assets and power plants entrusted for operation by clients (including related entities that are not consolidated). Quarterly formal operational reports are provided to communicate with the owners.

HDRE has extensive experience in the photovoltaic industry and sustainable management practices from its background in large-scale manufacturing. In addition to providing operational and management consulting services to clients, the team also possesses the expertise to effectively manage power plant operation and maintenance contractors. We integrate various resources and manage project progress accordingly.

Moreover, the HDRE team has professionals in finance, accounting, and legal fields. We can assist clients in implementing sound financial, accounting, and tax planning strategies. This not only maximizes asset value for investors but also promotes responsible investment and advances green finance initiatives.

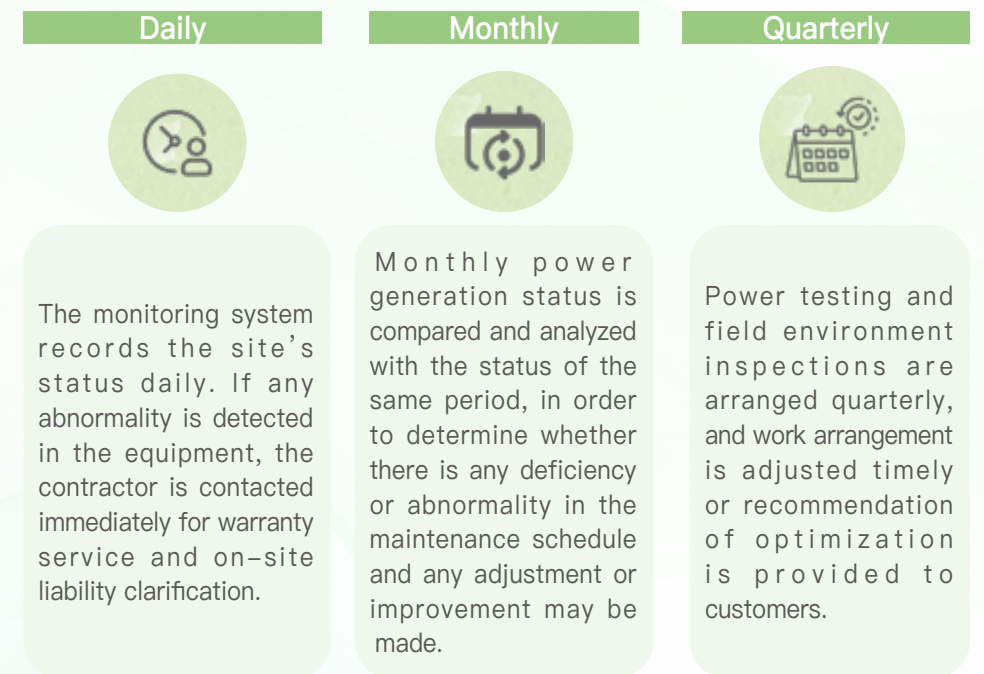
• Field Operation Management

Power station operation management is an important post-construction service item after the completion of the construction of solar power generation systems. If the solar power generation system is not maintained periodically, power generation rate may drop due to equipment circuit failure or environmental changes such as wind, sand, bird's droppings, dust oil stain, etc. HDRE maintenance team is equipped with extensive experience in field maintenance, and personnel are able to predetermine, identify and mitigate risks that may cause unstable power supply and propose countermeasures. Risks may include but are not limited to flooding caused by typhoons and heavy rainfall, operation interruption and equipment loss caused by earthquake, and power generation efficiency affected by high temperature and monsoons and dust. Therefore, we take into account the flood line over the past century, and adjustments are made to the construction framework. This may involve raising the support structures or opting for a floating design. Additionally, an outflow plan is developed to manage water discharge. We ensure normal power generation of fields according to real-time monitoring and routine maintenance. In case of typhoons or heavy rainfall announced by the weather forecast, water drainage and pump equipment are ensured to function normally in advance, in order to reduce the chance of flooding. In case of large scale losses due to natural disaster, all fields are under machinery insurance and operation interruption insurance, in order to reduce the level of loss. In areas with high salt damage,

the salt damage prevention module and framework are used, and the corrosion resistance is strengthened in the structure.

If there are issues with the construction quality of a project, such as equipment improper power generation, failure, base damage, improper drainage design, etc., the acceptance is performed by an independent third-party institution and a report is submitted. In addition, the Engineering Division or contractor provide assistance to improve deficiencies. If the defects occurred during in-service operation period, deficiencies in layout design, civil or drainage construction can be found, typically, one to two years after the grid-connection of a photovoltaic field. If it is determined to be a construction defect, negotiation is engaged with the proprietor, and the contractor will perform warranty improvement. In the future, we will continue to implement a procurement supplier assessment mechanism to proactively filter out higher-risk vendors and reduce the risk of abnormal maintenance quality. Additionally, maintaining constant communication with the maintenance team allows for immediate troubleshooting when equipment emits abnormal signals or experiences malfunctions. This proactive approach ensures efficient problem resolution and minimizes downtime.

HDRE implements daily inspection and performs data analysis monthly and quarterly, in order to ensure the highly efficient operation of the power stations and stable power generation, and to resolve abnormalities. Different operation managements are carried out during each period:





• Regular Operation Management

Power Station Construction Schedule	Maintenance Focus	Content Description
5 YEARS	Prevent equipment damage	Annual maintenance plan, system component inspection
10 YEARS	Consumable equipment replacement and maintenance	Concealed cracks, electricity leakage, inverter replacement
15 YEARS	Old equipment upgrade and maintenance	Pipeline overhaul, module replacement with new device
20 YEARS	Obsolete equipment replacement	Select new type of equipment and to enhance and achieve power generation benefit

• Field Maintenance Items

System Maintenance and Inspection	Repair Management	Cloud monitoring	Periodic Follow-up	Module Cleaning
Power station preventive maintenance, solar module inspection, solar inverter inspection, relevant machine inspection and calibration	Repair work, inverter and relevant machine repair, trouble-shooting report preparation, field maintenance	Remote monitoring, failure response, 365-day remote monitoring, corresponding troubleshooting, issue analysis	Periodic report, monthly power generation report, quarterly inspection report, communicating with the Bureau of Energy and Taipower unit to confirm corresponding warranty	Value-added service, anti-burglar security system construction, module cleaning, environment cleaning and weeding

HDRE has completed the development of field monitoring system in 2020, and the system is able to monitor the operation status, sunlight, environmental temperature, power generation capacity, voltage and current of each node, equipment stability of the photovoltaic station, and performance calculation based on the information collection, in order to monitor whether there is any performance abnormality in real-time. Furthermore, for self-developed systems, greater flexibility in electricity, manpower dispatch and data simulation, etc. can be achieved via information links. In 2022, HDRE introduced climate big data and implemented a simulation-based power generation forecasting function. This enables more accurate evaluation of project performance. Currently, this system is being utilized for monitoring purposes in both internally owned projects and by most of the company's clients.

As of 2023, HDRE's subsidiary, Hongbo Technology and Energy, has a total installed capacity of 310 MW in renewable energy. Due to its recognized quality by customers, its service capacity is estimated to grow 2.32 times, reaching 722 MW by 2025. HDRE Renewable Energy's operations and maintenance services are certified by the international third-party verification organization TUV NORD, confirming its quality assurance measures and technical capabilities to conduct efficient operations and reduce investment risks for stakeholders.



TUV Nord

- **Field Monitoring System**



Provide field power generation information and equipment running status information in real-time, ensure power plant generates power continuously and stably and resolve abnormalities swiftly, assist the team to manage solar power station.

Main Functions

Link to job dispatch system, such that when the system



Optimize the maintenance job dispatch schedule, and integrate with the staged early warning mechanism, in order to achieve the planning objective of AI smart automatic job dispatch.

Future Planning

- **Monitoring System**

Field Monitoring System



In 2023, HDRE managed 35 fields, with a total installation capacity of 288 MW. The estimated annual green electricity generation is approximately 132,173,966 kWh, which is equivalent to reducing emissions of 65,294 metric tons of CO₂, providing the afforestation benefits of 4,353 ha, and the carbon sequestration of 167 Taipei Daan Forest Parks in a year. In addition, we have also established a joint venture platform including our own assets and investments. The number of new fields with meter installation in 2023–2024 will be 1 field, and the installation capacity is estimated to reach 532 MW. For the short-term goal, the total management capacity of own assets is 200 MW. For the long-term goal, the installation capacity of service management is planned to be over 1,000 MW.

[Note 1]: According to the 2023 power generation carbon emission coefficient announced by the Bureau of Energy: the carbon emission per kWh of electricity is approximately 0.494kg of CO₂/kWh.

[Note 2]: The afforestation benefit refers to the research result of afforestation effect announced by the Forestry Bureau, Council of Agriculture, and the carbon dioxide fixed volume for each hectare of woodland is approximately 15 tons per year. In addition, according to the data provided by the Bureau of Energy, MOEA, based on the area of 25.8 hectares of Daan Park in Taipei, the carbon absorption of one Daan Park is 389 tons per year.

[Note 3]: First type of Electricity Enterprise: Refers to power generation facilities that utilize renewable energy and comply with the Electricity Act and relevant regulations. Second type: Refers to self-use power generation facilities that utilize renewable energy and comply with the Electricity Act and relevant regulations. Third type: Refers to self-use power generation facilities that utilize renewable energy and have an installed capacity of less than 2,000 kilowatts (2MWp) in accordance with the Electricity Act and relevant regulations.

- **HDRE Solar Photovoltaic Field Operation Management**

Customers	Number of Fields	Accumulated Installation Capacity in 2023	Accumulated Power Generation in 2023
Internal (own fields)	10 fields	4,952.34	6,154,977
External (including non-consolidated affiliate enterprises)	25 fields	283,074.44	126,018,989

3.1.3 Smart Green Energy, the Rising Force

- **TITAN Energy IoT Platform**


In order to expand its services to cover the international markets, TITAN bases its information service platform in Taiwan, and develops different cloud services according to different market mechanisms. TITAN Taiwan Information Platform is a service gateway, providing worldwide cloud services. The platform includes HDRE's independently developed AI value-added services that offer differentiation in energy system services, enhancing competitiveness.

With the increasing diversification of green energy applications, we introduce the TITAN Energy IoT Platform to achieve higher efficiency in integration and scheduling. This platform integrates self-developed cloud platforms, PaaS and AWS, to create a comprehensive energy command center. From data collection and analysis to forecasting, it enables system monitoring, alerts, reporting, and operational functions. Additionally, with AI, cloud technology, and big data analytics, the platform can facilitate


scheduling control and solution formulation.

TITAN platform serves as the intelligent hub for decentralized energy systems. The core technology comes from HDRE's subsidiary, STAR Energy Storage Solutions, which provides integrated hardware and software solutions for front-of-meter and behind-the-meter energy storage, ensuring reliable and stable AFC energy storage systems, solar storage, and energy management platforms for customers. Through intelligent management, it optimizes the operation and maintenance of various systems, executes power integration services, and supports the liberalization of electricity markets. This includes developing virtual power plants, demand management, energy centers for charging stations, and optimizing dispatch technologies such as green energy peer-to-peer trading. Furthermore, through long-term data collection, the system enhances the efficiency of services such as multi-party green energy trading algorithms, bidding decision systems for auxiliary service transaction platforms, and operational management platforms for charging stations. Ultimately, these advancements aim to save manpower, assist in analysis, and enhance decision-making capabilities.


With the flourishing opportunities in front-end and back-end energy storage in recent years, Star Energy Storage Solutions aims to achieve over 500 MW of energy storage by 2024. Then, the integration of diverse resources such as energy storage, demand capacity, and renewable energy is estimated to reach 2.5 GW, with a completion target of 550 MW in installed capacity, by the year 2025. As an energy aggregator, it provides each resource provider with business monetization opportunities. Furthermore, during times of electricity shortages, it offers diverse solutions to Taiwan Power Company, including auxiliary frequency regulation and energy transfer, to provide more robust support and create a win-win situation for all parties involved.



HDRE, as an energy aggregator, ventures into photovoltaics, aquaculture energy, energy storage, charging stations, green power supply, virtual power plants, and electricity trading. With the big data aggregated from all systems, TITAN platform utilizes algorithms and relevant analytical techniques to conduct generation, consumption, and price forecasting, thereby serving as the foundation for system dispatch and electricity trading.



The system operates with a foundational layer for data collection and database management, an analysis layer for forecasting and decision analysis, and an application layer for monitoring, sending alerts, reporting, and operating across all systems. In addition, an AI server is deployed for model training, enabling schedule provision or control solutions based on internal and external environmental information.



The monitoring and management platform efficiently handles the operation and maintenance of each system, accumulating long-term operational big data. Supported by corresponding algorithms, it serves as an auxiliary decision-making system for generation, consumption, and strategic analysis. In addition to saving on manpower, it effectively manages system operations and energy resources.

• **Innovations and R&D**

To maintain a leading position in the market, we continue to invest in research and development to provide products and services that meet consumer expectations and demands. This year, R&D expenditure has increased by 233%, nearing 1% of our revenue. In the past, we often outsourced new product concepts to companies with relevant technical and research capabilities. However, this year, we conducted our own research and competitive analysis. We interview product proposal units to confirm requirements, followed by product evaluation and planning. We then assess whether to proceed with internal development or outsource to external organizations. Gradually, we are consolidating product development rights and patent ownership back to HDRE.

Year	R&D Expenses (thousands NTD)	Operating Income (thousands NTD)	Percentage of Revenue (%)
2019	0	1270841	0.00%
2020	3,369	2,186,124	0.15%
2021	4,748	2,655,474	0.18%
2022	12,178	5,052,656	0.24%
2023	40,665	5,077,414	0.80%

• **The research, development, and strategic collaboration process of HDRE's product and service involves the following steps:**



• TITAN's Projects Execution for the Current Year

To continuously enhance the integration capabilities of the TITAN Smart Green Energy System, we have completed six projects by the end of 2023. These include the Green Energy Trading Service Platform, Auxiliary Service Cloud, Energy Cloud, Storage Cloud, Charging Operation Cloud, and Charging Service Cloud. Subsequent management and operations of most cloud services will be handled by our subsidiary, STAR Energy Storage Solutions.

Project Name	Project Description	Later Stage Plans
Green Energy Trading Service Platform	<ol style="list-style-type: none"> 1. Construct a precise prediction and matching system. The system can utilize AI technology to build power generation models for renewable power plants and electricity usage models for green energy demand customers to provide contract negotiation recommendations and revenue estimations. 2. Implement a digital contract and automatic billing generation system for contract management and performance status tracking, in order to reduce manual operations significantly and mitigate the risk of human errors. 	<ol style="list-style-type: none"> 1. Develop a purchase and sale electricity demand management system for STAR Exchange to manage the supply and demand status of green electricity. 2. Develop a transfer benefit analysis system to examine transfer benefits, manage contract status, and alert performance risks. 3. Develop a customer information platform to provide customers with green electricity transfer information and transfer benefit analysis services.
Auxiliary Service Cloud	Aggregate multiple users' energy storage devices to participate in Taiwan Power Company's electricity trading market for energy regulation. Expand the framework by designing multiple front-market systems for solar storage aggregators, energy-heavy industries, etc.	Transfer to STAR Energy Storage Solutions to continue development based on the current Taiwan electricity market situation.
Energy Cloud	Develop an integrated energy management system for solar power, energy storage, and charging. Complete the deployment of a commercial solar-charging-storage Proof of Concept (POC) site.	Transfer to STAR Energy Storage Solutions to continue development based on the current Taiwan electricity market situation.
Storage Cloud	The platform provides an operational interface located on cloud servers and field controllers on-site (including software modules), collecting and monitoring the operational status of energy storage devices. Operators can access historical bidding and successful bid information through the platform, as a reference for the decision-making and participation in Taiwan Power Company's day-ahead market bidding operations.	Transfer to STAR Energy Storage Solutions to continue development based on the current Taiwan electricity market situation.
Charging Operation Cloud	<ol style="list-style-type: none"> 1. Plan for Standard Protocol Charging Station (Single Gun) Management System 2. Plan for public charging sites 3. Design service plan for on-perm charging management service 	<ol style="list-style-type: none"> 1. Develop Standard Protocol Charging Station (Single Gun) Management System 2. Develop, operate and manage public charging sites and services 3. Develop on-prem charging management System
Charging Service Cloud	<ol style="list-style-type: none"> 1. Develop Line OA service system 2. Integrate with third-party payment systems 	<ol style="list-style-type: none"> 1. Develop brand system services 2. Develop merchant franchise services 3. Develop customer attraction services



• **TITAN Energy IoT Platform**

This platform operates data, including existing systems, on-site equipment, metering information, etc., and transmits the results back via communication networks. The data mainly consist of operational system status reports and management platform updates. Real-time alerts will be issued in case of anomalies, and troubleshooting can be done through remote operations.

Platform Name	Electricity Trading	Energy Storage	Photovoltaic (PV)	Auxiliary Services (Taiwan)
Scope	International electricity trading market operator	Energy storage system operations manager	Photovoltaic system operations manager	Energy storage system operator participating in electricity trading auxiliary services
Main Functions	<ul style="list-style-type: none"> ■ Market data collection ■ Market data analysis ■ Transaction execution advice ■ Transaction process management ■ Revenue settlement management 	<ul style="list-style-type: none"> ■ Real-time system monitoring ■ Historical status query and analysis <ul style="list-style-type: none"> ■ System alarm alerts ■ Integration of on-site EMS, SCADA, and CCTV <ul style="list-style-type: none"> ■ Integration with operations management system 	<ul style="list-style-type: none"> ■ Real-time system monitoring ■ Historical status query and analysis <ul style="list-style-type: none"> ■ System alarm alerts ■ Integration with operations management system ■ Site cleaning schedule analysis 	<ul style="list-style-type: none"> ■ Resource management ■ Bid process management ■ Execution and settlement management ■ Market data analysis
Platform Name	Sales Cloud	SaaS Energy Cloud	SaaS Charging Site Operations	SaaS Charging Service Cloud
Scope	Green electricity trading for purchase and sale operator	Commercial solar-charging energy service operator	EV charging site manager	EV charging service operator
Main Functions	<ul style="list-style-type: none"> Production and consumption resource management Precision analysis for green electricity matching Management of tripartite contracts Management of purchase and sale electricity bills Analysis of green electricity wheeling benefits Analysis of production and consumption electricity performance 	<ul style="list-style-type: none"> Management of solar-charging equipment Real-time system monitoring Historical status query and analysis Over-contract suppression, time electricity price, emergency power supply, and other electricity services Electricity price benefit settlement 	<ul style="list-style-type: none"> Station and charging pile management Real-time status monitoring Energy demand management Site selection analysis 	<ul style="list-style-type: none"> Brand interconnection Management of merchant alliances Transaction profit sharing management Member management Marketing and traffic diversion services

- TITAN Real-time Site Management Information



- TITAN Extended Applications at Physical Locations

Items	Descriptions	Diagram
Energy Storage Equipment	To localize energy equipment, HDRE and its partners jointly established an energy storage facility located in the Tainan Science and Technology Industrial Park. The factory setup process was completed in 2023, with the first shipment delivered to the site and installation completed in December.	
Charging Pile Equipment	In addition to energy storage equipment, TITAN has initiated plans to develop its own charging pile equipment, aiming to accumulate 8600 units in shipments by 2026.	
Solar, Charging and Storage Hybrid Station	Locate hybrid EV charging stations at existing EV charging stations, convenience stores, cafes, etc. Adopt solutions that include solar generation, energy storage, and charging capabilities. Aggregate power resources to participate in electricity markets, thereby increasing revenue.	



• **Brand Planning and Strategy of TITAN**

The TITAN system, core of HDRE, aims to achieve the goal of a Virtual Power Plant (VPP) through management of power stations, point-to-point power supply dispatch, and optimization. Moreover, it aims to extend the successful models globally. A VPP integrates the generating units, controllable loads, and energy storage devices that are distributed in various locations. Through coordinated control and communication technologies, real-time optimization can be carried out. Imagine a VPP as an advanced regional electricity aggregation

and management model. It can optimize distributed energy and enhance grid management. Its construction plays a crucial role in enhancing the structure of the national electricity market system. Not only does it offer stable output and bulk reception like traditional power plants, but also the complementary integration of diverse energy sources and robust control capabilities, positioning VPP as a pivotal player in future green energy networks.

This business model leverages Aggregators for scheduling

and managing participation in electricity trading, contributing positively to the economic, stability, and security aspects of power systems. HDRE employs the role of Aggregator in conjunction with VPP scheduling management, AI prediction, and other management systems to strategically develop in the electricity markets of Taiwan, Japan, and Australia.

Short-term

Goals

Complete the integration of TITAN hardware–software services, acquire an AI team, and establish a research and development center.

Resources

- TITAN hardware equipment
- TITAN software platform
- IoT and AI talent

Mid-term

Goals

Export TITAN integrated hardware–software services to Japan and Australia.

Resources

- Sites with solar, charging and storage
- Implementation of business models
- Participation in local frequency regulation, spot market, and capacity market.
- Optimization of AI algorithms
- Operation of VPP business models

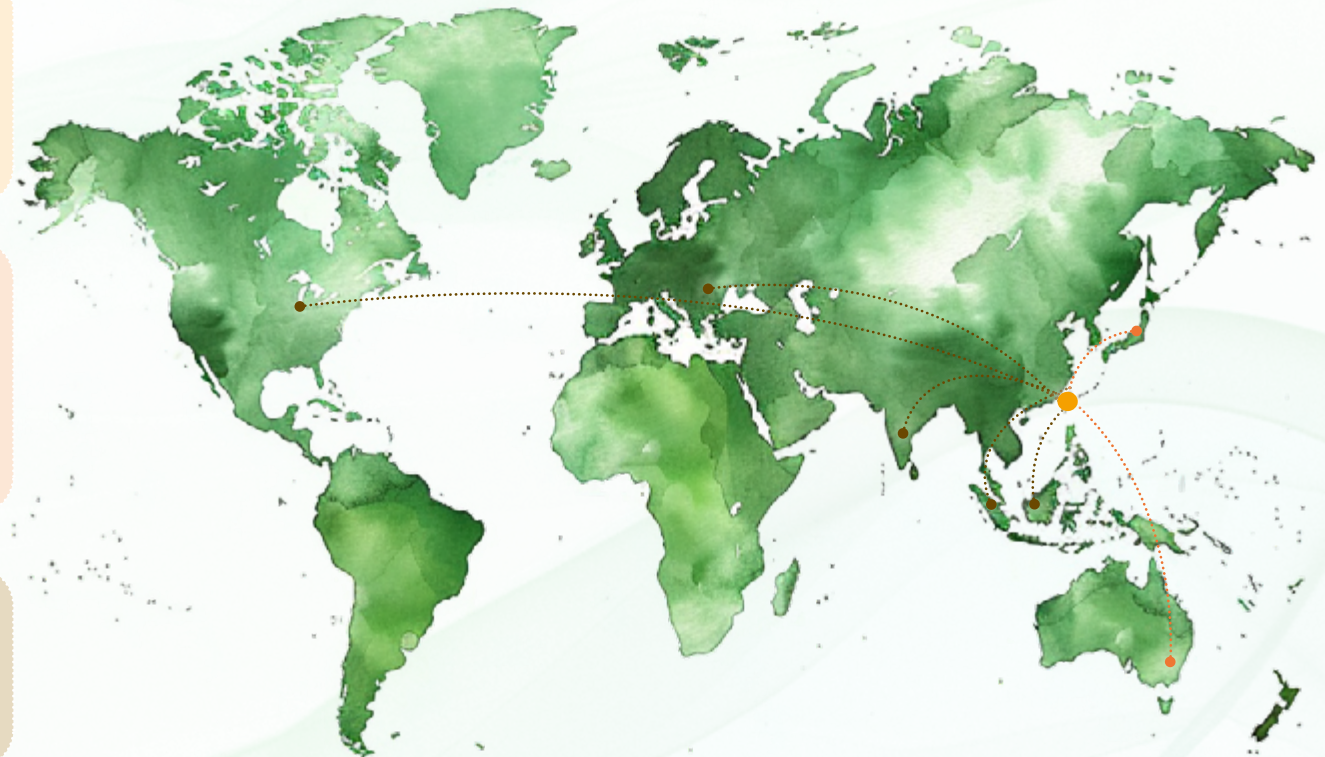
Long-term

Goals

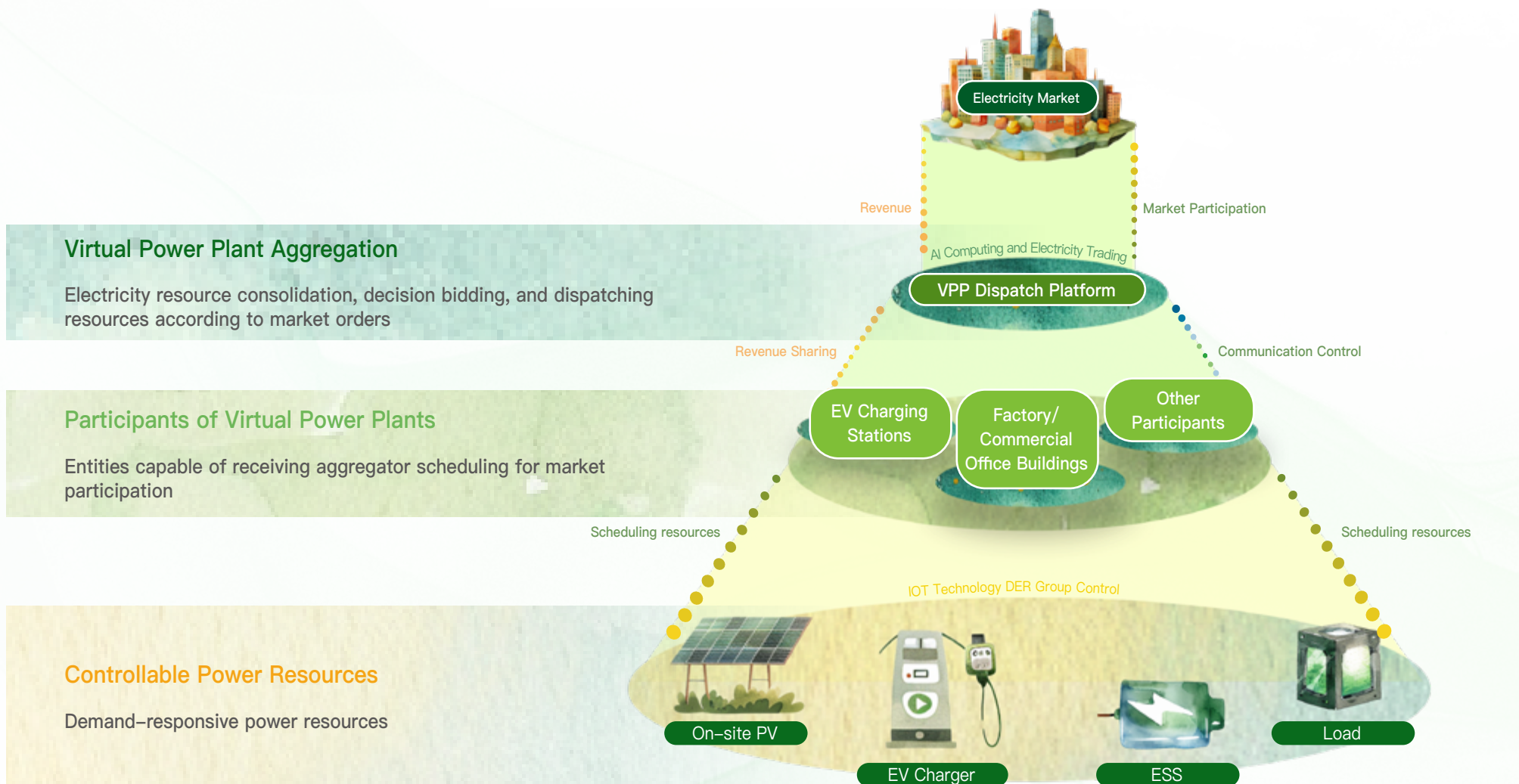
integrated hardware–software services globally.

Resources

- Adopt business models and AI algorithms of developed markets.



- Future Electricity Fields and Roles

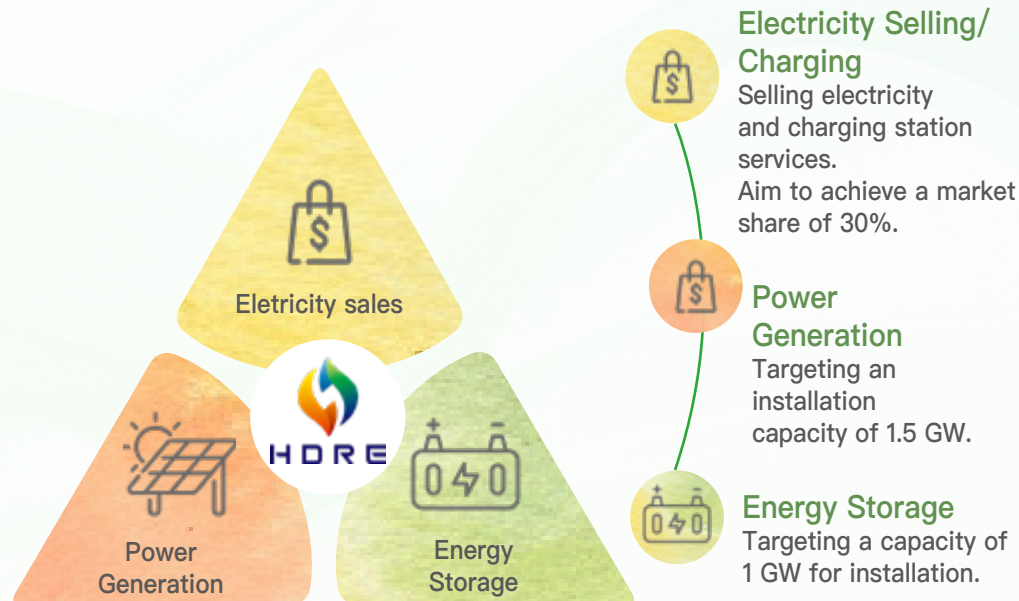


3.2 Smarter Energy, Accessible Green

HDRE expects to reduce the green power use threshold and to construct a power company adopting the virtual power plant operation model. We plan to use AI to provide smart power service, including smart management and green power dispatch, in order to provide diverse power consumption choices to corporates and consumers, and we have also entered the field of electric vehicle charging points, such that a comprehensive energy power grid can be provided to corporate users and general public, thereby achieving the goal of "Smarter Energy, Accessible Green".

Green Power Golden Triangle

Construct the "Green Power Golden Triangle" of power generation, energy storage and electricity sales, in order to advance towards the goal of smart green power company



3.2.1 STAR Exchange: Green Power Wheeling Service

In the context of energy liberalization, STAR Exchange Power Co., Ltd. was established in 2020 and acquired its electricity sales license in 2021. It assists customers in purchasing and acquiring green electricity, establishing itself as a leader in green energy services among 50 electricity retailers. At STAR Exchange, the core value is to "Use Green Electricity, Build a Net Zero Future". Utilizing an electricity IoT framework and smart green energy systems, environmental forecasts are predicted. Combined with electricity usage data analysis, the efficiency of each unit of electricity can be maximized. Additionally, energy optimization and electricity visualization services are provided to achieve real-time data and energy management efficiency.

• Highlights of the Year

Total renewable energy capacity
538,560 kW

Number of green energy sites
72

Stations switched to green energy supply
1,200 stations

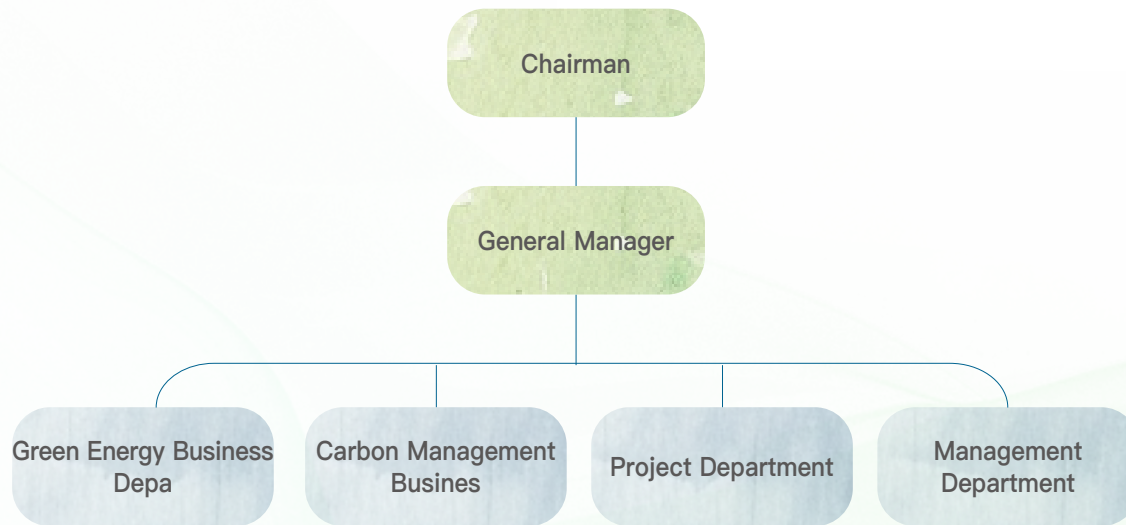
Renewable energy certificates issued
39,395

Accumulated green energy transferred
39,402,863 kWh

Total energy volume of current contracts
13.9 billion kWh



- Star Exchange Organizational Structure Chart



With the domestic “Climate Change Response Act” requiring carbon emission control and carbon fee collection, green power wheeling demand exceeds supply. Matching the supply and demand parties of green electricity is our goal at Star Exchange. This year, together with HDRE, we built a smart green energy management platform. From customer data analysis, demand matching, contract management to AI algorithm application, we optimized the dispatching and distribution of green energy, providing customers with the most suitable plan, predicting and mitigating energy dispatch risks.

- Star Exchange's Service Offerings

Customized Contracts	Star Exchange provides customized “green energy plant selection” and the acquisition of the National Renewable Energy Certification (T-REC). Customers can choose a variety of green electricity sources, from rooftop, ground-mounted, to water-based solar power plants, as well as wind farms. We offer diverse options and customized contracts to meet the carbon reduction and sustainability needs of clients and supply chains. Additionally, we assist our clients in obtaining T-RECs.
Energy Aggregation Services	Star Exchange believes, in understanding customers' electricity needs from the perspective of an electricity retailer, it enables us to offer customized demand response solutions and support service and dispatch. We encourage clients to participate in the electricity market to balance supply and demand, ensuring stable electricity supply and achieving sustainable goals.
Green Energy Planning	With smart cloud system services, Star Exchange helps clients understand the electricity usage of their equipment and plan energy-efficient and carbon-reducing electricity schedules accordingly. Clients can access their electricity information anytime through mobile devices or webpages. Moreover, the smart monitoring system provides round-the-clock energy management services to ensure efficient energy use.



• ▼ Client's Green Power Purchase Process



• ▼ HDRE Green Power Sales Process



Smart Green Power Wheeling

Comprehensive Green Energy Service	Green Energy Matching Platform	Contract and Billing Management	Energy Management System and Services
Collecting and analyzing customer electricity usage habits to customize optimal green energy supply and carbon management solutions.	The average green power matching rate reaches 90%, minimizing excess power with success. Currently, we primarily offer photovoltaic group purchase services, with future plans to expand into offshore wind power group purchase services to meet more customer demands.	Systematic management of green energy supply contracts ensures that the billing system fully discloses supply information and environmental benefits. This transparency enables clients to have a clearer understanding of their own green energy supply status and carbon reduction impact.	The AI algorithm of the system not only predicts supply and demand and optimizes matching algorithms (surplus control) and energy visualization, but also integrates with HDRE light charging and storage solutions to assist clients in achieving their carbon reduction goals.



Performance of Green Energy Wheeling in 2023

In 2023, Star Exchange's total green energy wheeling amounted to 30,579,893 kWh, the source exclusively from solar energy. The green energy was supplied to enterprises primarily from eight different industries: cleaning and cosmetics manufacturing, battery manufacturing, telecommunications, other information services, other financial services, life insurance, other real estate, and food. The green energy of two of the industries, cleaning and cosmetics manufacturing and other financial services, was jointly provided by HDRE. However, the remaining six industries had their green energy provided by Star Exchange's sites. Preliminary estimation indicates that 30,576 green energy certificates were issued, all of them under the Bundled REC System.

Clients' Industry	Percentage of Purchases	Sold Electricity Volume	Number of Certificates
Cleaning and Cosmetics Manufacturing	5%	1,658,448	1,658
Battery Manufacturing	3%	940,000	940
Telecommunications	32%	9,806,525	9,806
Other Information Services	1%	372,688	372
Other Financial Services	21%	6,290,638	6,290
Life Insurance	20%	6,199,643	6,199
Other Real Estate	12%	3,809,500	3,809
Food	5%	1,502,451	1,502
Total		30,579,893	30,576



• **Highlight Achievement in 2023**

On October 5, 2023, Star Exchange signed a Green Electricity Trading Trust Agreement with Bank SinoPac. In the future, corporate customers intending to buy green electricity will be required to deposit the electricity purchase fees into a trust account at Bank SinoPac. Payments will then be made to Star Exchange from the trust account. This collaboration aims to enhance the security and protection of the financial flow among power generators, electricity retailers, and purchasing customers. Moreover, it can indirectly assist small and medium-sized enterprises in purchasing green electricity, alleviating the problem of them having no access to green electricity. HDRE chairman Yuan-Yi Hsieh stated that Star Exchange and Bank SinoPac signed a five-year, Corporate Power Purchase Agreement (CPPA) of 14.3 million kWh green electricity in July 2023. Within two months, the wheeling operation was completed with high efficiency, providing Bank SinoPac with green electricity from September onwards. They plan to expand their green electricity demand in the future.

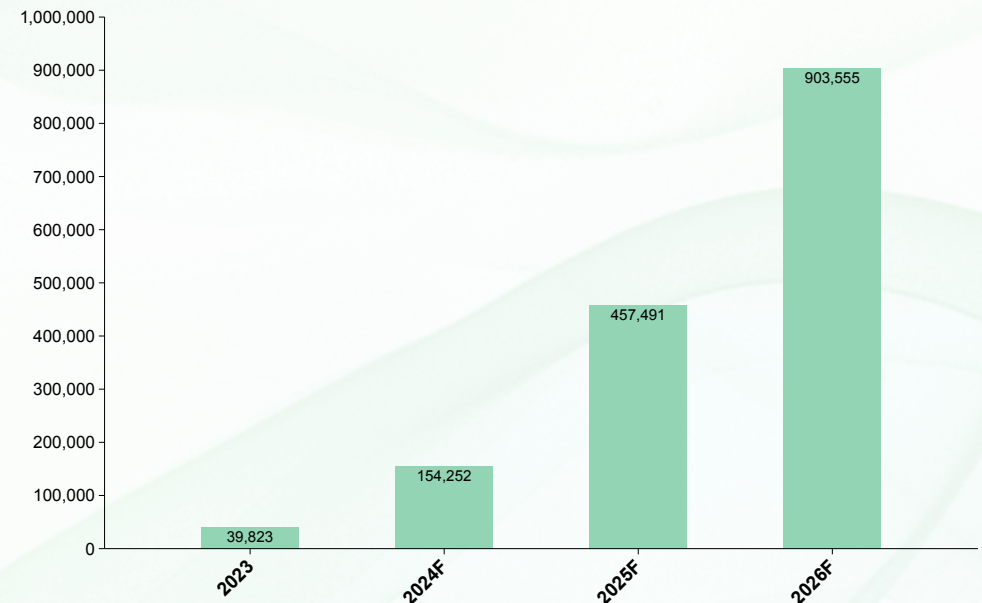
With the liberalization of the electricity market and independent transactions allowed, electricity sales become diverse. Power generators can sell electricity to utility companies or directly to clients. The consequent challenges are to ensure the credit rating of the buyers, guarantee financial security, etc. Through the bank acting as a third party to manage financial flows and dedicate use of funds, issues such as fund misappropriation can be avoided. Since the promotion of liberalized green electricity transactions in 2021, a trust framework through cross-industry cooperation has been introduced, providing a secure and convenient trading platform for power generation, sales, and purchases. Together with our corporate partners, we work towards the Net Zero goal.



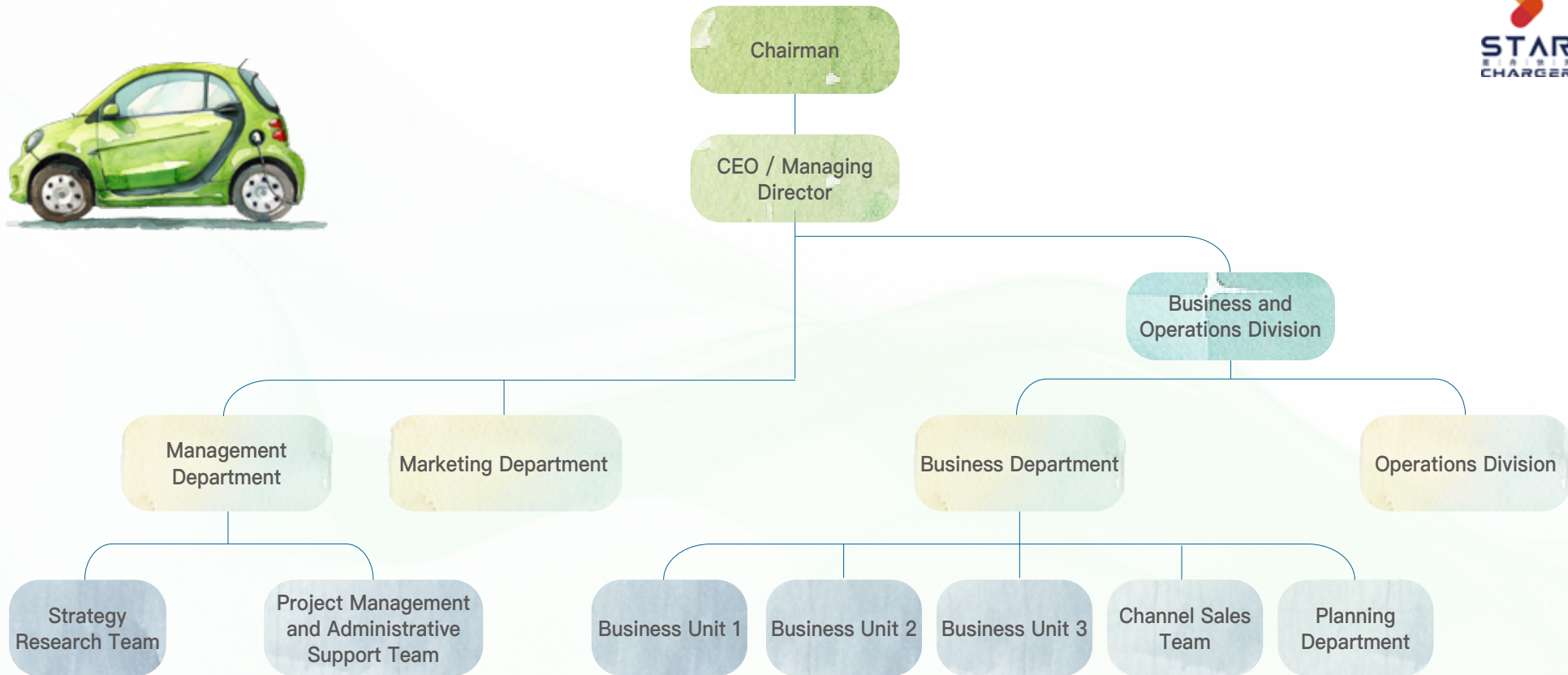
• **Future Plan**

As global warming has caused climate change to deteriorate, to prevent rising global temperature, many domestic enterprises have declared to reach Net Zero by 2050. In addition, with Taiwan being part of the international industry supply chain, the supply chain's demand for green power has also driven a greater number of enterprises to purchase green power, and the demand for green power will continue to grow. To assist clients obtain green energy and reach RE100, we are committed to satisfying the demands for green energy. In addition to the current green power wheeling model of one-to-one, one-to-many and many-to-one, we plan to develop the green power wheeling supply model of "many-to-many", which is more suitable to the market. Match trading among multiple numbers of power plants and customers will be performed, thus overcoming the match failure between power generation and power consumption and assisting clients to obtain the most suitable green energy.

• **Green Electricity Wheeling Goals**



3.2.2 STAR Charger: Electric Vehicle Charging Stations



The National Development Council under the Executive Yuan of Taiwan published the "Taiwan's Pathway to Net Zero Emissions in 2050" in 2020. In the transportation sector, it aims to reduce the annual carbon dioxide equivalent emissions from 35 million tons in 2019 to 3.3 million tons by 2050. To achieve the goal of "electrification and decarbonization of transportation," a complete ban on the sale of fuel-powered vehicles will be implemented in 2024. The target is to have electric passenger cars and electric motorcycles account for 100% of the market, further contributing to Taiwan's 2050 net

zero emissions target.

To align with the national energy policy and prepare for the transition from fuel-powered to electric vehicles in the future, it is necessary to proactively plan and establish an electric vehicle charging infrastructure. Therefore, STAR Charger, a subsidiary of HDRE, was established in 2021. As an electric vehicle (EV) charging service operator, we provide services including EV charger installation, product sales, and charging station operation. Through collaborations with domestic

manufacturers of EV chargers and utilizing systems and data, we offer energy solutions. In the first phase, we partnered with 10 FamilyMart convenience stores across Taiwan to establish 120 kW EV fast charging stations. These stations meet the charging requirements of various EV brands. Moving forward, we plan to expand our partnerships with car manufacturers, department stores, retail chains, and parking facilities to optimize the benefits of green electricity and achieve high-efficiency green energy.



• **Star Charger’s service offerings**

Direct Operation (Direct Sales) Self-operated Charging Stations	Franchise Managed Charging Stations for Customers	Channel Distributing Charging Station Equipment						
<p>Self-operated charging station services refer to those established and operated by businesses such as gas stations, shopping centers, parking lots, and other entities. These services allow businesses to provide convenient and cost-effective charging experiences, thereby attracting more EV owners.</p>	<p>The managed charging station service refers to businesses being contracted to operate EV charging stations on behalf of the owners. Through this service, businesses expand their operational footprint and assist the owners in providing more convenient and cost-effective charging experiences for EV users.</p>	<p>The service of distributing charging station equipment refers to businesses selling, installing, and maintaining EV charging station equipment. Through this service, businesses provide owners with convenient and professional charging station installation services.</p>						
<table border="0"> <tr> <td data-bbox="161 520 448 858"> Target Customers: <ul style="list-style-type: none"> • EV owners shopping at retail department stores • EV owners visiting amusement parks • EV owners staying at hotels • EV owners traveling to tourist attractions • Entertainment industry • Business professionals • Revenue Sources: • Charging service fees </td> <td data-bbox="477 520 772 584"> Revenue Sources : <ul style="list-style-type: none"> • Charging service fees </td> </tr> </table>	Target Customers: <ul style="list-style-type: none"> • EV owners shopping at retail department stores • EV owners visiting amusement parks • EV owners staying at hotels • EV owners traveling to tourist attractions • Entertainment industry • Business professionals • Revenue Sources: • Charging service fees 	Revenue Sources : <ul style="list-style-type: none"> • Charging service fees 	<table border="0"> <tr> <td data-bbox="833 520 1120 655"> Target Customers: <ul style="list-style-type: none"> • Fleet • Residential communities • Parking lot operators </td> <td data-bbox="1149 520 1444 791"> Revenue Sources: <ul style="list-style-type: none"> • Royalties (management fees) • Advertisement • Construction fees • Electricity trading market (demand response, vehicle-to-grid) </td> </tr> </table>	Target Customers: <ul style="list-style-type: none"> • Fleet • Residential communities • Parking lot operators 	Revenue Sources: <ul style="list-style-type: none"> • Royalties (management fees) • Advertisement • Construction fees • Electricity trading market (demand response, vehicle-to-grid) 	<table border="0"> <tr> <td data-bbox="1505 520 1747 687"> Target Customers: <ul style="list-style-type: none"> • Developers/Property Management • System Integrators • Channels </td> <td data-bbox="1821 520 2116 847"> Revenue Sources: <ul style="list-style-type: none"> • Charging station equipment sales • CMS (Charging Management System), EMS (Energy Management System) fees • Monthly management fees • Electricity trading market (demand response, vehicle-to-grid) </td> </tr> </table>	Target Customers: <ul style="list-style-type: none"> • Developers/Property Management • System Integrators • Channels 	Revenue Sources: <ul style="list-style-type: none"> • Charging station equipment sales • CMS (Charging Management System), EMS (Energy Management System) fees • Monthly management fees • Electricity trading market (demand response, vehicle-to-grid)
Target Customers: <ul style="list-style-type: none"> • EV owners shopping at retail department stores • EV owners visiting amusement parks • EV owners staying at hotels • EV owners traveling to tourist attractions • Entertainment industry • Business professionals • Revenue Sources: • Charging service fees 	Revenue Sources : <ul style="list-style-type: none"> • Charging service fees 							
Target Customers: <ul style="list-style-type: none"> • Fleet • Residential communities • Parking lot operators 	Revenue Sources: <ul style="list-style-type: none"> • Royalties (management fees) • Advertisement • Construction fees • Electricity trading market (demand response, vehicle-to-grid) 							
Target Customers: <ul style="list-style-type: none"> • Developers/Property Management • System Integrators • Channels 	Revenue Sources: <ul style="list-style-type: none"> • Charging station equipment sales • CMS (Charging Management System), EMS (Energy Management System) fees • Monthly management fees • Electricity trading market (demand response, vehicle-to-grid) 							
<p style="text-align: center;">Software Provision</p> <p style="text-align: center;">Charging Station Operations</p>	<p style="text-align: center;">Software Provision</p> <p style="text-align: center;">Charging Service Cloud</p>	<p style="text-align: center;">Software Provision</p> <p style="text-align: center;">Charging Service Cloud</p>						

• **2023 Installation Achievement of Charging Stations**

In addition to providing charging services through charging piles, Star Charger has integrated with LINE to offer consumers a comprehensive charging service since 2023. This integration allows users to search, navigate, and complete payment for charging services without the need to download another app but LINE. As of April 22, 2024, our official LINE account friends have reached 5426, with active users over 1500, and daily consumers holding up 5–10%. Moving forward, we plan to

optimize the platform with features such as a comprehensive charging network map, interactive games, discount codes, and customized graphic menus to provide a more intuitive and convenient user interface with faster information updates.

Up to the year 2023, we have established 16 charging stations, with an additional 33 sites under construction. These stations are primarily located in the western part of Taiwan, including

Taipei, Taichung, Nantou, and Tainan. This year, we secured the Yilan–Hualien Electric Vehicle Public Charging Station Operation Service Lease Project, expanding our charging network to the eastern side of Taiwan. There are currently 130 sites in development, and we are actively partnering with convenience stores, department stores, supermarkets, and parking facilities to strategically expand our island-wide charging network.



Location	Charging Stations
Carrefour Bali Longxing Store	2
Fushan Parking Lot Bali Station	1 (2 piles)

Location	Charging Stations
HDRE Headquarters	1
Shin Kong Life Tower	5
Jasper Villa TianMu	4
Neihu Tiding Exclusive	3 (6 piles)

Under Construction **33** sites

Operating: **16** sites

Under Development: **130** sites

Location	Charging Stations
Taoyuan – Qingpu Exclusive	3 (6 piles)
Taoyuan Airport MRT – A3 New Taipei Industrial Park	2 (4 piles)

Location	Charging Stations
FamilyMart Xinfeng Rest Area	4
FamilyMart Xinpu Shuiyuan Store	2

Location	Charging Stations
FamilyMart Qizhangli Store	2
FamilyMart Jinmei Store	2
FamilyMart Ruijing Store	2
Intercontinental Exclusive	8 (16chargers)

Location	Charging Stations
FamilyMart Luodong Fuxing Store	2
FamilyMart Su'ao Shenghu Store	2
TRA Yongle Station	1
TRA Dong'ao Station	3 (6 piles)

Location	Charging Stations
FamilyMart Kouhu Rest Area	4
PX Mart Gukeng Wenyuan Store	2

Location	Charging Stations
TRA Shoufeng Station	1 (2 piles)
TRA Linrong Xinguang Station	2 (3 piles)
TRA Sanmin Station	1 (2 piles)
TRA Dongli Station	1
TRA Fuli Station	1

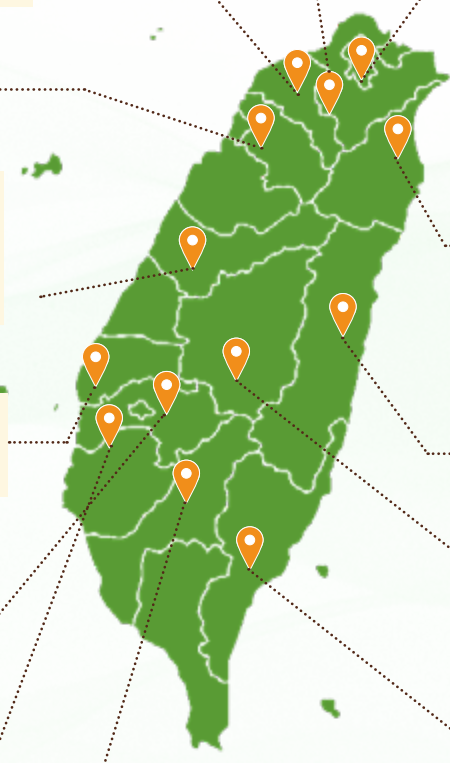
Location	Charging Stations
TRA Minxiang Station	3 (6 chargers)
FamilyMart Puzi Niutiaowan Store	1
Taisugar Corporation Gas Station	1 (2 chargers)

Location	Charging Stations
Qingjing Farm	6
Qingjing Hotel	2
FamilyMart Caotun Dunhe Store	2

Location	Charging Stations
FamilyMart Shanshang Minghe Store	2
FamilyMart Pingfeng Store	2
FamilyMart Xinxia Store	2
Taisugar Circular Village	4
FamilyMart Yongkang Yongde Store	2
FamilyMart Ding'an Store	1 (2 piles)

Location	Charging Stations
PX Mart Sanmin Youguang Store	2
Taisugar Hengshan Gas Station	2 (4 piles)
PX Mart Nanzi Dezhong Store	2 (4 piles)
Taisugar Guotai Gas Station	2 (4 piles)
Taisugar Jianjun Gas Station	2 (4 piles)
Museum of Fine Arts	6 (12 piles)

Location	Charging Stations
FamilyMart Chishang Station Store	2
TRA Guanshan Station	1 (2 piles)
TRA Ruiyuan Station	1



• Considerations for Selecting Charging Site Locations

Star Charger actively develops an island-wide charging network to optimize customer convenience. By the end of 2023, we have established 16 charging sites across Taiwan, with an additional 130 sites in development. In selecting the locations, we prioritize customer demand and accessibility, focusing on locations with high traffic flow. Our evaluation process integrates site assessment analyses and financial feasibility models. Moving forward, we will promote exclusive charging stations in metropolitan areas, picking out convenient locations such as convenience stores, supermarkets, department stores, and parking lots. We are also committed to participating in government-initiated station projects to realize our goal of a comprehensive island-wide charging network, contributing towards the ultimate goal of sustainable and affordable energy solutions

充電站ID	充電站名稱	充電輸出/千瓦	型態/AC	功率/千瓦	AC/DC	使用狀態	地點名稱	功能
2	山線地區智慧充電站	CDCA2ED2250003_2	CCS2	022	DC	使用中	山線地區	充電站管理
2	山線地區智慧充電站	CDCA2ED2250003_1	CCS1	023	DC	使用中	山線地區	充電站管理
2	山線地區智慧充電站	CDCA2ED2250004_2	CCS2	024	DC	使用中	山線地區	充電站管理
2	山線地區智慧充電站	CDCA2ED2250004_1	CCS1	025	DC	使用中	山線地區	充電站管理
2	山線地區智慧充電站	BCMD33EM2240006_1	J1772	026	AC	使用中	山線地區	充電站管理
2	山線地區智慧充電站	BCMD33EM2240006_1	J1772	027	AC	使用中	山線地區	充電站管理
3	板橋地區	BSABA2ED2240002_1	J1772	24	AC	使用中	板橋地區	充電站管理
3	板橋地區	BSABA2ED2240003_1	J1772	25	AC	使用中	板橋地區	充電站管理
3	板橋地區	BSABA2ED2240004_1	J1772	26	AC	使用中	板橋地區	充電站管理

• Charging Station Operations Management Platform – Charging Station Operators

Purpose	Features Description	Software Benefits
<p>A software platform used to manage and monitor electric vehicle (EV) charging stations, enabling Star Charger to provide customers site operation services on a single platform, while also equipped with internal site maintenance to improve management efficiency, reduce costs, and optimize customer experience.</p>	<ol style="list-style-type: none"> 1. Site Setup: Provides functions for new equipment and information integration during setup, ensuring real-time service. 2. Real-time Monitoring: Offers real-time status information of charging stations, including charging status, power output, and connectivity status. 3. Data Analysis: Collects and analyzes data on charging usage patterns, in order to understand customer demands, identify trends, and enhance operations. 4. Remote Management: Allows operators to remotely control charging stations, including starting/stopping charging sessions, adjusting pricing, and resetting stations. 5. User Management: Enables operators to manage customer accounts, including account creation, usage tracking, and payment processing. 	<ol style="list-style-type: none"> 1. Enhanced Efficiency: Automates many manual tasks, thereby improving operational efficiency. 2. Cost Reduction: Helps operators reduce energy, maintenance, and operational costs. 3. Increased Sustainability: Assists operators in improving energy efficiency and reducing carbon emissions. 4. Revenue Generation: Analyzes charging session data, such as time, location, and number of users, to enhance marketing activities and increase charging revenue.

• Customer Satisfaction

Star Charger conducted its first customer satisfaction survey in 2023, with a total of 279 participants. The survey focused on three aspects of user experience: charging station stability, intuitiveness of the LINE official account for users, and the environment of the charging stations. The average score received was 4.5 out of 5. Moving forward, these customer satisfaction ratings will be used to optimize the charging services provided.

Survey Aspects	Five-star rating
How is the stability/quality of the charging experience?	4.5
How intuitive is the use of the LINE official account?	4.5
How is the environment at the charging stations?	4.4

• Highlight Achievement in 2023

HDRE's charging stations are mainly located in western Taiwan, including Taipei, Taichung, Nantou, and Tainan. However, this year, Star Charger secured the "Yilan-Hualien Electric Vehicle Public Charging Station Operation Service Lease Project" public tender and was selected as the winning bidder. This contract marks the completion of the island-wide charging network layout. The expansion into the eastern part of Taiwan is scheduled to commence operations and begin service in March 2024.

The charging stations will be installed at nine locations: Yilan's Yongle Station, Dong'ao Station; Hualien's Shoufeng Station, Sanmin Station, Dongli Station, Fuli Station; Taitung's Guanshan Station, Ruiyuan Station; and also Hualien's Linrong Xinguang Station that is beyond the scope of the tender.

Star Charger's DC fast charger can charge the EV battery to 80% capacity within 30 minutes (per single pile), which is to add approximately 180 kilometers of range. To illustrate, this allows a drive from Taipei 101 to Lukang Mazu Temple in Changhua. Moreover, no additional apps are needed but LINE to scan and access Star Charger's charging services in no time.

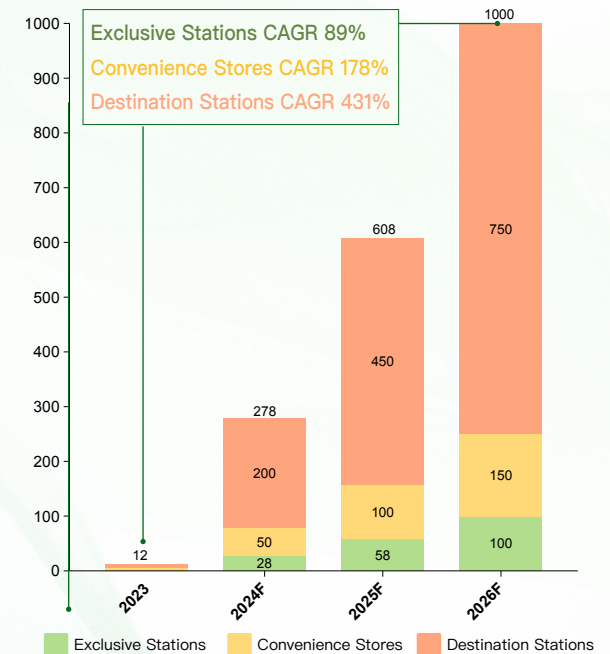
Mr. Chou Shih-Chang, President of HDRE, stated, "HDRE's goal of 'Smarter Energy, Accessible Green' has never wavered. Star Charger will be providing operational services of charging piles and building the island-wide charging network. In addition, we will continue to expand our partnerships to include department stores, supermarkets, parking lots, etc, and build a comprehensive charging ecosystem."



• Future Plan

The initial goal of customers focuses on the people in the living circles of the six major cities, and the product strategy of Business to Business to Consumer (B2B2C) is adopted. We collaborate with parking lot owners of convenience stores, super markets, hotels and department stores, and conduct field assessment on the vehicle traffic volume, customer group pattern and business model. We also optimize the charging installation process, in order to provide the charging point services for slow charging of 7 kW / 17 kW and fast charging of 30 kW / 60 kW / 120 kW, thus satisfying the flexible charging demands of electric vehicles of the general public. Furthermore, we also follow the market trend. In view of the government's policy and electric vehicle development trend, we plan to develop the Business to Business (B2B) charging point market.

• Charging Station Deployment Objectives





3.2.3 STAR Energy Storage Solutions: Electricity Grid for Energy Storage

Solar power generation is constrained by the variability of sunlight and weather conditions, making its output unstable. This unpredictability prevents enterprises from relying solely on solar energy as a consistent energy source. In response, integrating energy storage systems is crucial to enhance the stability of

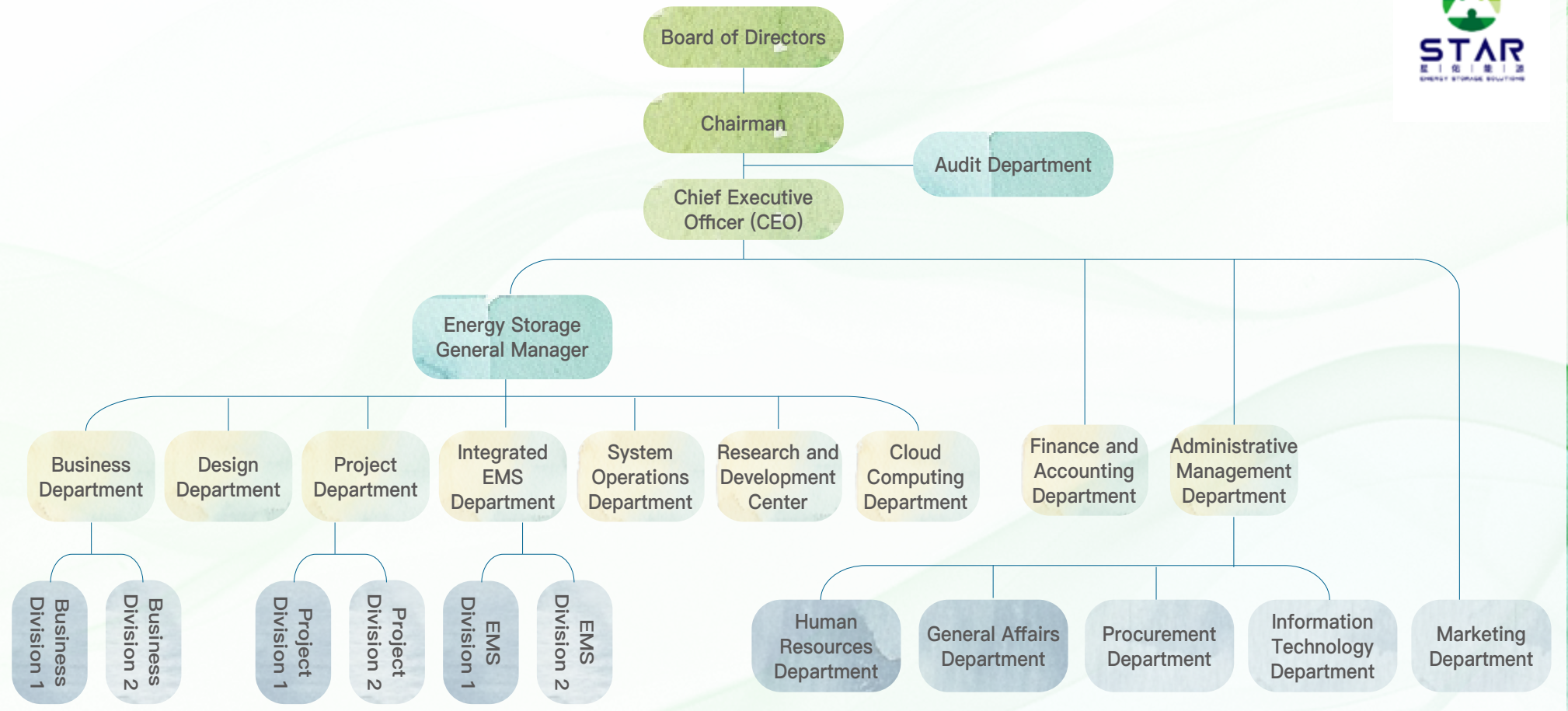
power supply. This approach allows for flexible scheduling of green energy usage.

To make green energy accessible in daily life, HDRE established its subsidiary, Star Energy Storage Solutions, in mid-2021. Star Energy Storage Solutions focuses primarily on the application of energy storage systems in the energy sector. Through core technologies such as system integration, localized energy

software development, and system operations management, Star Energy Storage Solutions aims to provide smart energy solutions to meet the 2050 net zero emission targets.

Additionally, Star Energy Storage Solutions actively participates in or assists clients in participating in Taipower Ancillary Services Market. This involvement helps maintain the stability of the power supply system.

- Star Energy Storage Solutions Organizational Structure Chart



HDRE is planning to develop the TITAN Smart Green Energy System, which includes an Energy Storage Cloud to assist operators in monitoring the operation of energy storage sites. It provides information such as State of Charge (SOC), State of Health (SOH), voltage, current, temperature, and more. Through big data analysis, health diagnostics and preventive maintenance can be conducted, optimizing the operation of the system based on the collected data. Furthermore, when there is a need for power dispatch in the power transportation sector, the status of the energy storage devices can be aggregated in real-time and participate in Taipower's power trading bidding platform, to stabilize the power grid and to maintain the safe and stable operation of the power system. When a power system is subject to an accident, we are able to assist the power system to resume to normal power supply swiftly. With regard to the energy storage business, we will actively participate in the Taipower electricity trading platform, such that the overall energy planning covers the energy production, transmission, storage and management aspects. Currently, Star Energy Storage Solutions plans to participate in auxiliary services using E-dReg and dReg to meet the requirements of frequency-regulation assistance of the Taipower trading market.

• Star Energy's Service Offerings



Modular Design

The capacity of battery modules can be flexibly designed according to different application scenarios.



Localized Software Development

Integration of localized product design, manufacturing, and warranty services. Customized energy management systems and control strategies are developed based on the latest system applications or electricity market rules.



Performance Warranty

Long-term monitoring of battery health status and performance warranty based on planned charging and discharging operation modes.

• Business Model

Service	Target Audience	Revenue Source
Resource Agency and Operations	Resources Eligible for Ancillary Services	Ancillary Service Fees on the Power Trading Platform
EMS (Energy Management System)	Investors intending to build energy storage systems and microgrids	Investment installation fees
SI (System Integration) Services	Investors wishing to build energy storage systems and microgrids	Investment construction fee
Project Coordination Services	Investors wishing to build energy storage systems and microgrids	Investment construction fee

• Energy Storage System Building

Star Energy Storage Solutions completed a 578.9 MW capacity development this year, installing new sites and energy storage battery systems in Tainan Liuying and Hualien Heping. In 2024, an additional 483 MW capacity is planned for phased deployment across different quarters, covering locations such as Pingtung Chaozhou, Taichung Longjing, Penghu, Tainan Liuying and Hualien Heping. We will actively engage with Taipower to provide ancillary services and support power dispatching, ensuring stable power output across Taiwan.

• Energy Storage Cloud –
Energy Storage System Illustration

Introduce small energy storage to achieve field capacity demand management, and off-peak/peak electricity adjustment



• Energy Monitoring Software

Energy System Names	Primary Use	Function Description
Energy Management System (EMS)	Managing energy storage system	Controls the operation of energy storage systems based on the types of ancillary service products they participate in.
Electricity Trading and Bidding Platform (Energy Storage Cloud)	Managing electricity trading, bidding and operational status of energy storage systems	Manages day-ahead market electricity trading bids and oversees the operational status of energy storage systems, including parameters such as SOC (State of Charge), SOH (State of Health), voltage, current, temperature, etc. Utilizes big data analytics for health diagnostics and preventive maintenance.
Service Market Bidding Volume and Price Prediction Decision Support System	Formulating optimized bidding strategies for the day-ahead ancillary service market	<ol style="list-style-type: none"> Utilize a bidding price prediction AI model to gather market information from the Taipower trading platform (such as historical bidding and clearing volumes, historical clearing prices, ancillary service demand, etc.), Taipower electricity data (including real-time and historical generation from various units), and weather forecast information for preceding weeks, day-ahead, or weekly forecasts to predict the day-ahead and preceding week electricity trading platform price outcomes. Utilize the predicted results from the AI model, including operational and scheduling information from the market, details of eligible trading resources, etc. Use optimization algorithms to determine the optimal bidding quantities and prices for the day-ahead and preceding weeks' bidding codes. Based on the results obtained from the decision support system, formulate the optimal bidding strategy and execute bidding operations on the electricity trading platform.

• Education and Training

Course Name	Course Description	Participants
Internal Education and Training		
Overseas Study Group (Japan, Australia)	Understanding the electricity markets in Japan and Australia	All employees
Taipower Electricity Trading Platform Study Group	Understanding the regulations and services of the Taipower Electricity Trading Platform	All employees
External Education and Training		
ISA/IEC 62443 Standards to Secure Your Control System (IC32)	Detailed understanding of how the ISA/IEC 62443 cybersecurity standard protects critical industrial control systems, and addresses procedural and technical differences between IT and OT network security, as well as the various security consequences of transitioning to open systems.	Star Energy Storage Solutions EMS Division

• Future Plan

Location/Energy Storage Capacity	2024 Target	Medium to Long-term Goal
Chaozhou, Pingtung/99 MW	Completion of battery system installation by 2nd quarter.	System begins service and operation.
Longjing, Taichung/100 MW	Completion of battery system installation by 4th quarter.	System begins service and operation.
Penghu/20 MW	Grid integration by 4th quarter.	System completes grid integration.
Liuying, Tainan/200 MW	Completion of battery system installation by 4th quarter.	System begins service and operation.
Heping, Hualien/10+10 MW	Launch service by 2nd quarter.	System completes grid integration and provides service.
Heping, Hualien/40 MW	Grid integration by 3rd quarter.	System completes grid integration.
Liuying, Tainan/4 MW	Grid integration by 3rd quarter.	System completes grid integration.

3.2.4 STAR Aquaculture: Fishery and Electricity Symbiosis

According to statistics from the Fisheries Agency of the Ministry of Agriculture, the number of fishermen has decreased from 400,535 people in 2010 to 325,256 people in 2022, marking an 18.79% decrease. The aquaculture area has also faced a decrease from 36,158.53 hectares to 32,909.93 hectares, accounting for 10.95%. In addition, the catch from inland aquaculture decreased by 3.49% in the fiscal year 2023 compared to the previous year. In recent years, the aquaculture industry has faced challenges such as climate change, rising labor costs, and labor shortages, resulting in a difficult situation for the industry. In response, the Ministry of Agriculture has proposed the Aquaculture White Paper, which includes six measures. One of the goals is to achieve a total installed capacity of 4 GW for land-based aquaculture photovoltaic systems by 2025, equivalent to about 10,000 hectares of fish ponds in Taiwan, accounting for one-fourth of the total pond area in the country. The promotion of aquaculture photovoltaic systems not only helps preserve agricultural land but also optimizes aquaculture practices, promotes green energy, and revitalizes local industries, creating a win-win situation.

In alignment with the national energy transition policy, HDRE established a subsidiary, STAR Aquaculture Co., Ltd., in May 2022. The subsidiary specializes in the management of aquaculture with fishery and electricity symbiosis. The highlight project this year is the site located in Qigu, Tainan, covering an area of 57.7 hectares for fishery and electricity symbiosis, which exceeds the initial estimation of 42.8 MW. The installed capacity is expected to generate 65 million kilowatt-hours of electricity annually. The main species cultivated include white shrimp, mullet, and milkfish.

• Annual Highlights

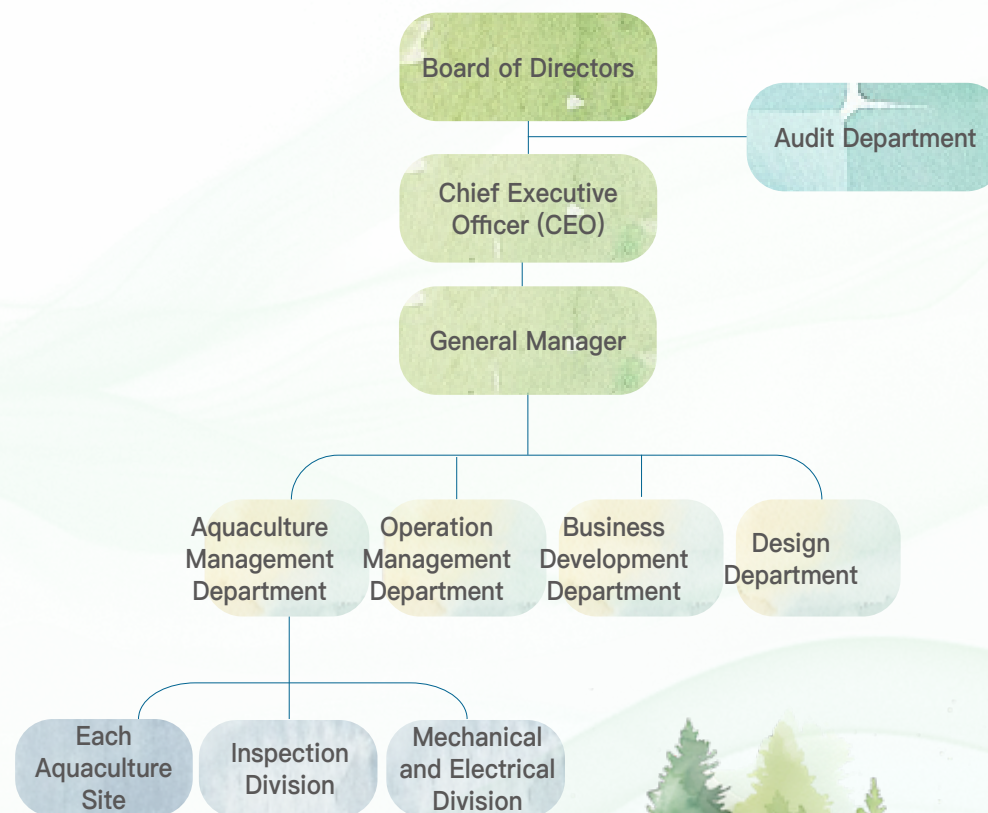
2023 Harvest Yield: 100,000 kilograms		Patents Obtained 3 aquaculture patents	
Number of Cultivated Species 10 species		Managed Land Area 100 hectares	



Location	Qigu District, Tainan City
Area (hectares)	57.74 hectares
Period	2018–2021
Relevant parties	Taiwan Environment & Planning Association Central Environmental Ltd.
Highlights	Overcoming extreme weather conditions such as extreme droughts in 2022 and 2023. Achieving a harvest yield of 60,000 kilograms within one year, despite salinity exceeding five degrees several times.
Detailed Execution Description	<ol style="list-style-type: none"> 1. Implemented water quality monitoring and fine-tuned the use of water quality materials such as probiotics, photosynthetic bacteria, and molasses to maintain water quality stability. 2. Conducted regular monitoring of the growth status of cultivated species and harvested them at optimal sizes. 3. Collaborated with local elderly farmers and network workers to assess the spawning and size specifications of mullet, arranging harvest schedules, achieving a breeding rate of 90% and a spawning rate of up to 70%.
Future Plans	Based on the aquaculture records and big data from 2023, we aim to achieve higher goals in 2024.



Star Aquaculture Organizational Structure Chart



• **Star Aquaculture's Service Offerings**



Fishery Planning

- Management Approach**
 - Existing fish farmers
 - In-house aquaculture team
 - Outsourced aquaculture
- Environmental Assessment**
 - Climate, water sources, water quality, soil conditions
- Fish Pond Design**
 - Planning of farming area
 - Selection of suitable species based on market demand and water quality conditions

• **Vertical Integration of Fishery and Electricity Symbiosis**

Star Aquaculture's development sites are primarily fish ponds owned by elderly landowners or fish farmers without successors. In collaboration with the development and engineering design teams, the entire site is carefully planned. The land is leveled, and the embankments are reinforced to ensure proper water drainage. Once the modules and related power generation equipment are installed, Star Aquaculture takes over the management of the aquaculture operations. Before releasing the fingerlings, we prioritize water quality cultivation. The cultivated species are based on the original local breeds. The entire process, from fingerling cultivation to harvest, can take from six months to one year. We establish production and sales records, carbon footprints, and water footprints, allowing consumers to trace the origin of the products and the resources consumed throughout the supply chain.

During the planning phase of the site development, waterways are a crucial factor. We refrain from extracting groundwater and instead rely on lagoons, surrounding channels, and the preservation of existing water routes. We reinforce the foundation of the original fish farms without causing damage. We also enhance the shoreline with the integration of power generation equipment, improving the planning of access routes and electrical arrangements to facilitate farming operations and harvest activities.

- Dispatch System**
 - Real-time abnormality reporting

We prioritize the recruitment of local fish farmers, in alignment with our company's aquaculture management policies. This not only increases local employment opportunities but also enables us to provide professional guidance in aquaculture operations. Additionally, the installation of shading structures on the modules provides an extra layer of protection, shielding the aquaculture process from direct exposure to harsh weather conditions and temperature fluctuations.



Smart Aquaculture

- Monitoring System**
 - Monitoring instruments
 - Data analysis
 - Dashboard management
- Prediction System**
 - Weather forecasting
 - Heavy rain forecasting
 - Cold wave alerts
- Aquaculture Traceability**
 - ERP system
 - Collection, aggregation, recording, and calculation of carbon footprint
 - Ensuring sustainability in every aspect

Our focus goes beyond aquaculture itself. We center our efforts around aquaculture while considering the local environment, enhancing operational processes, and meeting the diverse needs of species cultivation. We adhere to the principles of low-density aquaculture, employing biotechnology methods and probiotics to maintain a safe and eco-friendly farming environment. Our dedication extends to the land, the people, and all forms of life involved.



Sales Channels

Primary processing of fish farm harvest
Collaboration with seafood retailers to ensure efficient seafood distribution



• Application and Effectiveness of Aquaculture Software

Software Name	Purpose	Function Description	Benefits
Monitoring System	Facilitates detailed management across multiple sites, allowing for comparisons of site characteristics and enabling on-site decision-making.	Monitors water quality, equipment operation, and weather conditions, providing real-time feedback on operations and consolidating task management information.	Reduces the need for phone calls and repetitive confirmations, but streamlines management with real-time and graphical visualization.
Carbon System	Monitors energy consumption and carbon emissions.	Provides real-time monitoring of electricity meters, feed and feeding records, and calculates daily/annual carbon emissions.	Promotes environmentally friendly aquaculture by integrating with digital operation records, achieving technological advancement in aquaculture.
Water Quality Measurement System	Monitors water resource usage to avoid wastage.	Provides real-time monitoring of water usage at each site, integrated with a water quality monitoring system. Facilitates water resource recycling and effective management.	Supports environmentally friendly aquaculture by integrating with digital operation records, achieving technological advancement in aquaculture.
Enterprise Resource Management System	Records operational logs at each site.	Records accounting information such as seedlings, materials, feed, equipment, electricity, labor, etc.	Enables management and decision-making based on financial records, facilitating strategic planning for aquaculture in the following year.
Command Center	Integrates aquaculture data.	Alerts for abnormal values, and facilitates task assignments based on a calendar schedule.	Tested and obtained management approval in 2023.
Local Meteorological Center	Builds weather data within the site boundaries.	Compared to the general data from Central Weather Administration, a locally based center can provide more detailed and accurate information.	Enhances the accuracy of mullet harvesting timing, resulting in the production of high-quality mullet roe.

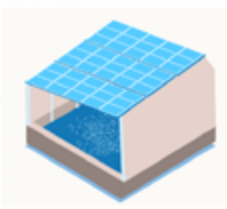
• Aquaculture Data Repository

By recording daily data such as feed input, dissolved oxygen level, water temperature, transparency, pH level, salinity, nitrogen, ammonia, nitrite, etc., the long-term (6 months to 1 year) feeding logs and recorded data become valuable assets for Star Aquaculture in establishing an aquaculture management big data system. It also serves as a foundation for further development of intelligent aquaculture management. By incorporating climate prediction and monitoring information, Star Aquaculture can automatically adjust feed materials and seedling placement, as well as manage and monitor water quality. Step by step, Star Aquaculture is moving towards automated intelligent aquaculture management, combining the expertise of its aquaculture team, modern technology, and establishing streamlined sales channels. By integrating traditional aquaculture knowledge and leveraging modern technology, Star Aquaculture not only ensures better fish harvests but also enables precise evaluation of financial models and investment returns.

• Real-time Monitoring Dashboard for Aquaculture Farm



- Types of fishery–electricity symbiosis facilities



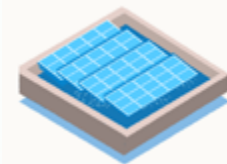
Roof-mounted (indoor)

Installed on rooftops (with a shading rate of less than 80%).



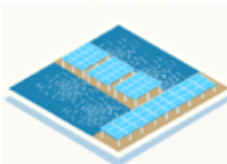
Columnar type (outdoor)

Installed in pools (with a shading rate of less than 40%).



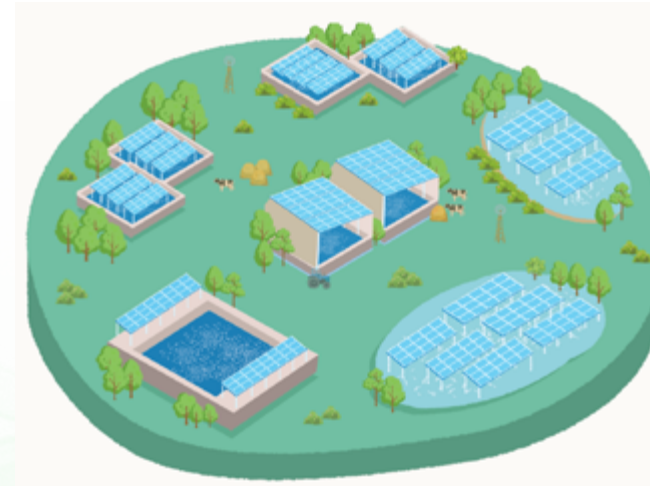
Floating platform type (outdoor)

Floating on the water surface (with a shading rate of less than 40%).



Embankment type (outdoor)

Installed on embankments or roadsides (with a shading rate of less than 40%).



- Acquisition of patents in 2023

Patent Title	Patent Description
Aquaculture Pond Fishing Structure and Method (1)	Design of fish collection grooves in aquaculture ponds to reduce inconvenience in harvesting and cleaning, and to increase operational efficiency.
Aquaculture Pond Fishing Structure and Method (2)	Design of adjacent aquaculture ponds with fish collection grooves to reduce inconvenience in harvesting and increase operational efficiency.
Aquaculture pond structure	Design of aquaculture pond structures for mollusk and shellfish cultivation, stabilizing water quality and reducing parasitic infestations.
Aquaculture pond fishing structure (1)	Design and operational methods for shrimp and fish harvesting structures in aquaculture ponds.
Aquaculture pond fishing structure (2)	Design and operational methods for mollusk and shellfish harvesting structures in aquaculture ponds.



• **2023 Training Course**

This year's internal education and training program focuses on practical courses, covering a total of 68 hours of training for all employees. Additionally, management-level courses totaling 15 hours were provided specifically for managers. External training resources included four sustainability certification programs for managers, covering ISO14064, ISO14067, and ISO14068, ensuring organizational managers possess relevant sustainability knowledge and management skills.



Course Title	Course Description
Internal Trainings on Practical Aspects	
Hand Thrown Nets	Cultivated species sampling and catching
Bamboo Raft	Species sampling, catching, material deployment, water quality measurement
Agricultural Vehicle Operation	Usage teaching, material and tool usage, also transporting product
Introduction to Various Materials	Introducing organic materials such as lime powder, molasses, probiotics, phototrophic bacteria, fish paste, tobacco bags, etc
Water Quality Interpretation	Data including temperature, salinity, pH, dissolved oxygen, along with daily weather and species feeding as basis for material and feed deployment
Material Usage	Introducing the use of organic materials like lime powder, molasses, probiotics, phototrophic bacteria, fish paste, tobacco bags, etc, and adjusting usage according to water quality, climate, and species growth status
Introduction to Aquaculture Species	Product positioning introduction for mullet, white shrimp, and milkfish; frozen white shrimp and mullet are popular products in the consumer market, and they are excellent gift choices after being processed.
Introduction to Cultivation Methods	<ol style="list-style-type: none"> 1. Ecological aquaculture method focusing on economic species paired with working species for pond waste cleaning 2. Organic material addition to stabilize water quality affected by weather changes for better species quality 3. Prohibition of pharmaceuticals and chemicals to maintain soil activity 4. Internal water circulation for natural sedimentation, filtration, and reuse through reservoirs
Team Consensus Building	Monthly meetings to exchange aquaculture methods and insights, promote internal knowledge management and bonding among employees to enhance cohesion.
Marketing Courses	Invite external marketing speakers on seafood product sales with the annual government subsidies.
Management Theory and Practice	Invite external scholars and experts to conduct 3 to 4 sessions on management theory and practice with the annual government subsidies.
External Education and Training	
Forklift Operation	Accumulated training and certification for 4 personnel; all future aquaculture operators are required to obtain certification.
ISO14064	Obtained training and certification for 1 personnel through government subsidy programs.
ISO14067	Obtained training and certification for 1 personnel through government subsidy programs.
ISO14068	Obtained training and certification for 1 personnel through government subsidy programs.
Carbon Footprint Practices (LCA Life Cycle Assessment)	Sent 1 personnel for training through government subsidy programs.
Data Analysis and Visual Reporting	Sent 2 personnel for training through government subsidy programs.
PowerBI Big Data Analysis Application	Sent 2 personnel for training through government subsidy programs.

• Highlight Achievement in 2023

Smart aquaculture is the future trend and industrial solution.

Star Aquaculture has two main policies; one is “Ecological Aquaculture” and the other is “Smart Aquaculture”.

Ecological Aquaculture focuses on creating a natural environment for aquaculture species to thrive without the use of chemical treatments. It utilizes microorganisms, probiotics, and economic and working fish species to maintain water quality in the farming ponds. Smart Aquaculture is the primary development focus this year. Smart aquaculture leverages technological advancements to address labor shortages in the industry and establish a knowledge management system for effective experience transfer and data recording.

Smart aquaculture is unlike traditional methods that rely heavily on visual inspection and experience. Star Aquaculture employs instruments to monitor water quality parameters such as pH levels, dissolved oxygen, temperature, salinity, oxidation–reduction potential (ORP), etc., twice a day. This allows prompt adjustments, such as aerating the water or adding probiotics, to stabilize the aquaculture environment. The AI management system is integrated to monitor the farming process in real–time and accumulate a database. It is developed by HDRE, and can instantaneously upload over 4,000 data entries to the cloud, notify relevant personnel, and use AI dispatch systems for continuous monitoring and anomaly alerts 24/7.

The establishment of smart aquaculture not only assists returning youth in knowledge transfer but also cultivates a new generation of aquaculture talent. The value lies in the accumulation of expert knowledge and experience within the AI system, enabling it to not only detect anomalies but also suggest corrective actions for staff to implement during their shifts. In the future, the system will continue to upgrade to include advancements like automated responses to alerts, such as halting automatic feeders or increasing dissolved oxygen levels via water wheels, thereby reducing possible human error and allowing staff to focus on monitoring and farming tasks.








• Future Plan

In 2023, Star Aquaculture achieved a fishing harvest of 60,000 kilograms. Throughout the year, we actively engaged in discussions with five major channels: end consumers, aquatic product distributors, restaurants and campuses, e–commerce platforms, and department stores. All products have obtained the Traceable Agricultural Products (TAP) from the Ministry of Agriculture and third–party verification. We have also conducted self–audits for carbon and water footprints, and will apply for testing in the future. We have secured three new aquaculture patents in 2023, setting the next milestone at a total of 10 patents. Star Aquaculture will continue to expand its managed fisheries and achieve intelligent aquaculture, building a new operational model for traditional industries.








Goals	Achievements in 2023	Short-term Goals	Medium to Long-term Goals
 Demonstration Site Development	<ol style="list-style-type: none"> Completed the demonstration site in Qigu with an installed capacity of 42.6MW. Obtained 6 technology patents in response to the innovative fishery and electricity symbiosis. 	<ol style="list-style-type: none"> Apply for 10 aquaculture patents. Manage area near 300 hectares. Host 10 educational visits at the fishery and electricity symbiosis demonstration site. 	<ol style="list-style-type: none"> Sign OEM/ODM cooperation agreements with other green energy companies. Directly and indirectly manage aquaculture areas totaling 500 hectares.
 Safe and Reliable Fishery Products	<ol style="list-style-type: none"> All fishery yields harvested in 2023 have been certified Traceable Agricultural Products (TAP) from the Ministry of Agriculture, verified by third-party impartial entities, and comply with Taiwan Good Agriculture Practice (TGAP) standards, allowing for product traceability. All fishery products have undergone self-audits for carbon footprint and water footprint. 	<ol style="list-style-type: none"> Submit carbon footprint verification for fishery products. Establish new managed fishing grounds, complete stocking declarations and updates, and apply for aquaculture registration. Establish new managed fishing grounds, complete application and verification of Production and Sales Records. Establish new managed fishing grounds, complete application and issuance of product traceability. Manage processed seafood products, and apply for product liability insurance coverage. 	<ol style="list-style-type: none"> Complete relevant license applications, audits, and issuance for OEM/ODM sites. Develop diverse, healthy, delicious, and low-carbon processed seafood products. Establish production and sales cooperation relationships with chain stores and platforms to promote products from fishery and electricity symbiosis.
 Automated Intelligent Aquaculture Management	<ol style="list-style-type: none"> Established standardized management and operational processes. Created process documentation forms. Developed protocols for personnel document interpretation and response procedures. Implemented water quality measurement instruments and utilized an in-house weather station to gather aquaculture information. Integrated an ERP (Enterprise Resource Planning) system to reconcile and record aquaculture deployment information with financial data. 	<ol style="list-style-type: none"> Establish an Aquaculture Command Center. Implement a Dispatch and Management Information Dashboard System. Establish Equipment Monitoring Systems. Develop self-audit verification data for aquaculture carbon and water footprints. 	<ol style="list-style-type: none"> Simultaneous rollout to manage fishery. Integrate aquaculture information across multiple platforms. Accumulate a big data repository for fishery and electricity symbiosis demonstration sites.
 Expanding Native Aquatic Species Restoration	<p>Conducted independent Environmental and Social Impact Assessments and established ecological reserves.</p>	<p>Restore and breed areola babylon</p>	<p>Research breeding methods for mullet and areola babylon</p>
 Systematizing Management Processes	<ol style="list-style-type: none"> Established standardized management and operational processes. Created process documentation forms. Developed protocols for personnel document interpretation and response procedures. 	<p>Establish Aquaculture Document Management Center</p>	<p>Establish standard operating procedures and documentation for the application and approval of fishery and electricity symbiosis demonstration sites.</p>

3.3 Strengthen Sustainable Value Chain

Meaning of Material Topic: Product Quality and Responsibility

		
<p>Actual/underlying positive impacts (opportunities) on the economy, environment, and society</p>	<p>Actual/underlying negative impacts (risks) on the economy, environment, and population</p>	<p>2023 Allocated Resource</p>

“Promote circular economy and enhance environmental energy efficiency to effectively reduce environmental impact.”
 Before each project, meet with contractors to discuss and remind them of the regulations on quality, environmental safety, and health issues. This ensures compliance and safeguards the quality and environmental impact during the construction process.

Environmental Impact Assessment, such as Environmental and Social Due Diligence (ESDD), must be carried out. For example, if quality control is not implemented, it may lead to soil loosening and even to soil liquefaction, posing risks of abnormal quality during construction.

Before each project, meet with contractors to discuss and remind them of the regulations on quality, environmental safety, and health issues. This ensures compliance and safeguards the quality and environmental impact during the construction process, mitigating adverse effects on the surrounding environment during operation.

• Strategy and Goal

		
<p>Policy and commitment regarding product quality and responsibility of HDRE</p>	<p>Short-term Goal (Within 1 Year)</p>	<p>Mid & Long-term Goal (Within 3–5 Year)</p>

1. Promote circular economy and enhance environmental energy efficiency to effectively reduce environmental impact.
2. Include staff and contractor participation in quality control. Provide activities to promote environmental awareness, health and safety, and energy efficiency enhancement. Continue to grow and improve.

1. Set annual key performance indicators, with positive (opportunity) and negative (risk) assessment, to be initiated in 2024 and regularly reviewed.
2. Complete 100% factory inspections for all project sites.
3. Conduct 100% on-site spot inspections for all project sites.
4. Reduce quality defects at project sites to less than five incidents.

1. Establish an internal electronic Quality Management System (QMS) platform, integrating functions for education and training, certification management, document control, and internal announcements.
2. Achieve ISO 9001 certification for similar project sites.
3. Assist related subsidiaries in implementing and completing management system verification.
4. Assist contractors to develop quality risk assessment capability.

3.3.1 Project Management and Progress Advancement

HDRE ensures that each power plant meets regulatory requirements and the demands of our clients and company after completion and grid connection, we have dedicated departments and teams at each stage to monitor project quality and progress. In 2022, our company obtained ISO 9001 certification for quality management systems, covering both office and project sites. We are gradually implementing quality management practices and executing ISO 14064-1 to assess significant carbon emissions and develop subsequent management and control measures. We have established a supervision and measurement checklist, defined four major quality dimensions, and included the performance and improvement points in the annual management review report. These matters are discussed in the annual management review meeting, where monthly reports and management plans are consolidated and reviewed for improvement. In planning for the year 2023, HDRE is also taking steps to implement and obtain ISO 9001 certification for quality management systems.

Our goal is to ensure that every project, from development and construction to operation, is completed on time and operates smoothly, meeting the expectations of our customers and contributing to the nation and the planet's net-zero carbon emission efforts. We are committed to upholding our "Smarter Energy, Accessible Green" philosophy throughout the entire process.



• ISO 9001:2015 QUALITY MANAGEMENT SYSTEM

bsi. Certificate of Registration
QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that: HD Renewable Energy Co., Ltd. 高雄能源科技股份有限公司 台北總部
 Taipei Headquarters 臺灣
 No. 35, Dexing Wt. Rd., 台北市
 Shilin Dist., 士林區
 Taipei City 德行西路35號
 111046 5樓
 Taiwan 111046

Holds Certificate No: **FS 774839**
 and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:
 The provision of solar power plant's development, design, construction, license application and green electricity sales.
 太陽能電廠之開發 - 設計 - 施工 - 執照申請與綠電販售 -

For and on behalf of BSI: Michael Lam - Managing Director Assurance, APAC

Original Registration Date: 2022-11-14 Effective Date: 2022-11-14
 Latest Revision Date: 2022-11-14 Expiry Date: 2025-11-13
 Page: 1 of 2

...making excellence a habit™

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authorized online. Printed copies can be validated at www.bsiglobal.com/ClientDirectory or telephone +44 (0)20359-0333. Taiwan Headquarters: 2nd Floor, No.37, 3rd St., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C. A Member of the BSI Group of Companies.

Certificate No: **FS 774839**

Location	Registered Activities
HD Renewable Energy Co., Ltd. Taipei Headquarters No. 35, Dexing Wt. Rd., Shilin Dist., Taipei City 111046 Taiwan 高雄能源科技股份有限公司 台北總部 臺灣 台北市 士林區 德行西路35號 5樓 111046	The provision of solar power plant's development, license application and green electricity sales.
HD Renewable Energy Co., Ltd. Taichung Office No. 360, Sec. 2, Taiwan Blvd., North Dist., Taichung City 404023 Taiwan 高雄能源科技股份有限公司 台中辦公室 臺灣 台中市 北區 台灣大道二段360號 5樓 404023	The provision of solar power plant's development, design, and construction.

Original Registration Date: 2022-11-14 Effective Date: 2022-11-14
 Latest Revision Date: 2022-11-14 Expiry Date: 2025-11-13
 Page: 2 of 2

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authorized online. Printed copies can be validated at www.bsiglobal.com/ClientDirectory or telephone +44 (0)20359-0333. Taiwan Headquarters: 2nd Floor, No.37, 3rd St., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C. A Member of the BSI Group of Companies.

• Field Quality Management for Field Construction and Installation

Construction Planning 01

Importance Description
Verifications of drawings, materials, proposals, and construction safety and quality management plan.

After the field plan is finalized, the Project Division then submits relevant plan documents of each construction to the Engineering Department. The head of the Engineering Department assigns the person who shall be in charge of the site, quality and environmental safety and health respectively.

The Project Division shall specify the quality standard during the pre-construction meeting, and shall also request the Engineering Division to fill out the “Construction Safety and Quality Management Plan” and to output the “Construction Quality Key Point Checklist” for submission to the field supervisor.

Construction Execution and Autonomous Inspection 02

Importance Description
Drawing review, material management, Self-inspection of construction quality, construction process review and doubt resolution

During the execution of works of a project, the contractor must fill out a daily construction logbook and submit it to the dedicated personnel for handling, in order to control the construction progress and quality. If there is any major abnormality during the execution process, the “corrective action request form” shall be filled out, and relevant handling reports and documents must be preserved.

The person in charge shall assign quality control or supervisor, and the contractor is requested to perform inspection according to the “Sub-item Construction Autonomous Inspection Form.” After the completion of each work, quality acceptance shall be performed respectively.

Construction Acceptance and Abnormality Handling 03

Importance Description
Acceptance, construction completion drawings correction and deficiency improvement

Customer and contractor acceptance: After the construction is complete, acceptance is performed according to the customer’s request, and “Acceptance Record Form” is issued, following which the person in charge of the field assigns supervision personnel to perform coordination and follow-up. After acceptance is complete, it is recorded in the acceptance record form or acceptance record is issued by a third party. In addition, dedicated personnel will summarize and confirm the documents in order to close the case. In case where there is any issue in the acceptance, assistance is provided after discussion with the customer, in order to ensure that all issues have been resolved and customer’s requests are satisfied.

Review by government agency: In addition to the acceptance by the contractor and customer, after a solar photovoltaic field construction is complete, grid-connection trial operation is applied with Taipower, and electricity quality measurement is performed, in order to ensure that the power supply quality satisfies the requirements. After the review and test are qualified, grid-connection can then be made.

Construction Execution Identification and Tracking 04

Importance Description
Construction Execution Identification and Tracking

After a project is closed, documents generated during the construction project process are summarized. All documents of survey reports, records, test reports and contracts must be preserved as electronic files and paper format in order to be used as the basis for identifying and tracking the construction execution and service process. In addition, the following documents are submitted to the Asset Management Division:

- Construction completion drawings
- Equipment catalog
- Operation manual
- Subcontractor (labor) contract
- Approval documents of each stage
- Acceptance record

Construction Planning

Construction Execution and Autonomous Inspection

Construction Acceptance and Abnormality Handling

Construction Execution Identification and Tracking



3.3.2 Source Tracking Management and Procurement Policy

• Procurement Management

During the purchase of raw materials, HDRE ensures that all construction materials comply with the material related test requirements, and a fixed quantity of samples are randomly selected for submission to the ISO certified laboratory for quality inspection. To prevent the risk of material supply interruption due to raw material shortage and overly centralized purchase from one single supplier, we adopt common specifications for raw materials as much as possible in order to increase the replaceability of raw materials. Even though they are different brands, the prices are within the same range, and would be increasing interchangeability and being less affected by price variations. Purchase of raw materials and equipment overseas may be subject to port congestion such that the product supply stability can be affected. Accordingly, we plan the temporary storage area to allow suppliers to deliver materials early. That can make sure the source and the raw material quality are stable from suppliers. We also introduce alternative materials or equipment from different countries to allow diversified sourcing and reduce dependence on a single procurement location. As for the purchase price, due to the demand over supply of materials, the risks of raw material price increase and potential material shortage exist. Accordingly, we use common materials and order materials early, in order to achieve price targeting and to reduce the impact of price fluctuation.

During the purchase of each raw material, we assess the purchase strategy according to the material characteristics. For materials of high cost ratio, well-known domestic suppliers and foreign first-class suppliers are evaluated. After the quality, performance and service aspects of suppliers are considered, the most competitive supplier is selected for cooperation. For converters, which are the core of field electromechanical equipment in fields, major manufacturers and equipment models with stable quality are selected as the priority cooperation partners, and other equipment is mainly from domestic suppliers with high quality, stable delivery and good service.

• Purchased Item and Expense in 2023

Type	Procurement Ratio
Solar panels/modules	24.05%
Energy storage batteries	50.11%
Charging piles	0.01
Other equipment (excluding modules)	25.28%

• Local Procurement

In order to implement local procurement and prioritize supply chain localization, we aim to improve the service efficiency of suppliers, shorten lead times, reduce the transportation distance of raw materials, and lower carbon emissions. With a focus on quality and competitive pricing, we give priority to local procurement from Taiwanese suppliers, while also creating local employment opportunities to promote socio-economic development. HDRE emphasizes local procurement, with all or some parts of the raw materials or equipment designed, manufactured, and assembled by Taiwanese

manufacturers. Furthermore, suppliers that have been assessed and certified with ISO 9001 Quality Management System, ISO 14001 Environmental Management System, or ISO 45001 Occupational Health and Safety Management System will receive higher ratings.

Due to company policy and coordinated planning by professionals, procurement is systematically listed according to the needs of each unit, while prioritizing localization principles. This year, local procurement has reached 71%, 10% higher than 2022. However, the remaining 29% is still imported after careful consideration of various factors. For certain raw materials such as inverters, transformers, and foundation piles, China remains a major manufacturing country with prices half that of the United States; for solar panels, even with domestic government subsidies, Southeast Asian suppliers offer more competitive market conditions in terms of quality and pricing post-pandemic. Therefore, some materials are still procured outside of Taiwan.

• Local Procurement Ratio in Last Three Years

	2021	2022	2023
Proportion of local procurement[Note 1]	94.27%	60.68%	71.00%

[Note 1]: The local procurement refers to that the material or equipment purchased is designed, manufactured and assembled by Taiwanese companies, or the parts of the aforementioned process is performed by Taiwanese companies, excluding suppliers that act as agencies in Taiwan for distribution and sale of products only.

• Procurement Ratio with ISO Certification in Last Three Years

Certification Type	2021	2022	2023
Procurement percentage of suppliers comply with ISO 9001	27%	23%	49%
Procurement percentage of suppliers comply with ISO 14001	20%	26%	29%
Procurement percentage of suppliers comply with ISO 45001	20%	22%	28%

• Procurement for overseas sites

This year, HDRE officially launched its overseas offices in Japan and Australia. For the development and procurement at overseas sites, the company continues to adhere to Taiwanese principles, prioritizing local supply and procurement. However, as HDRE has just entered the markets of Japan and Australia, to maintain high quality standards will take time to assess and carry out. Considering the long-term usage and evaluation periods, the company is currently seeking partners who meet the supply requirements. China remains the main source at present, but the long-term plan is to transition back to local procurement and prioritize local suppliers.

Green Procurement

In 2022, HDRE introduced the "Green Procurement Policy," incorporating environmental and social performance into the procurement decision-making process. It focuses on global environmental protection issues and strives to influence the upstream and downstream supply chain partners. HDRE primarily adopts products and services that meet the definition of green procurement, including but not limited to: low energy consumption (with energy-saving/environmental labels), low pollution, use of recycled materials, recyclability, and green building materials. To achieve the reuse of raw materials, steel templates that can be reused are used instead of single-use wooden templates. Inverters are also directly installed in the transformer box, reducing the use of cabinets and lowering costs. During the construction of the Penghu project, suppliers were required to handle the transportation of construction materials and tools individually. HDRE coordinated and consolidated the transportation, reducing carbon emissions and transportation costs in the construction process. Furthermore, the electrical wire routing is optimized during project planning to minimize the use of wiring materials.

In terms of office supplies, HDRE seeks environmentally friendly options. For example, it uses ReTissue, a sanitary

tissue made from recycled paper pulp, and collaborates with international tree planting associations for the "Tree Planting Edition" recycled sanitary paper. This not only contributes to reforestation but also provides local job opportunities to address poverty issues. The company has also replaced its official vehicles with electric cars instead of fuel-powered vehicles to reduce carbon emissions. All office lights have been replaced with LED lights, and priority is given to purchasing products with green environmental labels or energy efficiency ratings, as well as avoiding products with excessive packaging. HDRE also promotes the reuse of resources and the recycling of reusable materials.

This year, we prioritize replacing large-scale projects with N-type modules. Using N-type modules with the same power generation capacity reduces the number of modules and brackets required for assembly. It can promote energy efficiency, reduce waste, lose packaging materials, and require less land area for construction.



• Green Procurement Policy

1. Products and services that meet the definition of green procurement should include, but are not limited to: "low energy consumption (with energy-saving/environmental labels), low pollution, use of recycled materials, recyclability, and green building materials."
2. HDRE declares its green procurement policy to suppliers and prioritizes the purchase of green products. Products or services should strive to achieve various environmental and energy-saving effects. Consideration is given to environmental issues, long-term energy-saving and carbon reduction plans, and future environmental strategies in the extraction of raw materials, production, and development of new equipment. The possibility of sustainable cooperation with suppliers is regularly evaluated, and environmental aspects are included in supplier performance assessments.
3. Preference is given to environmentally friendly office facilities, decorations, and consumables, while avoiding the purchase of excessively packaged products. Promote the reuse of resources and the recycling of reusable materials. The selection of equipment or appliances prioritizes products with green environmental labels or energy efficiency ratings. Engineering projects primarily choose products from vendors who share the ESG philosophy.
4. HDRE actively implements green operational policies from within. The company continuously promotes environmental education through action plans, strongly advocates the concept of green procurement, and regularly evaluates the group's green procurement performance.



3.3.3 Supplier Management & Quality Monitoring

HDRE emphasizes both the breadth of its international supply chain and the depth of its local supply chain, carefully selecting high-quality partners. Committed to quality, we hold regular evaluation and discuss with suppliers and contractors the best solutions, establishing strong, long-term partnerships. Through stable supply chain collaboration, we aim for mutual growth, creating win-win situations and providing high-quality products and services. We actively sound our expectations for sustainable supply chains with suppliers and contractors.

As issues such as low-carbon supply chains and human rights gain prominence, we plan to integrate sustainability factors into our procurement considerations. We encourage suppliers to adopt carbon reduction strategies to achieve our supply chain carbon neutrality goals while strengthening human rights compliance requirements

• Supplier management and evaluation mechanism

Management objectives	Management procedure documents	Management audit documents
Raw material procurement suppliers	Supplier management procedures	Supplier Regular evaluation form
Site contractors	<ul style="list-style-type: none"> Contractor Management Procedure Design Management Procedure Project Management Procedure Engineering Planning, Execution, and Acceptance Management Procedure Material Inspection and Storage Management Procedure Construction Standards Quality Operation Risk Management Procedure 	<ul style="list-style-type: none"> Contractor Regular Evaluation Form Corrective Action Request Form Subproject Self-Inspection Checklist (51 forms) Construction Safety and Quality Management Plan Procurement Inspection Specification & Factory Inspection Record Occupational Health and Safety Guidelines (total of 15 documents) Quality Risk Identification
Completion and site operation	<ul style="list-style-type: none"> Project Management Procedure Engineering Planning Execution and Acceptance Management Procedure 	<ul style="list-style-type: none"> Engineering Completion Report Initial Inspection Record Reinspection Improvement Record Quarterly Operation and Maintenance Report

• Supplier and Contractor Selection Determination

When selecting, we prioritize quality over cost. After the specifications are set, we bring relevant parties and possible contractors together to discuss, evaluate and select the most suitable supplier offering high-quality and efficient products. Suppliers selected through this process are eligible for procurement. This year, emphasis has been placed on pre-assessment.

To ensure quality standards before procurement, we initiate third-party verification to jointly conduct quality checks before raw materials are shipped. Regular assessments are conducted annually to ensure the quality of the supplied goods and to monitor vendors' integrity and continuous improvement. Vendors with certifications such as ISO 9001 Quality Management System, ISO 14001 Environmental Management System, or ISO 45001 Occupational Health and Safety Management System may receive higher ratings.

• Supplier and Contractor Selection Determination Criteria

Aspects	Item	Management Guidance
Quality Management	Product level, technical capabilities	Verified the quality management of suppliers and contractors through the handling of delivery quality abnormalities in actual cases and regular evaluations of suppliers and contractors; if they fail to pass the evaluation and have not improved after communication and counseling, they may be classified as unqualified manufacturer, and terminated cooperation.
Supplier Information	Company type, capital amount, delivery capacity, price level, backup service	Supplier evaluation is required for initial cooperation. After passing, re-evaluation will be conducted every year or during a specific period to ensure that suppliers and contractors maintain or improve overall quality level.
Compliance in Environmental and Safety	Quality certificate, environmental management rating	For cooperating contractors, the following documents must be signed in advance and checked from time to time during the construction period to ensure the contractor's environmental, safety and health performance. <ol style="list-style-type: none"> Contractor's safety and health commitment letter Notice of contractor violating safety and health regulations Notice of joint prevention of occupational disasters

- **Supplier And Contractor Selection Results For 2023**

Distribution of Scores	Numbers of Supplier & Conductor
Priority Suppliers (85 points and above)	16
Recommended for Cooperation (84–75 points)	18
Can Be Improved (74–70 points)	4
Not Qualified (69 points and below)	0

- **Initial Screening Results Of The 2023 Environmental, Health, And Safety Management Questionnaire For Suppliers And Contractors**

Distribution of Scores	Numbers of Supplier & Conductor
Grade A: Good (81 points and above)	30
Grade B: Meeting Requirements (80–61 points)	8
Grade C: Need Improvement (60 points and below)	0

- **Environmental & Social Evaluation of Suppliers**

Environmental Evaluation

- Suppliers shall comply with all relevant domestic environmental laws and regulations
- Suppliers shall manage and reduce impacts of operation and manufacturing process on the environment. The key points include greenhouse gas emissions, waste emissions, recycle and management, water resource use, biodiversity, etc.
- Relevant raw materials of suppliers shall be traceable materials, and certification and inspection shall be performed periodically to ensure that they are legal without violating the HDRE’s energy regulations and management objectives., including the assessment of procurement with energy label.
- Suppliers shall be equipped with facilities and environmental permit for water and waste treatment
- Determine whether any supplier is subject to the record of nonconforming with inspection of environmental protection competent authority and its subsequent response method

Social Evaluation

- **Basic ethics:**
- Suppliers are expected to comply with the Ethical Corporate Management Best Practice Principles established by HDRE and to promote sustainable operation jointly
- **Human rights:**
 - (1) Suppliers shall not use any child labor or involuntary labor
 - (2) Suppliers shall ensure that the employee wage complies with the minimum wage specified in the law
- **Working environment:**
 - (1) Suppliers shall comply with all domestic and labor safety, health related laws and regulations
 - (2) Suppliers shall provide employees education, training and guidance related to their jobs, and shall establish appropriate preventive measures and accident handling regulations

To effectively manage and timely understand the supply chain status, we categorize and classify suppliers. According to the evaluation result, we expand the cooperation opportunity with quality suppliers. For suppliers of poor evaluation results and having deficiencies, we request such suppliers to improve, and evaluate whether cooperation is to be continued according to the improvement result.

Supplier evaluation standards were established in 2021 and modified in 2022, adding the contractor evaluation regulations. This year, HDRE adjusted the supplier classification criteria and set the qualification score at 60 or above. The new standards took effect in 2023, initiating ongoing evaluations for new suppliers and contractors. This year, a total of 40 suppliers and contractors were evaluated, and had all met the standards, meeting the three major evaluation criteria: basic information, compliance with environmental health and safety regulations, and quality management. There was no significant non-conformity.

For the suppliers that did not pass the evaluation (scoring below 60), HDRE followed internal management procedures and required them to submit improvement reports, establish improvement plans, and monitor improvement progress. This ensures compliance with HDRE’s standards for qualifying suppliers and allows for re-evaluation through supplemental documentation as needed.



Supplier and Contractor Evaluation

We conduct regular evaluations to identify high-risk suppliers and establish a two-way communication channel with them. This approach helps mitigate the risk of supply chain disruption and enables long-term collaboration with promising vendors. Based on the evaluation results, HDRE expands cooperation with high-quality suppliers. However, suppliers that do not meet our quality requirements, even after continuous communication and guidance, may be classified as disqualified vendors and will no longer be engaged in future collaborations.

In 2023, HDRE conducted regular assessments on the 26 suppliers and 14 contractors at the project sites. None of them were put under observation. However, 2 suppliers and 4 contractors fell between 61 to 79 points, falling short from excellent. If they fail to improve two times in a row, they will be disqualified.

Overall, all suppliers and contractors assessed in 2023 passed the evaluation and are qualified as acceptable suppliers and contractors for HDRE.



Supplier Evaluation	
Evaluation Criteria	Percentage
Shipping Performance	30%
Quality	30%
Product Inspection or Testing Status	20%
Factory Inspection	10%
Bonus aspects	10%

Contractor Evaluation	
Evaluation Criteria	Percentage
Construction Quality	20%
On-Site Interface Management	10%
Capability in Handling Quality Abnormalities	10%
Health, Safety, and Environmental Management	30%
Project Progress and Timeliness	10%
Ability to Interpret Blueprints	5%
Coordination of Construction Methods	5%
Level of Coordination	10%

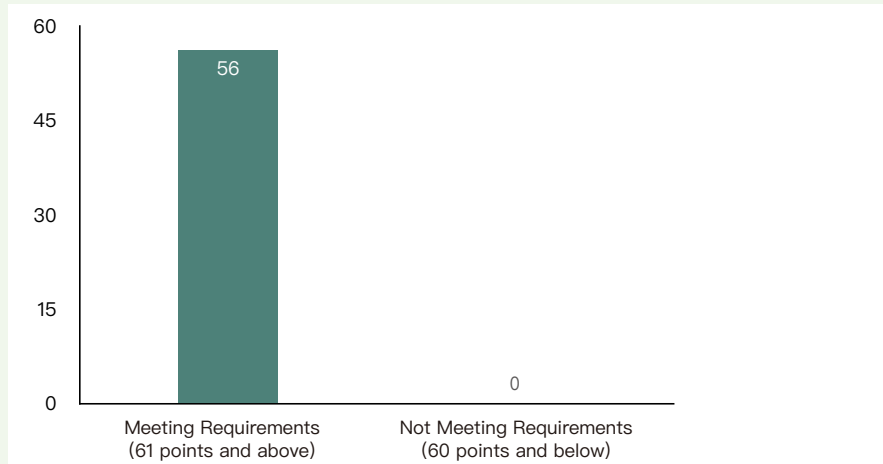
Range of scores	Regular Supplier Evaluation
Excellent (80 and above)	24
Acceptable (61-79)	2
Under observation (Below 60)	0

Range of scores	Regular Contractor Evaluation
Excellent (80 and above)	10
Acceptable (61-79)	4
Under observation (Below 60)	0

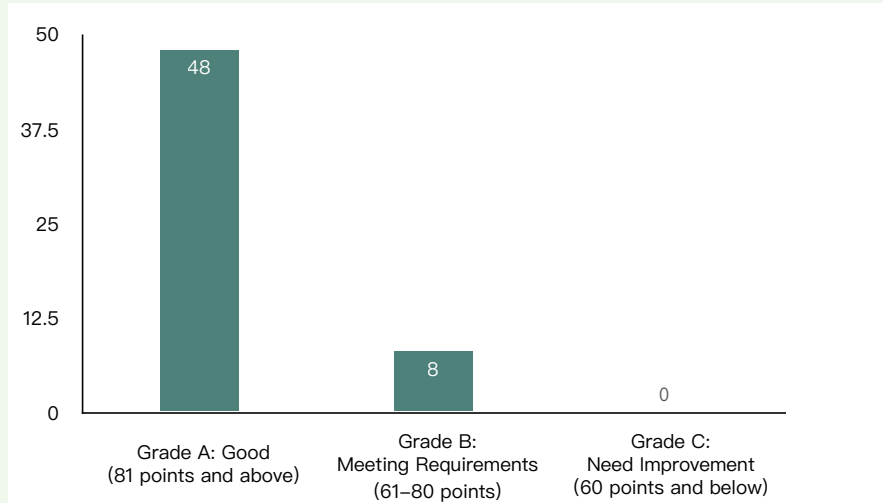
- Initial Assessment of Suppliers and Contractors**

A total of 56 suppliers and contractors have undergone initial evaluation, all scoring 70 or above. There are no disqualified suppliers or contractors. Environmental health and safety management questionnaire scores are all 61 points or higher, with no C level contractors.

Basic Evaluation of Suppliers/Contractors



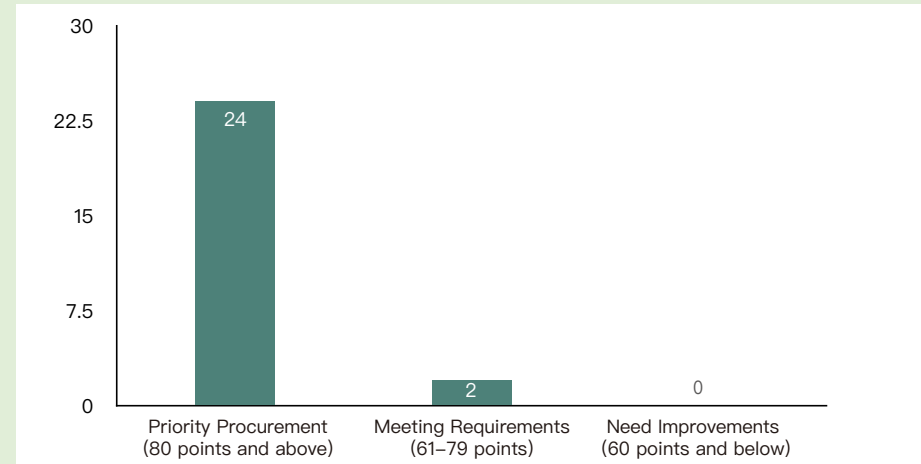
Summary Table of Environmental Health and Safety Management Questionnaire Scores



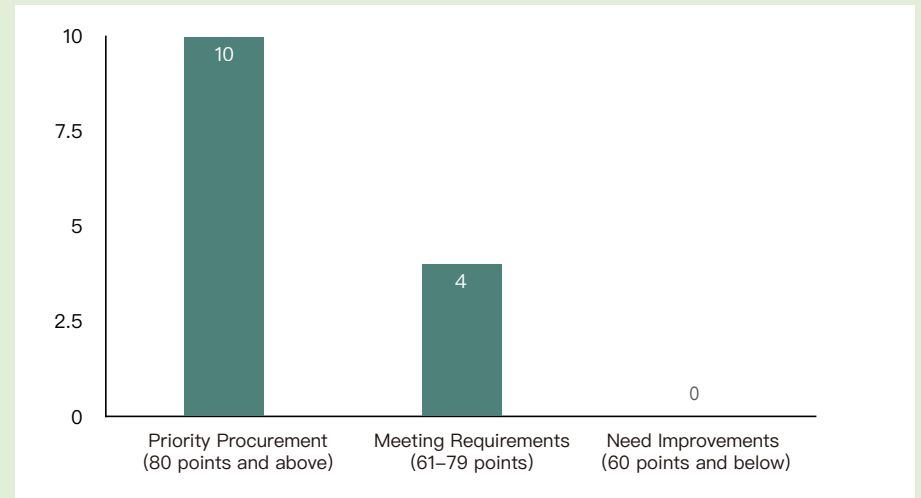
- Regular Evaluation of Suppliers and Contractors**

To ensure the quality of construction on site, regular evaluations of suppliers and contractors have been conducted. Based on the projects completed to date, a total of 26 suppliers and 16 contractors have undergone regular assessments. All evaluation scores have met or exceeded 60 points, qualifying them as competent suppliers and contractors.

Regular Evaluation of Suppliers



Regular Evaluation of Contractors





3.3.4 Customer Satisfaction at HDRE Services

In 2023, HDRE conducted a customer satisfaction survey among clients involved in project development and construction, asset management, and green energy sales. The annual satisfaction survey serves as an important basis for HDRE’s continuous improvement of products and services. We value customer feedback and strive to build trust and meet customer needs through two-way communication.


The satisfaction survey questionnaire covers five key areas: customer service, professional competence, quality, delivery, and overall evaluation. We gather feedback on service quality from customers. After compiling and analyzing the survey results, we engage in further communication and understanding with customers regarding areas of dissatisfaction, and make adjustments to improve service quality accordingly. We highly value customer privacy and intellectual property rights for data collected from clients. All data collection, storage, and processing are conducted in accordance with the law. In 2023, there were no incidents of privacy infringement or complaints regarding the loss of customer data.

- **Business Development**

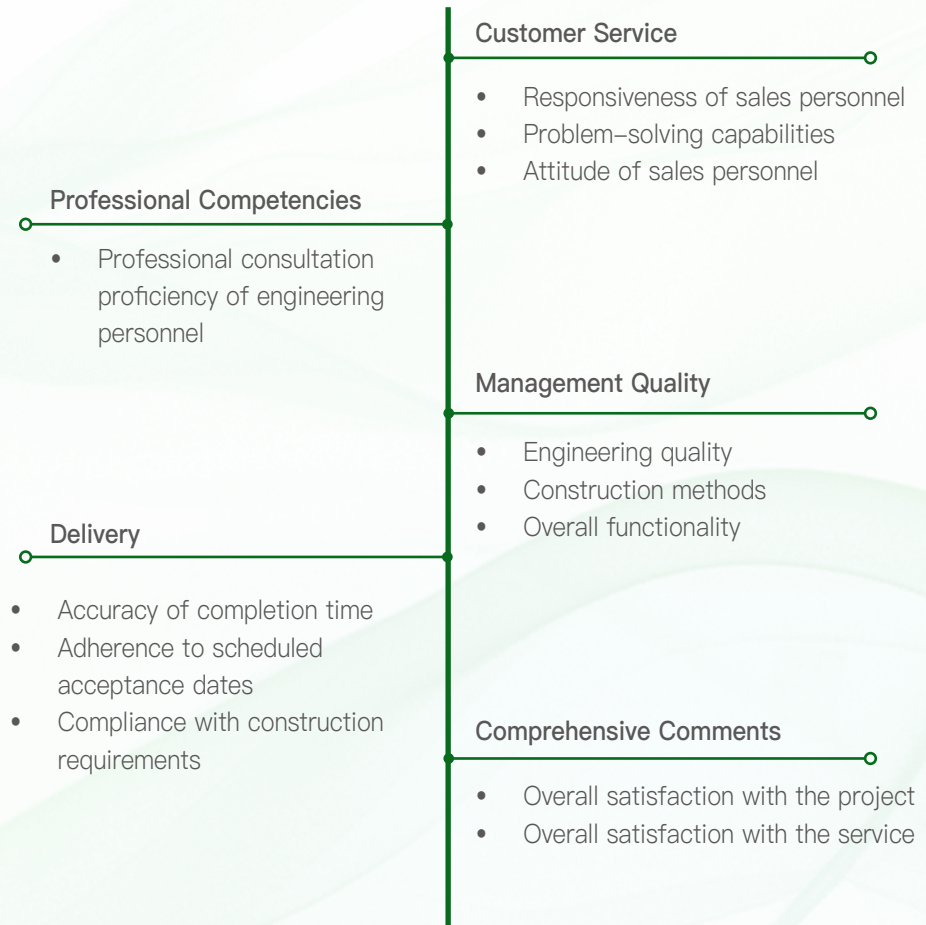
The entire process of project development, from self-assessment and land lease contract signing to installation application, project execution, and grid connection operation, is jointly carried out by our front-end business and engineering teams in collaboration with clients. The successful establishment of a power plant requires coordinated efforts and collaboration among the HDRE team, with subsequent operation and management tasks handled by our maintenance team. The satisfaction assessment of the project site can be divided into three main phases: development, construction, and completion, each involving different stakeholders. Segmenting the site development into these stages allows for better reception of customer feedback, facilitating future service improvements.

In 2023, the Business Department distributed satisfaction survey questionnaires during all three stages: 12 were collected during development, 2 during construction, and 7 upon completion. The overall satisfaction rate reached 70%.

During the development phase, dissatisfaction was primarily related to the lengthy process of submissions to public authorities. Steps have been taken to address this concern by enhancing communication with local government offices, aiming to expedite county approval and submission processes. In the completion phase, delays in acceptance schedules were attributed to construction issues. These concerns have been addressed through project improvements, and subsequent re-evaluation will enable equipment commissioning to proceed.

Composition	Survey Method and Frequency
 Project Development & Engineering Services	Through paper-based questionnaire surveys, we conduct an annual customer satisfaction survey for clients involved in HDRE's development and construction of project sites

Customer Satisfaction Evaluation Items




- **Asset Operation Management and Post-Investment Management**

The operation of assets can affect the overall performance; therefore, equipment operation management and financial analysis are key objectives of the Asset Management Division. The platform customer financial model is used as the field performance target, and the management asset status and capital activities and reports are tracked according to the internal field management regulations and on a daily, weekly and monthly basis, along with the submission of operation reports to track major matters quarterly, in order to increase the customer satisfaction.

In the year 2023, a total of 78 survey responses were collected for the customer satisfaction survey. All responses fell between satisfied and very satisfied, with no feedback rating average or dissatisfied. This outcome highlights the customers' acknowledgment and satisfaction with HDRE's teams in terms of customer service, professional capabilities, quality, and operational management.



Composition	Survey Method and Frequency
 Asset operation management and post-investment management	Perform paper questionnaire surveys, and conduct one time of satisfaction questionnaire survey on shareholders annually.

Customer Satisfaction Evaluation Items


<p>Professional Competencies</p> <ul style="list-style-type: none"> • Professional administrative management • Professional financial/tax management • Professional site technical consultation services 	<p>Customer Service</p> <ul style="list-style-type: none"> • Responsiveness of personnel • Problem-solving capabilities • Attitude in response
<p>Operational Performance Quality</p> <ul style="list-style-type: none"> • Timely provision of accounting settlement reports • Timely provision of management performance reports 	<p>Management Quality</p> <ul style="list-style-type: none"> • Administrative management services • Meeting scheduling and proposal content • Overall post-investment management performance
	<p>Overall Evaluation</p> <ul style="list-style-type: none"> • Timely response to management issues • Overall satisfaction with asset management services for the year



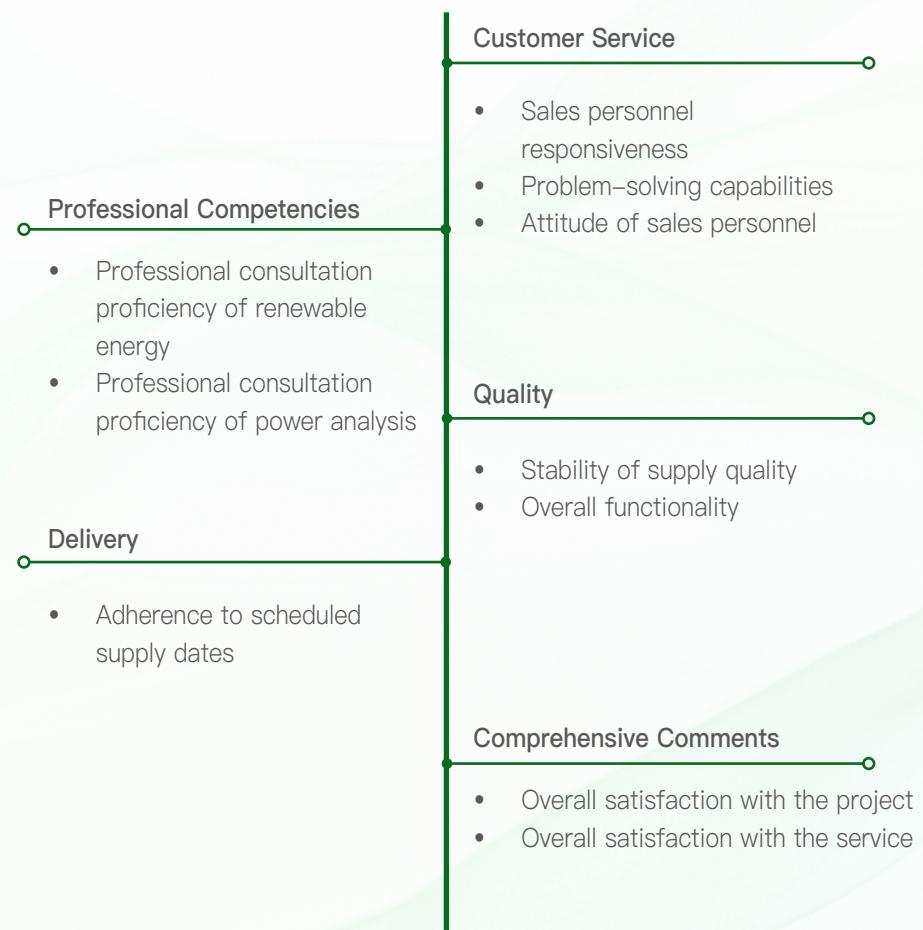
Green Energy Wheeling Service

Establish the green electricity sales management process of the Company, match the green power supply and customer demands, provide excellent service to green power customers. Customer satisfaction surveys are issued to customers purchasing green power annually, and the questionnaire type of survey is adopted to collect feedback. After the surveys are collected, the quality management unit then statistically analyzes and reports during the management review meeting. In addition, the power consumption status of all customers for the last month is statically analyzed on a monthly basis. In addition, for customers with differences between the actual power consumption and the expected power consumption exceeding more than 20%, power consumption status report is prepared in order to analyze the power consumption difference cause and to propose improvement recommendations. The performance is tracked in the following month to determine whether improvement has been made, in order to satisfy the power consumption demands of customers timely.

In 2023, due to Star Exchange being newly established, we received a total of xx survey responses. The overall average score was xx out of 5. The satisfaction assessment for this year indicated that 97% of responses fell between satisfied and very satisfied. We aim to expand our services in the smart power sector to meet customer needs comprehensively and continuously receive positive feedback and recognition from our customers.

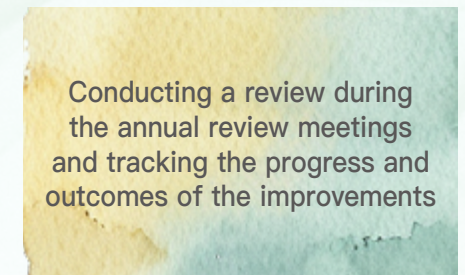
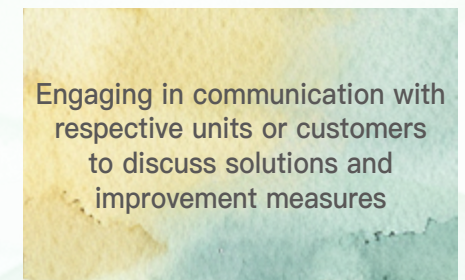
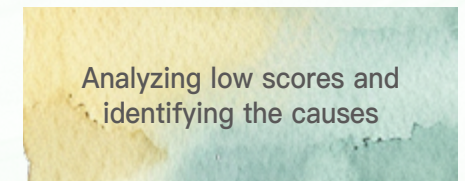
Composition	Survey Method and Frequency
 Green Power Wheeling Service	Perform paper questionnaire survey, and conduct one time of satisfaction questionnaire survey on current customers purchasing green power annually.

Customer Satisfaction Evaluation Items



Customer Satisfaction Improvement Process

HDRE values the feedback and opinions of stakeholders. After the customer satisfaction survey, we engage in communication and discussions regarding areas with lower scores and propose solutions. These issues are then tracked and reviewed during the annual review meetings.



04

Sustainable Environment and Clean Energy

- 4.1 TCFD
(Task Force on Climate-related Financial Disclosures)
- 4.2 Energy Policy and Management
- 4.3 Ecological Diversity Protection





CH4 Sustainable Environment and Clean Energy

Core Vision and Commitment





With global climate change and extreme weather becoming more prominent, we deeply understand the importance between energy management and sustainable development. We look forward to improving energy efficiency and using renewable energies to accelerate clean energy planning. We consider various aspects of the impact of climate change on the business operation, in response to the environmental related policies of our nation and the concept of sustainability of the World Commission on Environment and Development (WCED). The concept refers to “development that meets the needs of the present generation without compromising the ability of future generations to meet their needs”. Accordingly, we focus on “HDRE Sustainable Development Policy” to establish eco-friendly energy policy in terms of the environmental aspect, thus achieving the goal of “promoting circular economy, improving environmental energy performance, and reducing environmental impact effectively”. We are committed to the direction of low-carbon operation and implementing corporate sustainable development.

2023 Outcomes and Performance

- 1 The Taipei headquarters utilizes **100%** green energy.
- 2 Continue optimizing Task Force on Climate-related Financial Disclosures (TCFD).
- 3 Continue expanding the scope of greenhouse gas inventories; currently, the inventory for domestic offices has been completed.
- 4 **0** environmental regulation violations reported.

4.1 TCFD (Task Force on Climate-related Financial Disclosures)

The intensification of extreme weather conditions is prompting the international community to call for proactive action in response to climate change. In line with this, HDRE is actively establishing a risk management mechanism to assess the potential risks and opportunities associated with climate change across various aspects. We adhere to international initiatives and standards related to sustainability and climate change and have set forth response measures and management policies to enhance our ability to adapt to potential climate risks and strengthen the resilience of our sustainable operations.

The four key frameworks of TCFD	Key implementation projects	Responsible unit
 Governance	<ul style="list-style-type: none"> The Sustainability Department serves as the core unit driving sustainable development, including climate-related issues. In our 2023 Sustainability Report, we have incorporated the TCFD framework to outline climate risks and opportunities. The Board of Directors irregularly receives reports from the Sustainability Department on the implementation status of significant sustainability issues, TCFD climate information, and greenhouse gas inventory pathways. The Board provides feedback and input on the report contents. 	Board of Directors Sustainable Development Office
 Strategy	<ul style="list-style-type: none"> Identify significant risks and opportunities through the climate risk and opportunity matrix. Assess the potential impact of climate change on HDRE through scenario analysis. Completed inventory and obtained ISO 14064-1 third-party verification for office locations in Taipei and Taichung. By the end of 2023, the Taipei headquarters has achieved 100% use of green energy and the Taichung office 70.5%. Develop a "Green Procurement Policy" as a basis for management and implementation, integrating environmental and social performance into the procurement decision-making process, and encouraging upstream and downstream suppliers to follow it. 	Sustainable Development Office Various departments
 Risk Management	<ul style="list-style-type: none"> The Sustainable Development Department identifies climate risks and opportunities based on the TCFD framework, converging on the issues through interviews and focusing on significant climate risks and opportunities through questionnaire responses. The department consolidates the company's current management policies concerning significant climate risks and opportunities. 	Sustainable Development Office Various departments
 Metrics & Targets	<ul style="list-style-type: none"> We will continue to obtain ISO certifications, with the goal of completing assessments for all locations by 2025. We have established green energy usage targets and regularly track the progress towards achieving them. We actively address the related risks associated with climate change. Our subsidiary, Star Aquaculture Co., Ltd., plans to implement a water management system for aquaculture starting in 2023. This system will enable real-time monitoring of water usage. We aim to expand localization and green procurement efforts. This includes reducing lead times, decreasing transportation distances and carbon emissions of raw materials, and simultaneously creating more local employment opportunities to promote socio-economic development. 	Sustainable Development Office Various departments

4.1.1 Climate governance

Climate Governance Structure

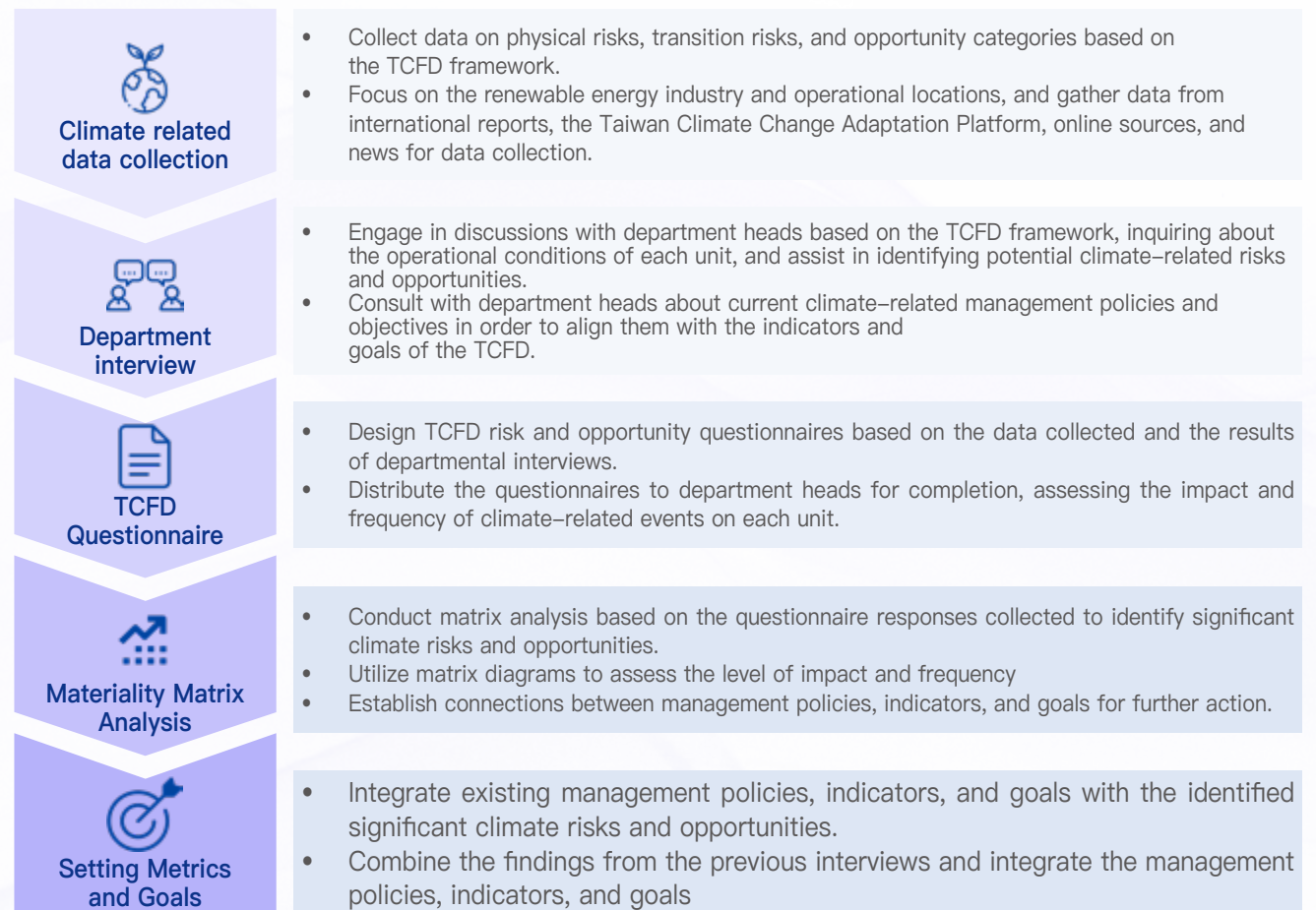
Led by the Chairman, the Sustainable Development Department identifies climate change risks and opportunities within the company. The Board of Directors oversees the process and ensures the implementation of issue identification, strategic planning, resource integration, and performance tracking from top to bottom. This continuous effort aims to drive the company's sustainable development goals. Climate risks and opportunities are observed and identified by various units through their daily operations. They are then discussed, analyzed, and identified as short-term, medium-term, or long-term risks and opportunities in sustainability discussions with the Sustainable Development Department.



4.1.2 Identifying climate risks and opportunities

To promote sustainable development within the company, we adopt the Task Force on Climate-Related Financial Disclosures (TCFD) framework. This involves conducting cross-departmental climate education training and interviews to establish a basic understanding of climate change and TCFD among our employees, integrating climate awareness into their work scope.

Additionally, we utilize climate questionnaires for design, completion, and analysis. By using "frequency of occurrence" and "impact level," we perform matrix analysis of climate risks and opportunities. This helps us identify significant climate risks and potential opportunities within HDRE. We then consolidate these indicators and goals to strengthen our climate management efforts.





TCFD Climate Risks and Opportunities Project Description

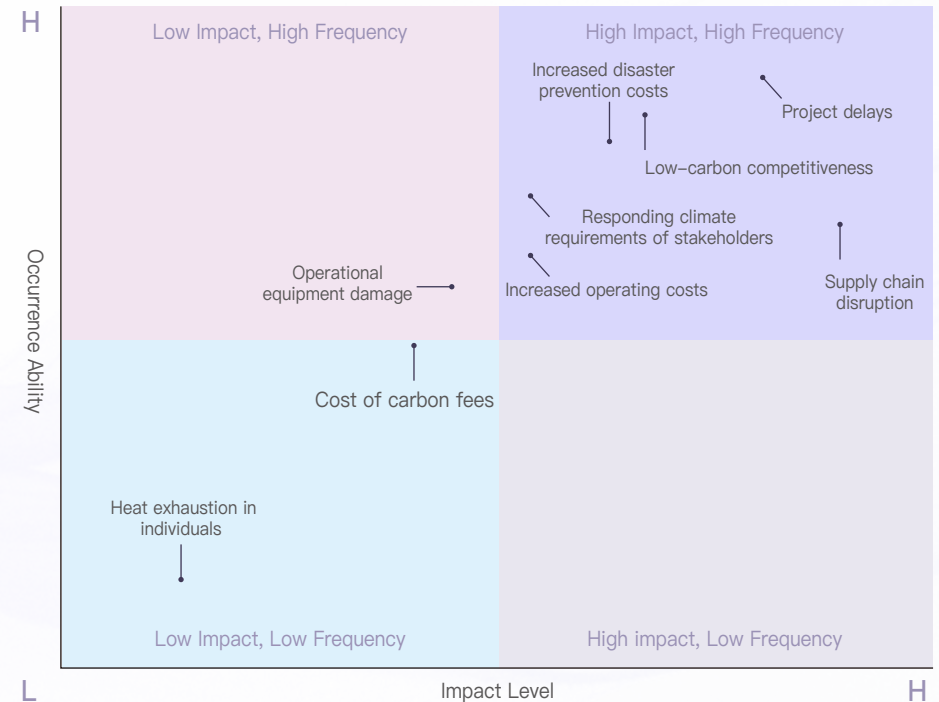
Based on the collected climate-related data, TCFD framework, and interviews with department managers, a total of 9 climate risks and 7 climate opportunities have been identified. These 16 TCFD risks, and opportunities have been incorporated into a questionnaire, which has been distributed to the respective department managers for completion. The responses from the questionnaires will be further analyzed using a matrix analysis approach to identify the significant climate risks and opportunities.

Risk project

Risk	Risk category	Risk prw	Potential operational and financial impact (description of risk impact)
Physical Risk	Immediateness-typhoon/heavy rainfall	Project delays	Extreme weather events such as typhoons and heavy rainfall are considered abnormal incidents. For instance, if the project site experiences severe flooding or transportation disruptions due to extreme rainfall, it can lead to project delays or increased operational costs.
		Increasing disaster prevention costs	To mitigate climate-related disasters, there is a need to enhance equipment's resistance to wind, heat, and flood prevention capabilities, which can result in additional costs.
		Operational equipment damage	The increased frequency of extreme weather events such as typhoons and heavy rainfall can directly damage operational facilities or information equipment.
		Supply chain disruption	Climate-related disasters such as heavy rainfall causing flooding or severe drought leading to wildfires can impact the normal supply of raw materials from suppliers, resulting in supply chain disruptions.
	Long-term-long-term climate impacts	Increased operating costs	The volatile weather patterns and the inadequacy of existing risk assessment systems cannot predict weather accurately. It leads to uncertainty of increased costs, adding pressure to cost management.
		Heat exhaustion in individuals	Prolonged increases in temperature contribute to a higher frequency and likelihood of heat exhaustion in individuals, thereby affecting the health of employees working on-site and increasing the risk of operational disruptions.
Transition Risks	Policies and regulations	Cost of carbon fees	Governments worldwide are implementing greenhouse gas reduction or carbon pricing policies to achieve their net-zero carbon emissions targets by 2050. This requires companies to reduce their carbon emissions. With stricter regulations in various countries, there is a potential for an increase in the cost of carbon fees in the future.
	Market risk	Low-carbon competitiveness	Customers are increasingly inclined to purchase low-carbon products and are demanding that the entire supply chain of companies, including HDRE, reduce the carbon footprint of their products. As a result, HDRE may incur costs associated with driving supply chain transformation, such as increased raw material costs and expenses related to guiding suppliers through the transition. Additionally, HDRE may need to invest in its own equipment and assets to meet market demands.
	Reputation risk	Responding climate requirements of stakeholders	Customers' expectations regarding HDRE's ability to assist businesses in their low-carbon transition, energy conservation, and carbon reduction efforts can impact stakeholders' (shareholders, customers, and suppliers, etc) perceptions of the company's image and reputation.

Climate risk matrix analysis results

A total of 6 major climate risks identified in 2023:

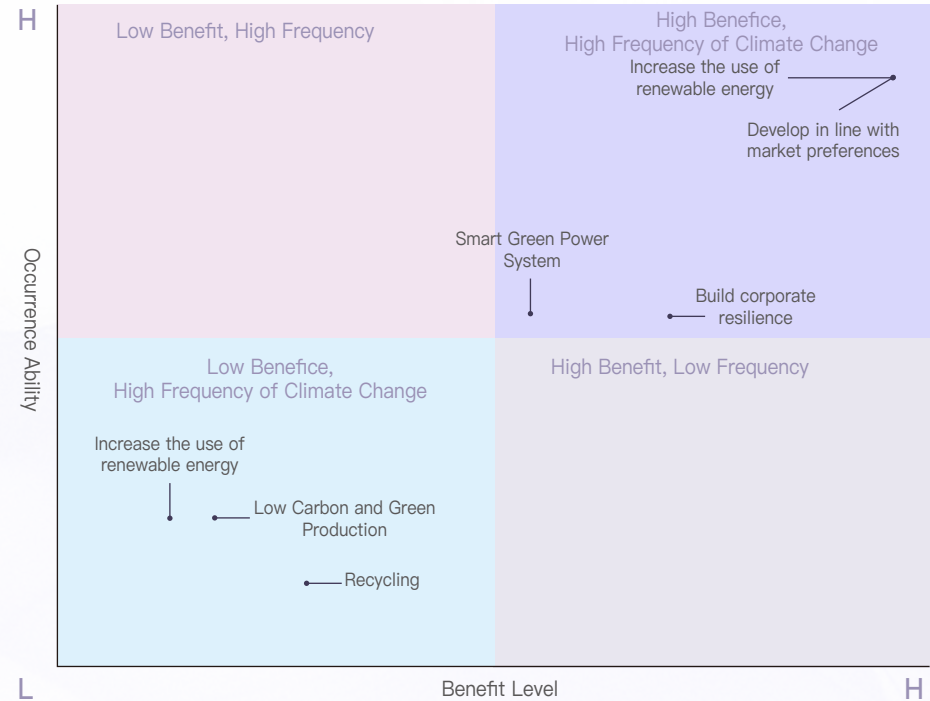


Opportunity project

Opportunity Category	Opportunity project	Potential operational and financial impact (description of opportunity benefits)
Resource efficiency	Low Carbon and Green Production	By utilizing more efficient production equipment, HDRE can reduce electricity and water consumption as well as waste generation during the assembly process, in order to reduce production costs.
Product and service	Smart Green Power System	By offering green energy consulting, planning, and sales services, HDRE can assist customers in obtaining optimal electricity scheduling and stable green energy supply, which leads to increased profitability.
	Recycling	By decomposing solar panels into different materials and using these materials to produce new solar panels or other products, HDRE can achieve a more environmentally friendly and sustainable approach to solar power generation. This initiative can attract more customers to collaborate and provide opportunities to enhance profitability.
Market	Develop in line with market preferences	Market and customer demand for green energy management, electric vehicle charging stations, solar panels, and other related products is increasing due to factors such as government policies. This trend presents an opportunity for HDRE to enhance its profitability.
	Increase willingness to invest	The growing awareness of green energy and the increasing demand for it have generated greater interest among investors in the green energy industry. This has resulted in increased investment opportunities for companies like HDRE, leading to a more abundant source of funding.
Energy source	Increase the use of renewable energy	In addition to supplying customers with renewable energy, HDRE implements green energy practices in its own facility construction and daily operations. By utilizing green electricity, the company aims to minimize its organizational carbon footprint and product carbon footprint. These efforts enhance product competitiveness and create opportunities for increased profitability.
Resilience	Build corporate resilience	HDRE actively monitors climate risks and opportunities to ensure the company's resilience in the face of disasters and maintain a keen awareness of climate-related opportunities.

Climate opportunity matrix analysis results

Four major climate opportunities have been identified for 2022:





4.1.3 Climate Risk Scenario Analysis

Taiwan's unique geography with its high mountains and steep slopes, combined with its highly variable climate, results in uneven distribution of rainfall and susceptibility to seasonal and regional water scarcity issues. Additionally, the typhoon and rainy seasons can lead to devastating floods. Furthermore, the increasingly stringent environmental regulations may result in carbon-related costs and emission controls, leading to rising costs for HDRE. Therefore, whether it is regarding "physical risks" or "transition risks," we approach their impacts with caution and manage them rigorously.

According to the matrix analysis of significant risks, the primary physical risk is "immediate typhoons or heavy rainfall," which may cause project delays, increased disaster prevention costs, damage to operational equipment, and supply chain disruptions. HDRE conducts climate risk assessments during the early stages of site development to ensure that the site is suitable for construction. Therefore, in this analysis of physical risks, we will focus on assessing the risk of flooding at office locations. The transition risks are categorized as market risk, reputation risk, and policy and regulatory risk. Market risk includes the "cost of changing market preferences," reputation risk involves "responding to supply chain climate requirements," and policy and regulatory risk refers to the "cost of carbon fees." Cross-departmental meetings discuss market and reputation risks. In this analysis of transition risks, we will primarily focus on evaluating HDRE's exposure under different scenarios from 2023 to 2050 and the potential consequences.

- Physical risk: risk analysis of flooding of operating bases:**

We conducted scenario simulation analysis using the RCP8.5 scenario and utilized information from the National Science and Technology Center for Disaster Reduction (NCDR) – Climate Change Adaptation Platform to estimate the climate conditions at the end of this century (2075–2099). Based on the analysis results, we will develop management measures accordingly.

Using the TGOS (Taiwan Geospatial One-Stop) layer of climate change disaster risk map as the data basis, we categorized the risks into levels: levels 1–2 represent low risk, level 3 represents moderate risk, and levels 4–5 represent high risk. The disaster potential levels were also calculated: levels 0–25 indicate first-level risk, levels 26–50 indicate second-level risk, levels 51–75 indicate third-level risk, levels 76–100 indicate fourth-level risk, and levels 101–125 indicate fifth-level risk.

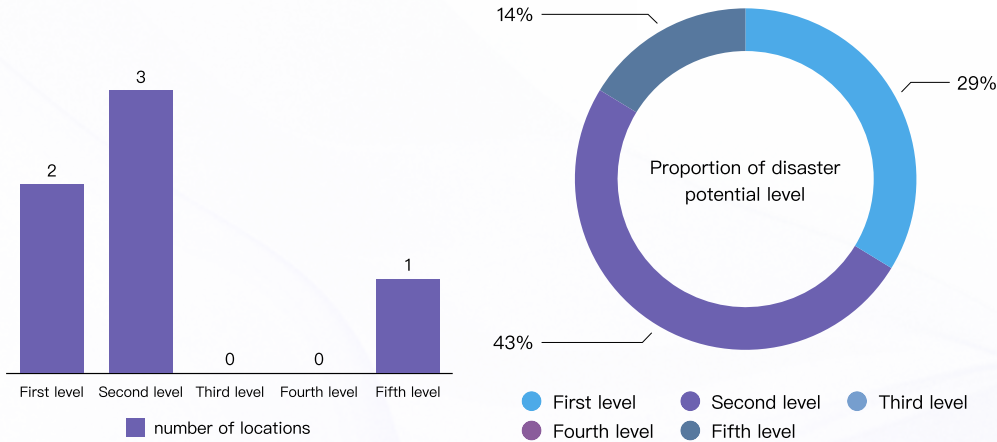
Among all the office locations in Taiwan, only the Kaohsiung office is categorized as fifth-level risk for potential flooding, while there is no statistical data available for the Penghu region. Flooding Potential Risk Level of HDRE Office

Flooding Potential Risk Level of HDRE Office

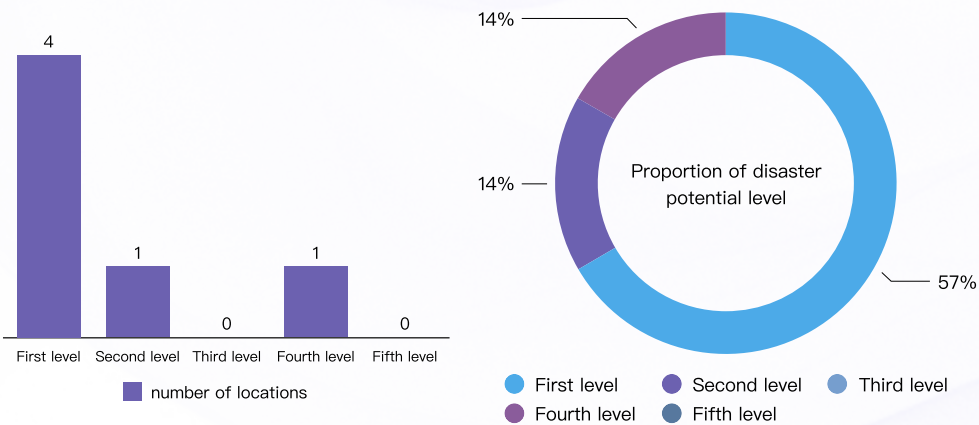
Name	Address	Taiwan-wide risk	Regional risk
Taipei head office and office	F5, No. 35, Dexing West Road, Shilin District, Taipei City, Taiwan (R.O.C.)	Second level	First level
Taipei Office	No.7, Dexing W. Rd., Shilin Dist., Taipei City, Taiwan (R.O.C.)	Second level	First level
Taichung Office	No.360, Sec. 2, Taiwan Blvd., North Dist., Taichung City, Taiwan (R.O.C.)	First level	First level
Tainan Xuejia Office	No.151, Heping Rd., Xuejia Dist., Tainan City, Taiwan (R.O.C.)	First level	First level
Tainan Jiali Office	No. 260–1, Jialixing, Jiali Dist., Tainan City, Taiwan (R.O.C.)	Second level	Second level
Kaohsiung Office	No. 56, Minsheng First Road, Xinxing District, Kaohsiung City, Taiwan (R.O.C.)	Fifth level	Fifth level
Penghu Office	No.21, Huimin Xincun, Magong City, Penghu County, Taiwan (R.O.C.)	No statistics	No statistics

Note: The overall risk and regional risk refer to different spatial scales. The overall risk presents the relative risk of all counties and cities in Taiwan, while the regional risk presents the relative risk within specific regions.

[Regoin] Disaster Potential Level Proportion of disaster potential level



[Regoin] Disaster Potential Level Proportion of disaster potential level



Scenario setting

We have followed the definition of future climate scenarios based on the "Representative Concentration Pathways" (RCPs) as outlined in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report. Specifically, we have used RCP8.5 as the reference scenario for greenhouse gas emissions.

RCP8.5 represents a high emission scenario where radiative forcing increases to 8.5 watts per square meter by the end of the century. In this scenario, carbon reduction policies remain unchanged, and countries make minimal efforts to mitigate greenhouse gas emissions. This leads to a sustained increase in atmospheric greenhouse gas concentrations, resulting in a projected temperature increase of nearly 4°C by the end of this century.

Scenario parameter

Index	Definition	Disaster type	Index selection
Hazard Level (H)	Climate Change Impacts on Climate Characteristics	Flood disaster	Probability of Experiencing "Rainfall Exceeding 600 mm Within 24 Hours" in the Baseline Period and Future Estimates.
		Slope disaster	Probability of Experiencing "Rainfall Exceeding 350 mm Within 24 Hours" in the Baseline Period and Future Estimates.
Vulnerability (v)	Extent to which the system is exposed to climate change hazards	Flood disaster	Analyzing the Flooding Index (Areas Prone to Flooding) Based on the Simulation of Quantitative Rainfall of 600 mm within 24 Hours.
		Slope disaster	Analyzing Vulnerability, Historical Landslide Index, Slope Index, and Geological Disaster Potential Based on Current Disaster Potential Data.
Exposure (E)	Objects that may be affected by the disaster	Flood disaster	Areas with higher population density are more directly im-pacted when a disaster occurs.

Source

- The Ministry of Science and Technology's "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform" (TCCIP)
- The National Science and Technology Center for Disaster Reduction has developed the "Climate Change Disaster Risk Adaptation Platform" (Dr.A)



• **Transition Risk: Carbon Fee Risk Analysis**

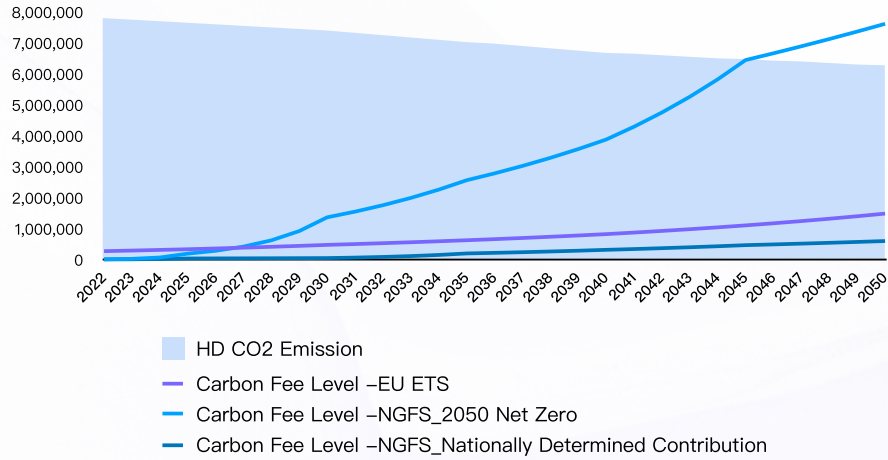
To achieve the goal of “Net Zero Emissions by 2050”, the Taiwanese government is in the process of setting carbon fee rates and related sub-laws under the “Climate Change Response Act”. In the foreseeable future, carbon fees will be levied on domestic emission sources. In 2023, HDRE’s greenhouse gas emissions (Scope 1 and Scope 2) amounted to 311.7209 metric tons. If the government imposes high carbon fees in the future, it will impact the company’s operating costs and gross profit.

Therefore, we assess the exposure of HDRE from 2023 to 2050 under different scenarios, using three carbon emission scenarios proposed by the International Energy Agency (IEA): the Stated Policies Scenario (SPS), the Announced Pledges Scenario (APS), and the Net Zero Emissions by 2050 Scenario (NZE). We combine these with carbon price level forecasts, including the “EU Carbon Tax Estimated Rates”, “NGFS 2050 Net Zero”, and “NGFS Nationally Determined Contribution”.

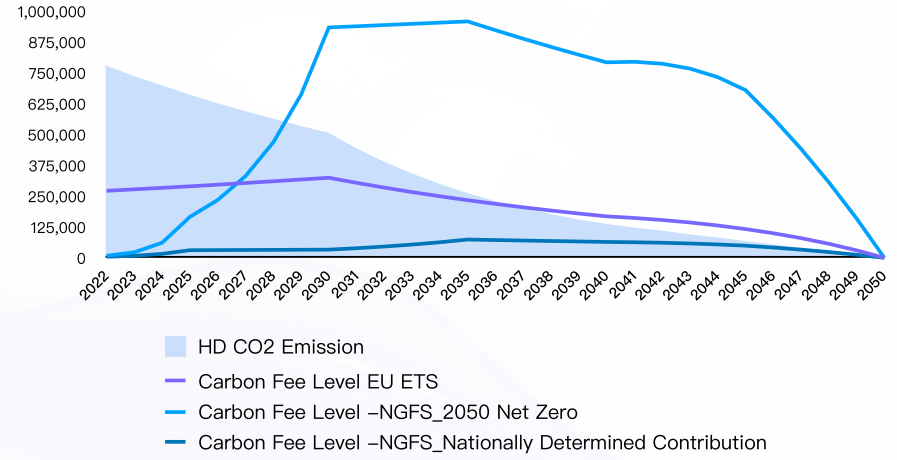


Carbon emission rate/year	EU ETS	NGFS_2050 Net Zero	NGFS_ Nationally Determined Contribution
Year	TWD/tCO2e	TWD/tCO2e	TWD/tCO2e
2023	939.33	76.16	27.71
2024	1012.79	218.22	56.67
2025	1092.00	625.26	115.92
2026	1178.70	932.13	124.08
2027	1272.28	1389.61	132.81
2028	1373.29	2071.63	142.16
2029	1482.32	3088.36	152.16
2030	1600.00	4604.11	162.87
2031	1708.00	5276.78	218.20
2032	1823.29	6047.73	292.34
2033	1946.37	6931.31	391.65
2034	2077.75	7943.98	524.71
2035	2218.00	9104.61	702.97
2036	2367.92	9993.87	779.17
2037	2527.97	10969.98	863.64
2038	2698.84	12041.43	957.26
2039	2881.25	13217.53	1061.02
2040	3076.00	14508.51	1176.04
2041	3283.93	16163.58	1280.35
2042	3505.90	18007.47	1393.92
2043	3742.89	20061.69	1517.56
2044	3995.89	22350.26	1652.16
2045	4266.00	24899.90	1798.71
2046	4555.38	25909.97	1903.71
2047	4864.40	26961.02	2014.83
2048	5194.38	28054.71	2132.45
2049	5546.74	29192.76	2256.93
2050	5923.00	30376.97	2388.67

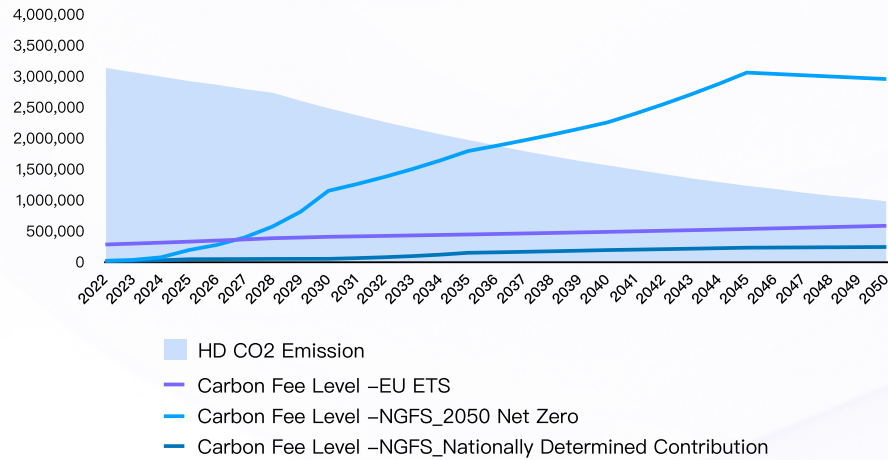
Scenario analysis of HDRE Energy's carbon fee(STEPS)



Scenario analysis of HDRE Energy's carbon fee(NZE)



Scenario analysis of HDRE Energy's carbon fee(APS)



Estimated year		2030	2040	2050
STEPS	Carbon Fee Scenario			
	Estimated rate of EU carbon tax	\$474,376	\$821,945	\$1,484,658
	NGFS 2050 Net Zero suggested rates	\$1,365,051	\$3,876,851	\$7,614,284
APS	Carbon Fee Scenario			
	Estimated rate of EU carbon tax	\$395,868	\$475,647	\$573,970
	NGFS 2050 Net Zero suggested rates	\$1,139,139	\$2,243,475	\$2,943,690
NZE	Carbon Fee Scenario			
	Estimated rate of EU carbon tax	\$324,534	\$168,014	\$0
	NGFS 2050 Net Zero suggested rates	\$933,870	\$792,466	\$0
	NGFS Below 2DC suggested rates	\$33,036	\$64,236	\$0



According to the analysis, under three carbon emission and five carbon fee scenarios, the carbon fee can go as high as \$7,614,284, which will account for approximately 0.13% of HDRE’s operating revenue in 2023 (\$5,770,414,000). The fee does not financially impact HDRE’s operations. Nonetheless, we remain highly aware of our greenhouse gas emissions. Currently, the Taipei office uses 100% green electricity, and the Taichung office has achieved its 2023 goal of at least 70% green electricity usage, with an actual usage rate of 70.5%. Our future goal is to expand the scope of greenhouse gas inventories from office locations to project sites. By improving technology, HDRE aims to reduce greenhouse gas emissions at every stage of the product life cycle, providing customers with low-carbon renewable energy solutions.

4.1.4 Climate Management Policy

The company discloses projects according to TCFD's recommendations, connects 6 major climate risks and 4 major climate opportunities that may affect the company's operations, strategies, and financial planning, and formulates corresponding management policies:



• Physical Risk: Immediate – typhoon or heavy rainfall event

Risk project	Construction project delay
Impact on operations or finance	Abnormalities caused by extreme weather conditions such as typhoons and heavy rainfall and severe flooding at the construction site, resulting in transportation delays or personnel injuries, leading to project delays or increased operating costs.
Management Policies	<ol style="list-style-type: none"> 1. Conduct climate risk assessment prior to site development, including factors such as wind speed, wind resistance, low-lying terrain, flood risk, unstable foundations, typhoons, rainy seasons, and high temperatures. 2. Reserve space for water accumulation and implement elevated supports or water-resistant structures in flood-prone areas during site planning. 3. Install multiple generators at the site to prevent operational disruptions in the event of power outages from the grid. 4. Implement standard operating procedures, self-inspections, and maintain construction logs. Strengthen progress tracking and update management schedules for each work shift. 5. Establish checkpoints for post-emergency event inspections to prevent the escalation of risks. 6. Ensure normal power generation at the site through real-time monitoring and routine maintenance. Prioritize maintenance activities before wind disaster to minimize the probability of flooding.

Risk project	Increased Disaster Prevention Costs
Impact on operations or finance	To mitigate climate-related disasters, it is necessary to enhance the equipment's resilience to wind, heat, and flooding, which may lead to additional cost increases.
Management Policies	<ol style="list-style-type: none"> 1. Incorporate climate conditions into site design considerations and optimize the equipment used in the facilities. Evaluate the installation methods and drainage plans based on past flooding incidents and the identification of the hundred-year flood line in flood-prone areas. 2. Implement anti-saline modules and supports in areas with high salinity. Enhance measures against salt spray during construction. 3. Consider both price and quality when procuring raw materials and use equipment that can withstand certain weather conditions in the site planning and design. 4. Obtain machinery insurance and business interruption insurance for all facilities to minimize the extent of potential losses.

Risk project



Supply chain disruption

Impact on operations or finance

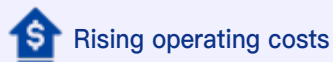
In the event that raw material suppliers are affected by climate-related disasters such as heavy rainfall causing flooding or droughts leading to wild-fires, it can disrupt the normal supply of materials and result in supply chain disruptions for HDRE.

Management Policies

1. Monthly warehouse inventory control and inventory checks are conducted to ensure an adequate supply of stock.
2. Avoid relying solely on a single supplier to mitigate the risk of supply chain disruptions by diversifying the sources of supply.

• Physical Risk: Long-Term – Long-Term Climate Impacts

Risk project



Rising operating costs

Impact on operations or finance

The weather fluctuates violently, and the existing risk assessment system cannot accurately predict, which increases the uncertainty of costs and increases the pressure on cost management.

Management Policies

1. Solarpro will be used during the project development phase to simulate 10 years of sunlight exposure and assess the power generation benefits.
2. Appropriate protective measures, such as lightning rods, improved drainage systems, and regular maintenance of the surrounding environment, will be installed based on the actual conditions.

• Transition Risks: Market Risk

Risk project



Low-carbon competitiveness

Impact on operations or finance

Customers prefer purchasing low-carbon products and require that the overall supply chain of HDRE reduces the product carbon footprint. Therefore, HDRE will incur costs associated with demanding supply chain transformation, such as increased raw material costs and expenses related to guiding suppliers in their transformation efforts. Additionally, HDRE will invest in its own equipment and assets to meet market demands.

Management Policies

1. We continuously engage with our customers, paying close attention to and listening to their needs. We provide customized and diverse solutions to meet their demands.
2. We conduct regular customer satisfaction surveys to understand their thoughts and identify areas where HDRE can improve.

• Transition Risks: Reputational Risk

Risk project



Responding to stakeholders climate requirements

Impact on operations or finance

Customer expectations regarding our ability to assist businesses in low-carbon transformation and energy efficiency may impact stakeholders' (shareholders, customers, suppliers, etc.) perception of our company's image and reputation.

Management Policies


1. We regularly hold shareholders' meetings to communicate the current situation and future of HDRE, engaging with stakeholders in the process.
2. We publish periodic sustainability reports that highlight our commitment to climate change, low-carbon initiatives, and energy management, showcasing our dedication to these important issues.




• **Climate Opportunity: Products and Services**

Opportunity project	 Smart Green Power System
Potential operational and financial benefits	By offering green energy consultation, planning, and sales, we enable customers to optimize their electricity scheduling and access stable green energy, thereby enhancing profit opportunities.
Management Policies	<ol style="list-style-type: none"> 1. We have established a subsidiary company, Star Exchange Co., Ltd., dedicated to green energy consulting and sales. Star Exchange Co., Ltd. focuses on providing customers with the green energy solutions they need. 2. We are committed to continuous development and improvement of our TITAN Smart Green Energy System. This innovative system leverages data collection and analysis to optimize power generation, energy storage, electricity sales, and distribution.

• **Climate Opportunities: Markets**

Opportunity project	 Develop in line with market preferences
Potential operational and financial benefits	Due to factors such as government policies, the market and customers are experiencing an increased demand for green energy management, electric charging stations, solar panels, and other related products. This trend presents greater opportunities for profitability.
Management Policies	<ol style="list-style-type: none"> 1. We will continue to monitor and collaborate with government policies to establish diverse renewable energy projects. 2. We will remain attentive to the electricity demand of corporate clients and the public in order to seize market opportunities.

Opportunity project	 Increase willingness to invest
Potential operational and financial benefits	The increasing awareness of green energy and the rising demand have led to a growing interest from investors in the renewable energy industry. This has resulted in a more abundant source of funding for HDRE, allowing for enhanced financial resources.
Management Policies	With the vision of "Living with Green Energy, accelerating a Net Zero Carbon Future," HDRE aims to explore the possibilities of various electricity applications and promote the widespread adoption of "Smarter Energy, Accessible Green" The company strives to become a smart green energy corporation, continuously advancing the development of the renewable energy industry.

• **Climate Opportunity: Resilience**

Opportunity project	 Build corporate resilience
Potential operational and financial benefits	Actively monitor climate risks and opportunities to ensure the company's resilience in the face of disasters and maintain sensitivity to climate opportunities.
Management Policies	Utilize TCFD (Task Force on Climate-related Financial Disclosures) climate-related financial disclosures to identify and understand climate risks and opportunities. Actively manage significant risks and opportunities, mitigate and adapt to climate risks, and capitalize on climate opportunities.

• **Metrics and Targets**

2024 target	Medium- and long-term goals
<ol style="list-style-type: none"> 1. In response to the Taiwanese government's "2050 Net Zero Emissions" policy, we commit to using 100% green energy in our Taipei office starting in 2023. Additionally, we will ensure that at least 70% of the energy used in our Taichung office comes from renewable sources. 2. We are dedicated to implementing and promoting the requirements of the management systems in all operational areas, including project sites, to ensure a safe and healthy working environment for our personnel. 3. We will actively pursue ISO 14064-1 certification for both our domestic offices. 4. We will continue to increase our purchase (general affair) of ReTissue, a recycled sanitary paper product, aiming to reach a procurement volume of 100 cases. Through this initiative, we could support the planting of at least 1,000 trees. 5. We plan to purchase an electric utility vehicle in the first quarter of 2023. This acquisition marks the beginning of an ongoing process to replace conventional company vehicles with electric ones. 	<ol style="list-style-type: none"> 1. We will regularly report climate-related issues, such as climate risks and greenhouse gas inventory status, in our board meetings. 2. We will continue to drive the adoption of 100% self-consumed green energy in our office locations and aim to expand this achievement to more sites. By 2025, our Taipei headquarters will achieve net-zero emissions, and by 2030, all our office locations will reach net-zero emissions. 3. We will strive for ISO 14064-1 certification for all our office locations. 4. We will expand our localization and green procurement efforts, prioritizing local supply chains. By working with local suppliers, we can improve service efficiency, reduce lead times, minimize transportation distances for raw materials, and decrease carbon emissions. Furthermore, this approach supports local job creation and fosters social and economic development. 5. 100% using electric passenger vehicles and commercial vehicles. 6. In line with the "Obsolete Electricity Consuming Equipment Replacement" program, we will gradually replace outdated lighting fixtures with energy-efficient LED lighting in our offices. Our offices will be using LED lighting generally in the future.

4.2 Energy Policy and Management

Green Energy Policy

1. We will establish sustainable development goals for our company and ensure their implementation and regular performance reviews.
2. We will drive the promotion of a circular economy, providing sustainable and clean energy sources to effectively enhance environmental performance and reduce environmental impacts.
3. We will encourage the participation of all employees in activities related to quality control, environmental and occupational health and safety, health promotion, and energy efficiency, and continuously optimize these areas.
4. We support environmentally friendly product design and green procurement practices.
5. We are dedicated to the research and development of intelligent monitoring and green technologies.
6. We aim to minimize ecological destruction and enforce environmental and occupational health and safety measures.
7. We strive for the sustainable development of our company, the environment, and society.

4.2.1 Greenhouse Gas Inspection

By conducting a greenhouse gas inventory of our own emissions, companies can gain insights into their emissions and take necessary measures to improve and work towards achieving net-zero carbon emissions. Since 2021, HDRE has obtained ISO 14064-1 certification and has been implementing greenhouse gas inventories in all its offices. Third party verification has been obtained according to the British Standards Institution (BSI) ISO 14064-1:2018. In the future, we will expand the scope of greenhouse gas inventories to include our project sites and seek ISO 14064-1 certification for those sites as well.

HDRE has implemented various measures to reduce its environmental footprint, including paperless operations, replacing energy-consuming equipment, upgrading to energy-efficient air conditioners and electric vehicles, promoting the use of public transportation among employees, and installing smart meters in our office spaces to enhance electricity monitoring and management. In 2023, our Taipei headquarters achieved 100% usage of green electricity for self-consumption.

Year	2021	2022	2023
Scope 1	147.4101	93.4242	119.5800
Scope 2	110.9375	119.2747	192.1409
Scope 3	97.6581	129.8187	294.6332
Total emissions	356.006	342.518	606.354

Unit: metric tons CO2e

ISO 14064-1:2018 Greenhouse Gas Inventory Verification





4.2.2 Energy Resource Use

Energy policy

The “Sustainable Development Office” of HDRE is the leading department for energy policies, and it uses the energy management regulations and the sustainable policy of “Improvement of Environmental Energy Performance” established by the Company as the highest directives for the energy management. In addition, meetings are convened periodically to review the energy achievement status. In order to achieve the five goals below, we plan to introduce the ISO 50001 Energy Management System in 2024 and improve energy performances by establishing the system and process.

- Improve company internal energy management and energy use efficiency
- Comply with energy management related regulatory requirements
- Invest in energy resources properly, and prevent waste of energy
- Plan energy resource use efficiency, and realize low carbon operation
- Ensure thorough completion of energy saving indicators



Total Energy Consumption in 2022 and 2023

		2022		2023	
		Energy usage (L, KWH)	Heat value (GJ)	Energy usage (L, KWH)	Heat value (GJ)
Total gas-oline usage	95 unleaded gasoline	14,108.44	460.43	14468.49	472.18
	92 unleaded gasoline	4,965.00	162.03	5120.16	167.10
	Super diesel	14,042.18	493.52	24268.23	852.92
Electricity		263,382	947.71	220,342	792.84
Renewable Energy		29,050	104.53	167,821	603.86

Total heat value (GJ)	2,168.227	2,888.905
-----------------------	-----------	-----------

Grid Power Percentage	43.71%	27.44%
-----------------------	--------	--------

Percentage of Renewable Energy	4.82%	20.90%
--------------------------------	-------	--------

Note 1: The heat values for various fuels are referenced from the Bureau of Energy's Greenhouse Gas Emission Coefficient Management Table 6.0.4 version. Electricity: 860 kcal/kWh, Gasoline: 7,800 kcal/L, Diesel: 8,400 kcal/L, 1 kcal = 4.184 kJ, 1 GJ = 1,000,000 kJ.

Note 2: The percentage of electricity from the grid is calculated as the electricity consumption (GJ) divided by the total heat value (GJ).

Note 3: The percentage of renewable energy is calculated as the renewable energy consumption (GJ) divided by the total heat value (GJ).

Note 4: The company's internal boundaries cover: Taipei headquarters and office, Taichung office, Tainan office, Xuejia office, Jiali office, Kaohsiung office, and Penghu office.




• Water Consumption Status

The water usage of HDRE Energy can be divided into internal office operations and external site operations. Internally, we primarily use water for general domestic purposes, while externally water is used for photovoltaic (PV) sites. The aquaculture water for the fishery and electricity symbiosis field is sourced from nearby drainage channels and collected rainwater in our own reservoirs.

In 2023, we completed the data collection of water resources for offices and warehouses. However, the current data collection is limited and does not include water usage for site construction and operation and maintenance. In the future, we will continue to expand our data collection to include all sites. The total water consumption for HDRE Energy in 2023 was 2,694 cubic meters, which includes all office locations.

Solar panels contribute to the development of renewable energy and water conservation. However, during the subsequent maintenance phase, water is used to clean the solar panels. The cleaning methods vary depending on the type of site. Currently, manual cleaning is the primary method, but we plan to introduce automated cleaning equipment in the future to reduce the use of manpower and water resources.

HDRE Energy Field Water Consumption Status

Water Consumption Item	Water Consumption Type	Remarks
 Cleaning solar panels (Ground type, roof type)	Clean water	Each field is cleaned quarterly depending upon the weather condition. Clean water and tools are used to clean the modules. The main purpose of cleaning is to physically remove dust, such that water stain or dirt problem can be eliminated. After cleaning is complete, it is drained off directly.
 Fishery and electricity symbiosis field	Clean water	The wastewater from the aquaculture is directed into our own reservoirs, where the water quality is treated and improved. It is then recycled for reuse, and no wastewater is discharged.
 Water resources inventory	Planning in process	HDRE's subsidiary, Star Aquaculture Co., Ltd., plans to implement a water management system in 2023 to monitor water usage in real-time.

Water Resource Utilization Policy

- HDRE recognizes the importance of water resource management and has developed a water resource utilization policy. The company has set directions for water resource development and has implemented water-saving initiatives based on the four directions:
- Enhance water resource recycle and reuse, and use equipment adopting water saving design for photovoltaic fields
- Expected to Introduce the water resource recycling system for fishery and electricity symbiosis fields, and install rainwater collection and module cleaning and reuse of wastewater
- Continue to implement new technologies for fishery cultivation water resource recycle and reuse
- Implement automatic water-saving cleaning equipment for water consumption of fields in the future








Water Resource Utilization Policy

HDRE recognizes the importance of water resource management and has developed a water resource utilization policy. The company has set directions for water resource development and has implemented water-saving initiatives based on the four directions:

- Enhance water resource recycle and reuse, and use equipment adopting water saving design for photovoltaic fields
- Expected to Introduce the water resource recycling system for fishery and electricity symbiosis fields, and install rainwater collection and module cleaning and reuse of wastewater
- Continue to implement new technologies for fishery cultivation water resource recycle and reuse
- Implement automatic water-saving cleaning equipment for water consumption of fields in the future



• Energy Saving and Carbon Reduction Measures

Execution Plan	Description
 <p>Select green energy equipment with energy saving</p>	<p>Selected highly efficient and eco-friendly machine model complying with the government regulations</p> <ul style="list-style-type: none"> • Installation of smart meters in the Taipei and Taichung offices, with the Taipei office achieving 100% usage of green energy in 2023 and the Taichung office achieving 70.5% green energy usage in 2023. We do this spontaneously. • Promotion of policies for the electrification of government vehicles, use of LED lighting fixtures, and adoption of new energy-efficient air conditioning systems.
 <p>Living environmental protection and good habit</p>	<ul style="list-style-type: none"> • Promoted all employees' spontaneous use of eco-friendly tableware. • Avoid the use of disposable beverage cups, utensils, and containers for gatherings and food orders. For example, limit drink orders to bulk containers or encourage the use of reusable eco-friendly cups. • Installed heating equipment, such as microwave and electric pot to facilitate employees bringing their own lunch boxes for meal heating, to increase employees' will to use eco-friendly tableware.
 <p>Reduce waste and save energy, implement recycle and reuse</p>	<p>Field construction</p> <ul style="list-style-type: none"> • Changed to use steel molds for repetitive use for the construction to reduce material purchase and waste. It can replace the purchase of mold and material in every site operation in the past. • Due to the different site locations, certain facilities and equipment, such as container offices, toilet installation, safety fences and pallets, etc, will need to be modified for reuse on the next site. <p>Internal of the Company</p> <ul style="list-style-type: none"> • Implemented paperless and electronic administrative operation. • Every 20th of the month is "Meat-Free Day" at HDRE, where lunch is served without meat to promote a low-carbon and healthy lifestyle. • Every 30th of the month is "On-Time Clock-Out Day" at HDRE, where all lights are switched off at 7:00 PM.

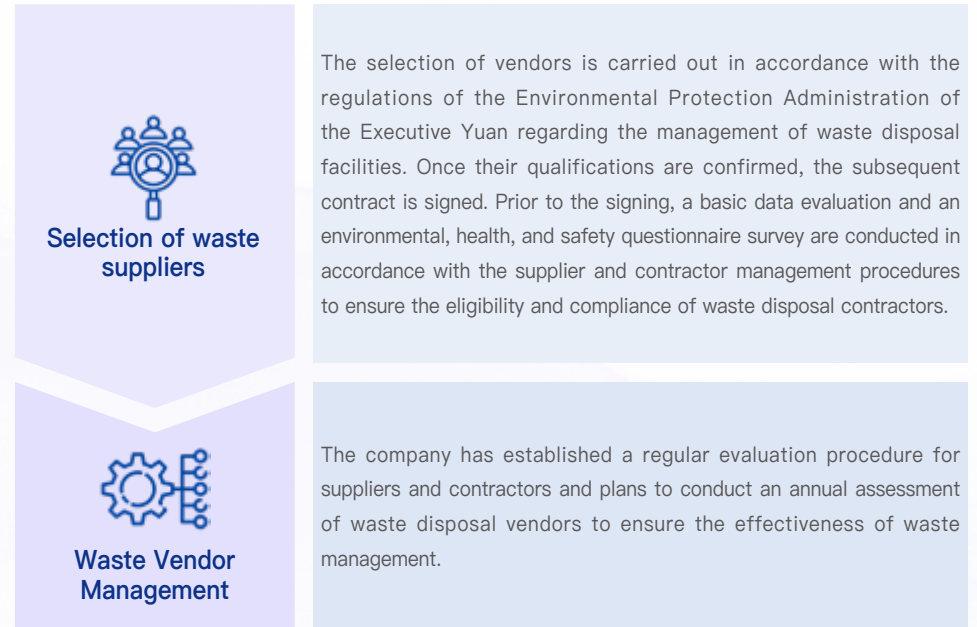
4.2.3 Waste Management

The scope of wastes generated by HDRE mainly refers to the activities associated with the office, construction of photovoltaic fields and field maintenance. We perform waste management according to the waste management related regulatory requirements completely and implement three main strategies: reduction of waste, proper treatment, and recycle and reuse. In addition, we also consider the characteristics and volume of different types of wastes to adopt different actions or treatment methods, thereby reducing impact of operation on the environment.

Waste Management Strategy	Description of Action
 <p>Reduce waste</p>	<ul style="list-style-type: none"> During the procurement process, select reusable and eco-friendly materials (for example: reusable steel molds can be used for fields, and eco-friendly LED light tubes can be used for office areas). “Paperless” policy is implemented in the office. For example, we switch to an electronic approval system to reduce waste of paper.
 <p>Proper treatment</p>	<ul style="list-style-type: none"> Identify waste types at sites and entrust qualified waste disposal contractors to recycle accordingly. Offices are equipped with recycling bins to ensure good practice with general waste.
 <p>Recycle and reuse</p>	<ul style="list-style-type: none"> Wastes are classified, and if there are reusable materials, they are uniformly placed at the warehouse for repetitive use until they reach the end of their life cycles, then be properly disposed of.

Waste Treatment Process

According to the scope of business, waste can be divided into: photovoltaic field wastes (business waste) and living waste of office areas (general waste). The treatment methods of such wastes comply with the Waste Disposal Act, and the most appropriate recycle method is adopted for each type of waste.



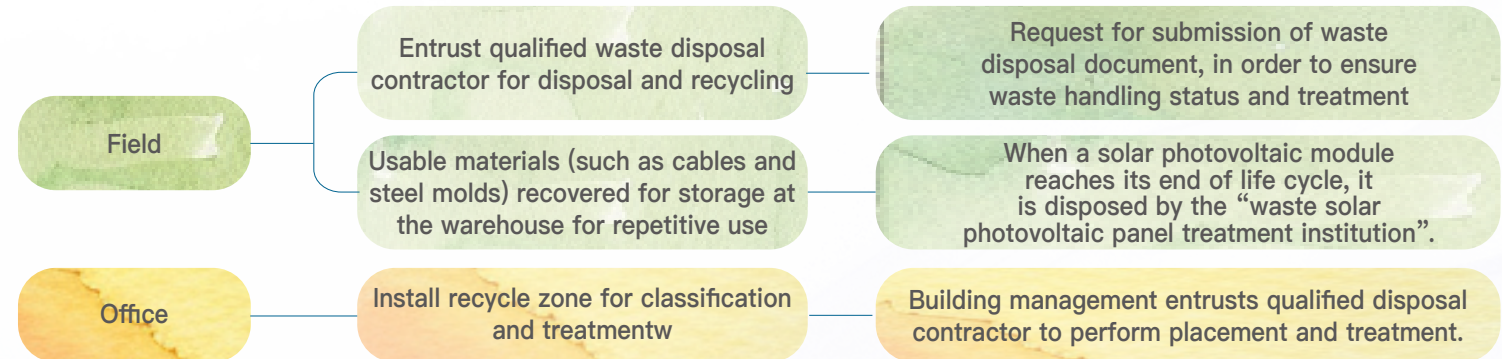
Field Wastes

The main treatment process can be divided into disposal and waste reuse. For waste disposal, the evaluation, assessment, and review of suppliers are performed according to the government laws and regulations, and a qualified waste disposal contractor is entrusted and requested to provide the waste disposal documents, to ensure the status and treatment adopted for the wastes. For reuse of wastes, reusable steel molds and cable reels are used during the purchase of raw materials, to reduce generation of wastes. When a solar photovoltaic module reaches its end-of-life cycle, it is disposed by the “waste solar photovoltaic panel treatment institution”

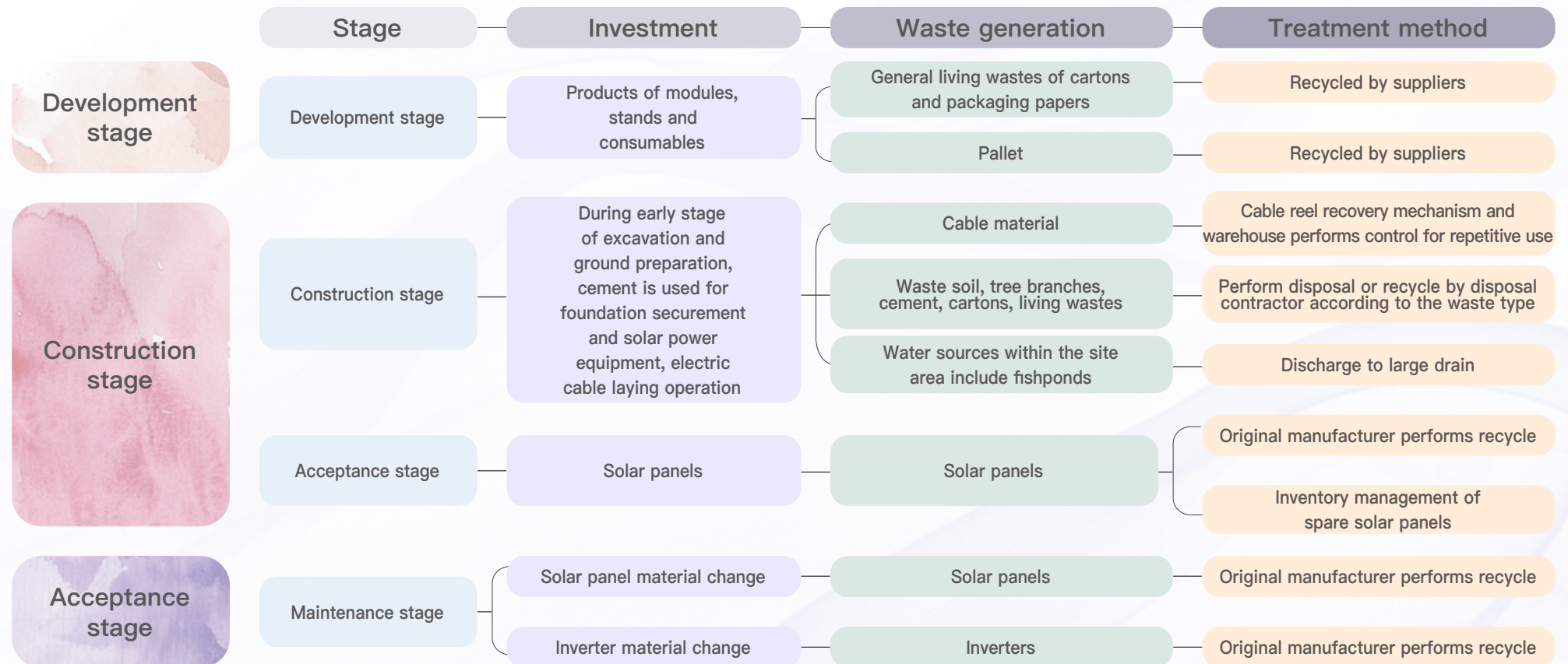


Living Wastes of Office Buildings

Waste and recycle areas are set in the offices of HDRE and wastes are subsequently classified at the building recycle zone. The waste will be treated by qualified disposal contractors which are appointed by the building's management.



Operation waste treatment process flow chart



- 2023 Waste Management and Achievement

Confirm legal compliance of waste disposal contractor

Complete waste disposal contractor compliance review and contract signing




100% Compliance

Construction activity with waste reduction, and use of steel molds

Increase reuse rate of construction materials and steel molds

100% Compliance

Waste Treatment Short/Medium/Long Term Plan

Category			
	Argicultural waste resource utilization	Construciton activity with waste reduction	Operation management informatization
Short/Medium Term	Initiate biochar test plan	Change molds to steel molds, fence, pallet recycle and reuse	Implement electronic administrative operation
Long Term	Biochar commercialization	Continue implementation	Continue implementation

4.3 Ecological Diversity Protection

Promoting local prosperity and coexisting with the ecology have always been a development goal that HDRE is committed to. Through the development of various sites across Taiwan, we adhere to the principle of non-destructive ecology while adding value to the land, providing residents with a more diverse lifestyle and opportunities. In 2022, HDRE initiated the development of the Qigu project in Tainan. From assessment and communication to the promotion of diverse ecological coexistence, HDRE not only emphasizes commercial operations but also values the inheritance of sustainability, aiming to achieve a vision of shared prosperity and well-being for the corporate, society, and the ecology.





Material Topic : Ecological Diversity



Actual and potential positive impacts (opportunities) on the economy, environment, and population

While developing solar energy projects, collaborating with local environmental and animal protection groups to plan ecologically preserved areas with no development can help maintain biodiversity. This approach can enhance trust within the local community and instill confidence in investors. Taking the population changes of the Black-faced Spoonbill as an example, according to the "2022 Global Synchronized Census of Black-faced Spoonbills," the global population of Black-faced Spoonbills continues to increase, with a continuous growth in the number of wintering individuals in Taiwan. Their distribution has also become more widespread compared to previous years, with the highest number of wintering individuals observed in Tainan. Furthermore, the population has been steadily growing each year.



Actual and potential negative impacts (risks) on the economy, environment, and population

If there is a significant deterioration in the local ecology or a decline in biodiversity after the solar energy project development, it can easily become a subject of blame, resulting in a negative corporate image, and hindering further business development.



Resources invested in 2023

As an example of the Black-faced Spoonbill population, in April 2023, the results of the global synchronized census were announced, revealing a new historical record with a total of 6,603 individuals wintering worldwide. Taiwan, being the most important wintering site globally, has achieved a significant milestone this year. Through the efforts of the Forestry Bureau and the Chinese Wild Bird Federation, Taiwan recorded a record-breaking 4,228 Black-faced Spoonbills, accounting for 64% of the global population. Over 90% of the Black-faced Spoonbill population in Taiwan is distributed in areas such as Tainan, Chiayi, and Kaohsiung. Clearly, the development of solar energy projects has not had a negative impact on the sensitive conservation of these migratory birds. HDRE will continue to adhere to ecological and environmental conservation principles in the development of future solar energy projects, minimizing any potential impact on the local ecology.

Strategy Goal



Company Policy and Commitment to Biodiversity

HDRE firmly believes in the importance of preserving biodiversity. This commitment not only reflects our significant corporate social responsibility but also our dedication to the environment and sustainability. We actively respond to the United Nations' Sustainable Development Goals by taking concrete actions to protect terrestrial ecosystems and preserve biodiversity, ensuring the balance of the ecological sphere.

Principles:

HDRE upholds the belief in harmonious coexistence between humans and nature, practicing biodiversity and sustainable development. We continuously strive to raise awareness of biodiversity among our employees, shareholders, customers, and suppliers. During our business operations, we avoid engaging in activities within critical biodiversity areas. If we operate in proximity to such areas, we take measures to minimize any potential impact. We also strive to avoid or minimize the release of pollutants into the air, water, and soil.



Short-, medium- and long-term goals

1. We conduct surveys on the biodiversity development around our main project sites and establish a sensitive biodiversity map.
2. We expand the native aquatic species in aquaculture to promote the restoration of the natural fish population.
3. Based on the results of biodiversity surveys, we collaborate with agricultural experts to enhance the diversity of insects and plants in the surrounding ecosystem.

4.3.1 Environmental and Social Assessment

• Environmental and Social Assessment

Most of the domestic fishery and electricity symbiosis type of solar photovoltaic field developments are located at the southwest coastal areas. Since such areas have rich aquatic birds and ecological resources, it is necessary to consider ecological balance during the field development. All stages of the field development from site selection, planning and construction operation can bring benefits and cause impacts on the environment. Accordingly, it is necessary to determine possible aspects and impact levels during the installation of the photovoltaic equipment, and plan early with response strategies in order to prevent possible impacts.

To achieve the goal of ecological balance, we autonomously entrust environmental experts to perform in-depth assessments of environmental and social inspections, water and soil assessment and ecological investigation, etc. before the development of each field.



Environmental and Social Inspection

- For different conditions, such as sunlight exposure / tree shielding / low ground with typhoon flooding, etc., simulation software is used to perform simulation assessment, to achieve precise assessment result.
- Consulting firms and environmental organizations are commissioned to conduct environmental and social assessments. Developer engagement with landowners and fish farmers is strengthened through interviews, enhancing credibility.



Water and Soil Assessment

Regular quarterly water and soil quality testing is conducted.



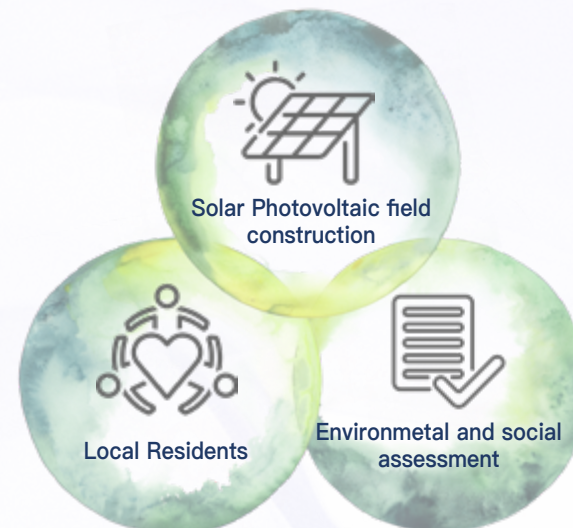
Ecological Investigation

External ecology consultants are hired to perform investigation and monitoring.

• Execution Outcome

Balancing green energy and ecological prosperity while respecting the wishes of residents and safeguarding the rights of fishermen has always been a crucial concern for us, especially in the planning of solar photovoltaic projects. To address this, we engage environmental organizations to facilitate coordination and conduct environmental and social assessments as the initial step of communication. This approach enables us to better understand the perspectives and concerns of the local community regarding solar photovoltaic projects. By identifying potential local risks and proactively addressing them through early negotiations, we aim to foster positive relationships with the local community throughout the project planning phase, ensuring a harmonious coexistence.

For example: During the planning of the construction route, we will take into account the local traffic and religious culture, such as temple activities. Only after discussing and negotiating with the residents will we design the site to mitigate possible impacts. In addition, during the development period, we also attend temple activities and provide donations of relief supplies and goods in order to maintain proper relationship with the local community. In addition, since 2018, we have also reserved the “Wild Goose and Duck Ecological Protection Zone” at Tainan Qigu field during the installation of the photovoltaic field, and constructed the “Net Zero Carbon Emissions Demonstrative Zone” at Yunlin Gukeng. In the future, we will continue to promote field protection and geological recovery and engage with relevant organizations to implement land sustainable development through joint efforts.





Tainan Qigu Fishery and Electricity Symbiosis | Wild Goose and Duck Ecological Protection Zone

- First project with “operator’s self-submission of environmental and social inspections response solution mechanism” in Taiwan
- Fishery and electricity symbiosis field approved by the Council of Agriculture, fishery photovoltaic zone

Yulin Gukeng Net Zero Carbon Emissions Demonstrative Zone | Waste bamboo recycle

- Approval of the Council of Agriculture was obtained in 2022
- First photovoltaic project responding to the government's net zero carbon emissions path
- First solar power project combined with biofuel

Solar Photovoltaic Field Development Land | Local Co-prosperity

- Field construction route not affecting religious and folk activities
- Donate local agricultural special products, attend religious and folk activities or donate relief supplies
- Ensure each local development project employing a certain percentage of local residents

• Wild Goose and Duck Ecological Protection Zone

Qigu field with 60 hectares of waste fish farm reserved for wild goose and duck ecological protection zone	
Place	Qigu, Tainan
Area	57.74 hectares
Period	2018~2021
Relevant participating units	Taiwan Environment and Planning Association Central Environmental Ltd.
Executive Description	This case is in Qigu, Tainan. During the development, fish farms abandoned or occupied by others for cultivation for a long period of time were found to have reuse value. Environmental monitoring was performed during the early stage to determine the local ecosystem and species, to assess whether the land was suitable for development. We found goose and duck ecosystems and native mangrove areas growing at the abandoned fish farms. To protect the existing environmental ecology, we decided to reserve the area without development, and discussed possible ecological disturbances with environmental consultants for strategies.



• Waste Bamboo Recycle

Yulin Gukeng Net Zero Carbon Emissions Demonstrative Zone: Waste bamboo recycling	
Place	Gukeng, Yulin
Area	25.35 hectares
Period	2020~Present (Development in process)
Relevant participating units	Taiwan Sugar Corporation Sinotech Engineering Consultant Ltd. People Nudge Platform
Executive Description	Yulin Gukeng is a place of rich natural landscape and agricultural development, and it is also one of the key organic agricultural development cities. Through public tender, HDRE obtained an abandoned cultivation farm released by Taiwan Sugar Corporation at Gukeng. Through geological drilling and soil test, we further determined that the field was a gravel land which is not suitable for cultivation. Based on the consideration that a lot of farmers were concerned about the development of this project, it was important for us to find the balance between the green energy policy and the agricultural development. We convened several local explanatory seminars and entrusted public groups to organize community workshops, to understand the expectation and worries of the community residents. We also continue to correct the field design during the development process, to additionally install recreational space, green energy environmental education site, ecological detention basin, environmental facility walkway and bicycle lane to satisfy the community needs and to reach consensus with local farmers. In view of the global emphasis on climate change, this project responds to the government policy vision of 2050 Net Zero Carbon Emissions, and we have actively included a net zero carbon emissions demonstrative zone in the project, thus establishing a demonstrative project for photovoltaic and agricultural material reuse.

Agricultural Materials Recycle and Reuse



- One land with multiple purpose and Multi-objective planning
- Agricultural residual material reuse
- Agricultural recycle technology

Renewable Energy Net Zero Transformation



- Gukeng photovoltaic net zero cycle demonstration park
- Activation of abandoned cultivation land of Taiwan Sugar Corporation
- Net zero carbon emissions implementation

Landscape Recreation Education Demonstration

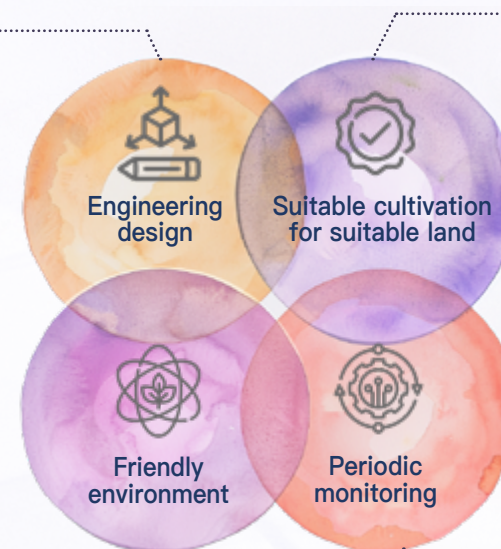
- Composite use of land for multiple values
- Green energy/organic/low carbon promotion
- Neighborhood community recreation space establishment

Eco-friendly Design

HDRE is committed to the construction of eco-friendly fields based on the philosophy of “Green Energy Ecosystem Co-existence and Co-prosperity”, and the development considers environmental ecology and reduction of environmental impact as the priority. For the future construction of fields, we look forward to implementing the concept of sustainable environment in each photovoltaic field during the operation process. To implement this philosophy, presently, we are actively planning the “Eco-friendly Design” and environmental and social inspections are assessed in depth, in order to plan appropriate cultivation field type according to the water area, fish farm terrain, etc., thereby identifying different photovoltaic field environment conditions and demands. Accordingly, corresponding eco-friendly design can be adopted, such as: installation of migrating bird eco-protection zone, reserved fishery suspension period, prohibition of use of chemical agents for module cleaning operation, etc. In the future, we will continue to strengthen biodiversity protection actions, in order to preserve the original ecosystem as much as possible, thus heading toward a 100% green energy ecosphere and implementing ecological and environmental protection.

We review and propose corresponding strategies for environmental and social issues outlined in the official announcement section. In cases where the development zone includes important areas for biological activities or habitats, we adopt a leasing but non-development approach as a means of habitat creation and compensation measures.

1. Prohibit use of chemical agents for module cleaning operation
2. We ensure proper cleaning of our engineering equipment and the environment.



We select suitable species based on the local conditions and assess the market conditions of the species for planning purposes, in order to facilitate sustainable aquaculture operations.

1. We conduct regular ecological monitoring before, during, and after the construction phase as well as during the operational period.
2. We perform quarterly water and soil assessments to evaluate their quality and condition.



4.3.2 Ri Yun site in Qigu, Tainan

The Ri Yun site (fishery and electricity symbiosis) in Qigu, Tainan that was developed by HDRE is a fishery-solar coexistence project approved by the Tainan City Government, the Energy Bureau of the Executive Yuan, and the Council of Agriculture. It is also the first self-conducted environmental and social impact assessment project of its kind in Taiwan. Non-governmental organizations were involved in conducting interviews with various stakeholders and identifying ecological and social issues.

Fishery and electricity symbiosis inevitably has an impact on the environment and the local community. Balancing green energy development, ecological well-being, respecting public opinions, and safeguarding the rights of fishermen have always been a top priority for HDRE. Therefore, we have engaged environmental organizations to conduct environmental and social impact assessments and facilitate communication with stakeholders. This allows HDRE to fully understand the community's perspectives and concerns regarding solar energy projects. We have organized explanatory meetings to facilitate dialogue, address concerns, and incorporate the feedback from stakeholders into the project planning. Our goal is to establish a renewable energy project that benefits all parties involved, while ensuring biodiversity conservation and supporting the aquaculture industry, which would be a win-win-win scenario.

- **Future plan**

Due to the active development of solar energy projects in Qigu district in Tainan in recent years, HDRE believes in the importance of integrating solar energy and the environment. As a result, the company has sponsored and joined the Environmental Planning Association of the Tainan Salt Field Wetland Restoration Alliance. Through organizational coordination and wetland conservation efforts, the goal is to achieve sustainable coexistence between humans and wildlife.

Protecting the salt field wetlands not only serves to preserve natural carbon sinks but also enhances the functionality for migratory birds and strengthens the wetland ecological network, thus conserving endangered bird species and wetland wildlife. The wetland restoration plan proposed by the alliance is expected to span at least three years, and HDRE plans to provide continuous sponsorship and support for the project.



05

Sustainable Talent · Happy Workplace

5.1 Human Resource Management

5.2 Deep-rooted Talent Cultivation

5.3 Friendly Workplace Realization





CH5 Sustainable Talent · Happy Workplace

Core Vision and Commitment

HDRE considers its employees as one of the most valuable assets of the company. In the evaluation of material issues conducted in 2023, three major issues highly relevant to the employees were identified by integrating the perspectives of internal and external stakeholders. These issues include talent retention and attraction, employee salary and benefits, occupational health and safety.

On the premise of ensuring a safe working environment and occupational safety, HDRE combines talent planning with company strategic goals to create an entrepreneurial spirit of innovation, enthusiasm, boldness, ambition, and a sustainable pioneer. We are committed to creating comprehensive career development opportunities and a diverse and inclusive working environment for our employees, and providing competitive salaries and benefits, thereby establishing a stable talent pool for HDRE.



2023 Results and Performance



1 Implementing the three major management systems: ISO 14001, ISO 45001 and ISO 9001, and obtained third-party verification.



2 Established environmental, health and safety execution performance and goals, and effectively implement and track their outcomes.



3 In response to the "Youth Recruitment Program for College Students" launched by the Ministry of Labor, a letter of intent for cooperation was signed with Penghu University of Science and Technology.



4 Accumulated a total of 559,620 accident-free working hours, which reached the target and was rewarded with a certificate.



5 Initiated a human rights due diligence process to ensure that the company respects and protects human rights in all operations.

5.1 Human Resource Management

Material Topic : Talent Attraction and Retention



The actual and potential positive impacts (opportunities) on the economy, environment, and society

- Economy: Promote technological innovation, thereby promoting economic growth.
- Environment: Recruit renewable energy experts and environmental protection engineers, thereby promoting the realization of environmental protection goals and reducing negative impacts on the environment.
- Society: Recruit and retain high-quality talents, thereby helping the company's internal management and reducing contradictions and conflicts.



The actual and potential negative impacts (risks) on the economy, environment, and society

- Economy: Brain drain will affect the development of enterprises and is not conducive to the economic growth of the overall environment.
- Environment: With the company's population growth, the consumption of local resources (such as water, energy, land, etc.) may increase, putting pressure on the environment.
- Society: The introduction of high-income talents may exacerbate social inequality, lead to a widening of income gaps, and affect social stability and harmony.



2023 Achievements

- The total number of employees has increased by 28 compared with 2022, showing that the company's human resources have grown significantly due to business expansion this year.
- The staff turnover rate dropped by 3.64% compared with 2022, showing that HDRE's turnover rate has decreased and its talents have shown a trend of stable growth.

Strategic Goals



The company's policy and commitment to talent attraction and retention

To attract and retain talented individuals and encourage performance among employees, HDRE has established a competitive salary framework and regularly updates its compensation and benefits system. The company continuously cultivates its long-term human capital through internal management and incentive programs.



Short-term goals (1 year)

Continuously attract talent that meets the company's growth needs.



Medium to Long-term goals (3-5 years)

Provide compensation and rewards that are superior to the industry standards and create a work environment that encourages employees to unleash their full potential.



• **Material Topic : Employee salary and benefits**



The actual and potential positive impacts (opportunities) on the economy, environment, and society



The actual and potential negative impacts (risks) on the economy, environment, and society



2023 Achievements

- **Economy:** Good salary and benefits can increase job satisfaction and loyalty, reduce turnover, and increase overall productivity.
- **Environment:** Generous employee benefits (such as employee commuting subsidies and environmental protection allowances) help bring corporate culture into employees' lifestyles.
- **Society:** Good welfare policies (such as special leave, health insurance, allowances) help employees better balance work and life, reduce stress, and improve happiness.

- **Economy:** Improving the overall salary and benefits of employees may increase the operating costs of the company.
- **Environment:** Cutting investment in environmental protection in order to pay higher wages and benefits may reduce corporate investment in environmental protection technology and sustainable development.
- **Society:** Salary and benefits not meeting employees' expectations may increase the company's risk of brain drain.

1. Increased employee salary by 4.9%.
2. Initiated the establishment of human rights due diligence procedures.

5.1.1 Employee Overview

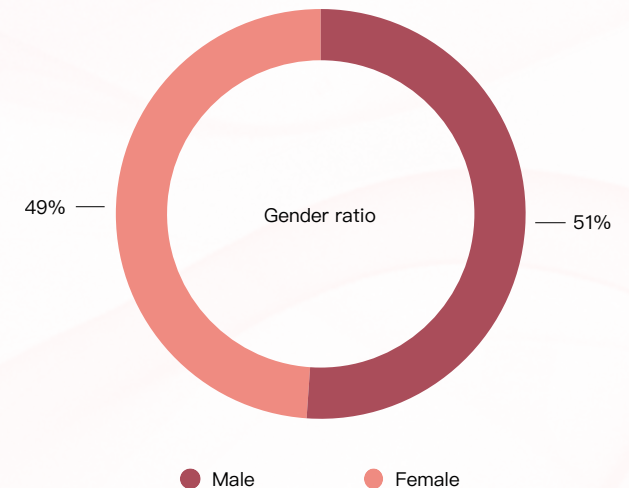
• **Manpower Structure Overview**

Manpower Structure :

HDRE Energy values the development and uniqueness of every employee, and treats them equally regardless of gender, race, age, marital status, or family situation. We are committed to promoting a friendly and inclusive workplace and continuously enhancing employee benefits and mechanisms, surpassing the requirements of labor laws to create a happier and more harmonious work environment.

By the end of 2023, HDRE had a total of 182 employees, including 182 full-time and 5 part-time employees. The gender ratio is 1.04, with 89 female employees and 93 male employees.

Gender ratio



Note: Gender ratio = Number of male employees / Number of female employees.

• **Strategic Goals**



The company's policy and commitment to employee salary and benefits



Short-term goals (1 year)



Medium to Long-term goals (3-5 years)

In order to attract and retain talented individuals and encourage performance among employees, HDRE has established a competitive salary framework and regularly updates its compensation and benefits system. The company continuously cultivates its long-term human capital through internal management and incentive programs.

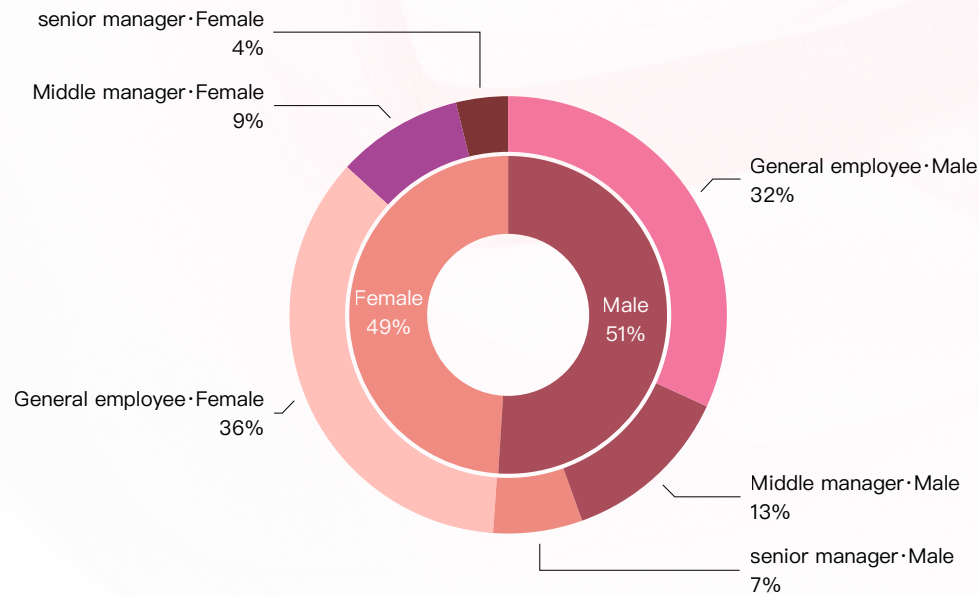
Regularly disclose human rights due diligence findings.

Provide salary and rewards that are better than those in the industry and create a working environment that stimulates employees' potential.

- **2023 Executive and non-executive positions**

HDRE has a total of 59 executive positions, accounting for 32.42% of the workforce. The gender ratio among managers is 1.45 to 1. That is, there are 24 female managers, accounting for 41% of the total number, which is higher than the 34.6% in 2022. Overall, female employees make up 48.9% of the total workforce, reflecting a 3% increase compared to the previous year. We strive for balanced development among employees and provide a fair and competitive workplace where gender does not create disparities in positions and remuneration. Our active efforts contribute to fostering a friendly environment of workplace equality

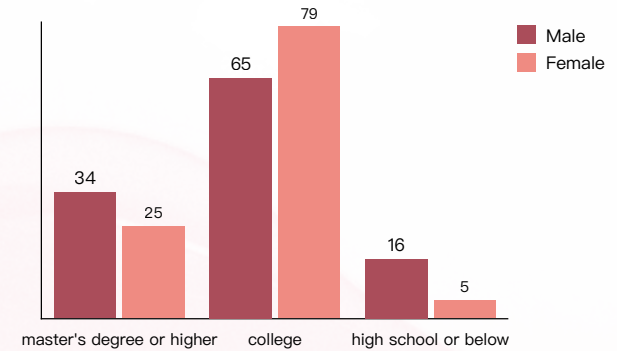
Position and Gender distribution



- **2023 Employees' educational background**

In terms of employees' educational background, 61% hold a college degree, 27.5% have a master's degree or higher, and 11.5% have a high school vocational education or below. This shows that HDRE's talent composition includes over 90% of people with middle or higher education. It reflects on our R&D capital and knowledge momentum in the overall company performance.

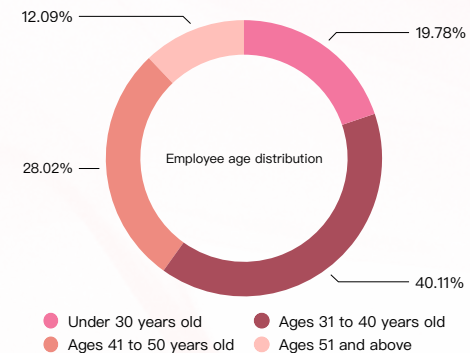
Educational background and gender distribution



- **2023 Employee age structure**

Although the average employee age of HDRE shows an overall upward trend, employees under the age 40 still account for 60%. This indicates that HDRE has a relatively young workforce. We are committed to providing a platform for young individuals and do not use age as a criterion for selection. As long as employees have the ability, they can be part of HDRE regardless of their age.

Employee age distribution





• **Employee Composition :**

The total number of employees in 2023 was increased by 28 compared with 2022 (23 full-time employees and 5 part-time employees), showing that the company's human resources have grown significantly due to business expansion during this year.

Category	2023	Gender	Sum	Taipei	Taichung	Tainan	Kaohsiung	Penghu	Hualien	
Number of employees	Number of employees	Female	89	38	42	8	1	0	0	
		Male	93	36	27	27	1	2	0	
contractual	Full-time	Female	87	97.75%	38	41	8	1	0	0
		Male	89	95.70%	35	27	24	1	2	0
	Part-time	Female	1	1.12%	0	1	0	0	0	0
		Male	4	4.30%	1	0	3	0	0	0
	Contractor	Female	0	0.00%	0	0	0	0	0	0
		Male	0	0.00%	0	0	0	0	0	0
	non-guaranteed hours (temporary contract, standby staff)	Female	0	0.00%	0	0	0	0	0	0
		Male	0	0.00%	0	0	0	0	0	0
	non-contractual	non-employee worker	2023 headcount		Taipei	Taichung	Tainan	Kaohsiung	Penghu	Hualien
			17		9	3	2	0	1	2

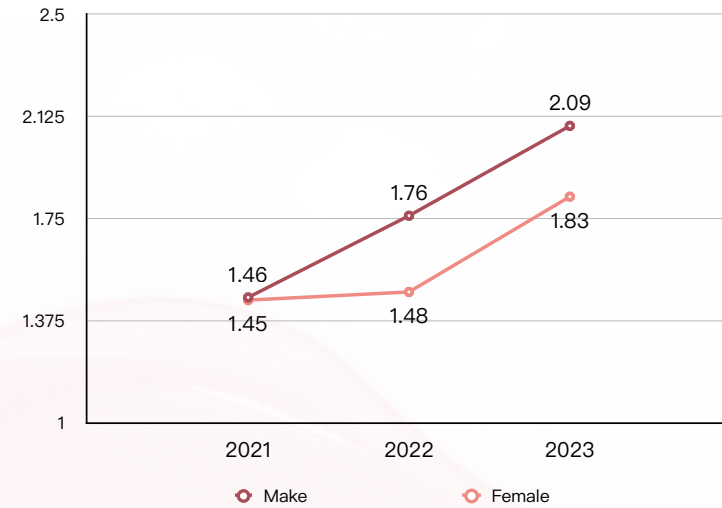
Note: Non-contract workers include security personnel, cleaning personnel, construction contractors, intermediary dispatched employees, apprentices, subcontractors, volunteers, etc.

- **Average seniority and the age of employees**

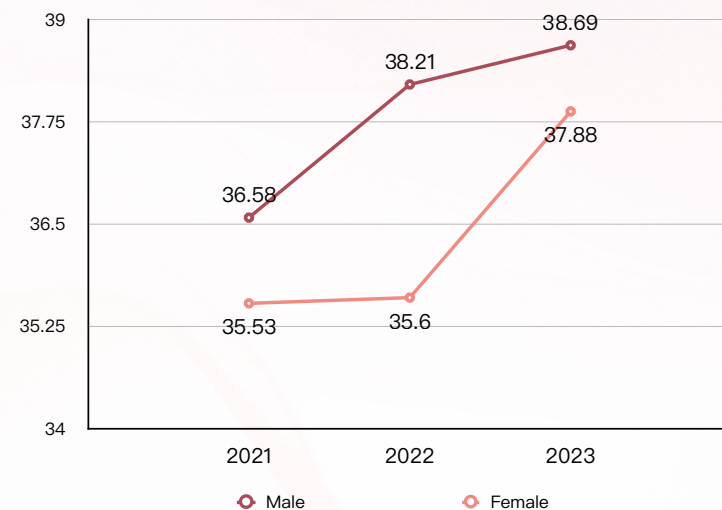
In 2023, HDRE witnessed an overall increase in the average seniority, with male employees seeing an increase from 1.76 years to 2.09 years, and female employees from 1.48 years to 1.83 years. These figures demonstrate our efforts in employee retention. Additionally, the average employee age also showed a similar growth pattern. The average age of male employees increased from 38.21 years to 38.69 years, while female employees' rose from 35.6 years to 37.88 years.

	Gender	2021	2022	2023
Average seniority (years)	 Male	1.46	1.76	2.09
	 Female	1.45	1.48	1.83
	Total	1.46	1.63	1.96
Average age (years old)	 Male	36.58	38.21	38.69
	 Female	35.53	35.6	37.88
	Total	36.14	37.02	38.29

Average seniority of employees



Average age of employees





•Talent Attraction and Retention

New /Resigned Employee Distribution :

Since 2020, due to business expansion, HDRE has continuously increased its recruitment needs. In 2023, there are 90 new employees, accounting for 49.45% of the total number of employees at the end of the year, a decrease of 9.64% from 59.09% in 2022. In addition, the staff turnover rate accounts for 23.76% of the total number of employees at the end of the year, which compared with 27.27% in 2022, dropped by 3.64%, indicating that HDREs turnover rate has decreased and its talents have shown a trend of stable growth.

All employees of HDRE are protected by labor contracts, and the regulations regarding employee resignation and notice periods follow the Labor Standards Act. We conduct interviews with departing employees and their immediate supervisors to understand the main reasons for their departure. We timely revise the salary and benefits system and continue to utilize internal management systems and incentive programs to reduce the turnover rate. Additionally, to protect local employment opportunities, we prioritize hiring local residents for solar photovoltaic system installation, module cleaning, and operation during both the construction and maintenance phases. In the future, we will continue to enhance the visibility of HDRE sustainable brand and actively recruit through diverse channels to attract and recruit professionals with expertise in green energy, thus enhancing the competitiveness of the company and our colleagues.

Composition of new employees in 2023:

In 2023, HDRE recruited a total of 90 new employees from 6 counties and cities across Taiwan, and of different age groups, reflecting the spirit of diversity and inclusiveness in our recruitment efforts. Most of the new hires were in the Taipei area, followed by Taichung. In addition, the majority of recruits fell within the age group of 31 to 40, followed by those between 41 and 50. In terms of gender, the recruitment numbers for males were relatively evenly distributed across different age groups, while females aged 31 to 40 were predominantly recruited.

Composition of new employees in 2023

Area	Total	Gender		Male (age group)				Female (age group)			
		Male	Female	Under 30	31 to 40	41 to 50	51 and above	Under 30	31 to 40	41 to 50	51 and above
Taipei	56	27	29	7	6	8	6	4	12	8	5
Taichung	26	10	16	2	6	2	0	4	9	3	0
Kaohsiung	0	0	0	0	0	0	0	0	0	0	0
Penghu	0	0	0	0	0	0	0	0	0	0	0
Tainan	8	7	1	3	3	1	0	0	0	1	0
Hualien	0	0	0	0	0	0	0	0	0	0	0
Total	90	44	46	12	15	11	6	8	21	12	5

Composition of Resigned Employee in 2023

Area	Total	Gender		Male (age group)				Female (age group)			
		Male	Female	Under 30	31 to 40	41 to 50	51 and above	Under 30	31 to 40	41 to 50	51 and above
Taipei	25	13	12	4	4	4	1	2	8	1	1
Taichung	12	4	8	1	1	1	1	1	5	2	0
Kaohsiung	0	0	0	0	0	0	0	0	0	0	0
Penghu	2	2	0	2	0	0	0	0	0	0	0
Tainan	3	3	0	0	3	0	0	0	0	0	0
Hualien	1	0	1	0	0	0	0	0	1	0	0
Total	43	22	21	7	8	5	2	3	14	3	1

5.1.2 Salary, Welfare and Employee Care

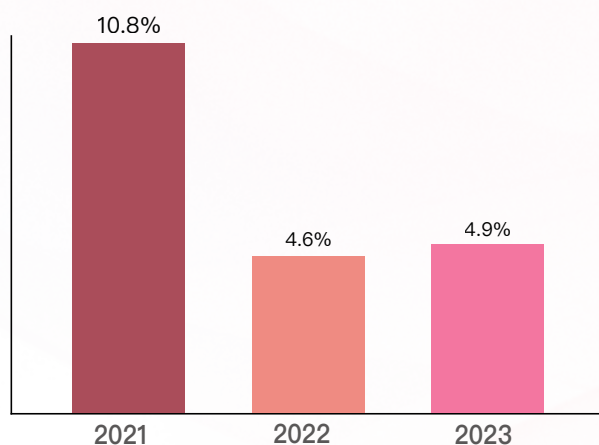
• Competitive Salary and Welfare

HDRE actively recruits exceptional talents to join us in realizing the vision of leading a life using green electricity, and building a net zero future. In order to achieve this goal, we provide salaries and benefits that surpass industry standards. Additionally, we offer employee stock options, profit sharing, performance bonuses, and year-end bonuses based on operational performance, in order to enhance competitiveness in the workplace with comprehensive and generous compensation.

We also promise not to discriminate or treat employees differently based on factors such as age, gender, race, religion, nationality, and others. Our compensation is determined based on the comprehensive market salary levels, domestic economic trends, and company's operational performances to maintain overall competitiveness in terms of compensation.


• Trends in employee salary adjustments

Over the past three years, HDRE has gradually adjusted the overall salary levels of its employees. The salary adjustment rate increased from 4.6% in 2022 to 4.9% in 2023. Each employee is a crucial partner of HDRE. We share the company's business performance with our employees, and the company's success is fully reflected in their overall compensation. This approach aims to create a balance that benefits both the company and the employees



• Ratio of executive to non-executive pay for Male and Female in 2023

In terms of the male-female salary ratio in 2023, the non-executive male-female salary ratio is 1.08 to 1, and the executive ratio is 2.6 to 1. Whether they hold the executive position or not, the overall male salary is higher than that of female. Though, the salary difference has decreased by 10.6% compared to last year. To take into account, the average seniority of male employees is 13.7% higher than that of female employees, providing the male employees with an average of higher pay. At HDRE, we are committed to ensuring that male and female employees with the same position and work performance can receive their due remuneration based on their contribution and performance.

Gender	 Male	 Female
Average executive salary	135,400	94,303
Median executive salary	114,000	83,500
Total of executive-level salary	5,822,200	2,829,100
Gender pay ratio for executive-level salary	2.6:1	
Average non-executive-level salary	54,553	43,475
Median non-executive-level salary	54,150	42,000
Total of non-executive-level salary	3,600,500	3,347,600
Gender pay ratio for non-executive-level salary	1.08:1	

Unit: NT\$

Note 1: The ratio of executive-level salaries is calculated as the total salary number of male executives divided by the total salary number of female executives.

Note 2: The ratio of non-executive-level salaries is calculated as the total salary amount of male non-executives divided by the total salary amount of female non-executives.



• **Salary level of non-executive employees:**

Over the past three years, the overall salary level of non-executive employees at HDRE has increased from 38,062 in 2021 to 48,075 in 2023, representing an average salary increase of 26.3%. We are committed to enhancing employee salary competitiveness and striving for a more equitable compensation structure, as we move towards a mutually beneficial and happy workplace.

Median salary of non-executive employees in last three years (NT\$)

Year	Median salary of non-executive full-time employees
2023	48,075
2022	45,100
2021	38,062



• **Welfare Policy Superior to Regulatory Requirements**






HDRE is committed to creating a happy workplace by caring for the physical and mental well-being of employees and enriching their work lives. Our goal is to meet the needs of employees through a diverse and comprehensive employee welfare system, strengthen the labor-management partnership, and enhance employee job satisfaction and dedication. In addition to the employee welfare system, we also prioritize the healthcare of our colleagues' physical and mental health.

As a company covered under the new labor retirement system, we contribute 6% of each employee's monthly salary to their personal account at the Labor Insurance Bureau, in accordance with the Labor Retirement Pension Act. This allows us to provide diverse and enriching employee benefits that meet the needs of our colleagues at different stages of life.

In the fiscal year 2023, HDRE has reached a record high investment in employee welfare funds, totaling NT\$24,015,173. Recognizing employees as partners, the company actively invests in enhancing their workplace experience, aiming to create a happy and fulfilling work environment together.

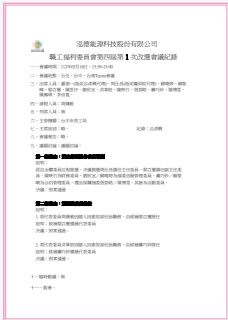
HDRE Employee Welfare

The total employee welfare fund in 2023 was NT\$ 24,015,173

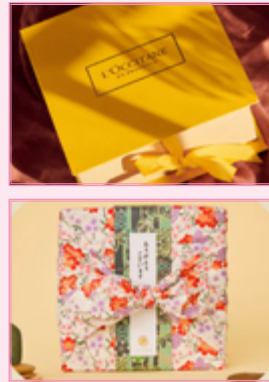
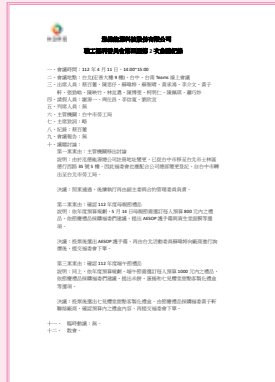
<p>Economy</p>  <ul style="list-style-type: none"> • Birthday bonus • Meal allowance • Meal subsidy • Marriage and funeral subsidy • New recreation fund appropriation 	<p>Safeguards</p>  <ul style="list-style-type: none"> • Annual health examination and labor insurance • Group insurance
<p>Entertainment</p>  <ul style="list-style-type: none"> • Incentive trips • Festival and holiday activities • Weiya (Year-end banquet) • Staff dinner parties of each department • Massage activities for stress relief 	<p>Facility</p>  <ul style="list-style-type: none"> • Breastfeeding room • Employee recreation zone • Multifunction office and environment beneficial to physical and mental health
<p>Development</p>  <p>External training and development subsidy of NT\$2,000 per time (annually)</p>	

Welfare Committee

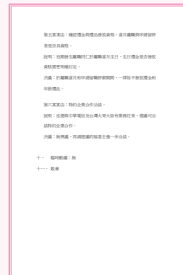
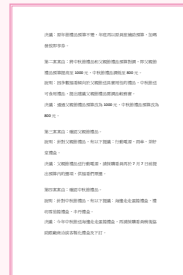
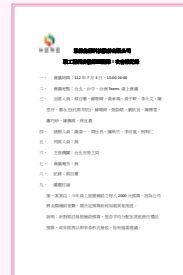
- Meetings: 16 March
- Topics: Re-election of Welfare Committee Members
- Execution: Confirmation of Welfare Committee Members for Various Projects.



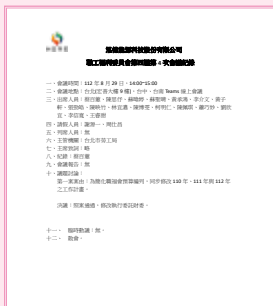
- Meetings: 11 April
- Topics: S2 Gift Voting
- Execution: Complete the procurement and distribution for Mother's Day and Dragon Boat Festival.



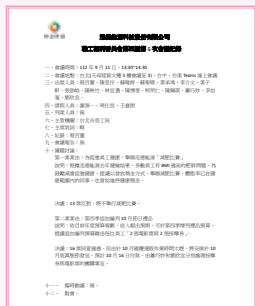
- Meetings: 3 July
- Topics: S3 Gift Voting
- Execution: Complete the procurement and distribution for Father's Day and Moon Festival.



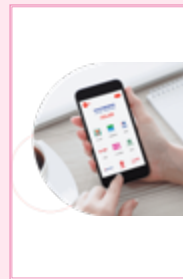
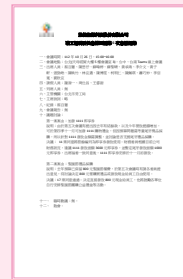
- Meetings: 29 August
- Topics: Simplify the Budget Preparation for the Welfare Committee
- Execution: Revise the work plan for the years 2021 to 2023.



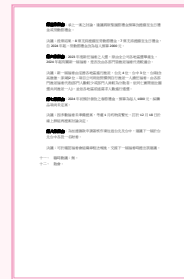
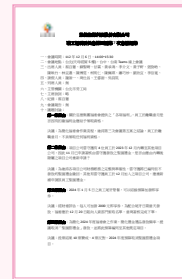
- Meetings: 11 September
- Topics: Additional Budget Allocation for October Holiday Gifts in the S4
- Execution: Add Halloween gifts for the end of October and complete procurement and distribution.



- Meetings: 26 October
- Topics: Increased Revenue Allocation, Additional Distribution of Bonuses
- Execution: Additional distribution of vouchers for Double 11 and year-end banquet.



- Meetings: 6 December
- Topics: Increase the 2024 labor bonuses
- Execution: Increase the 2024 labor bonuses to NTD 2,000.





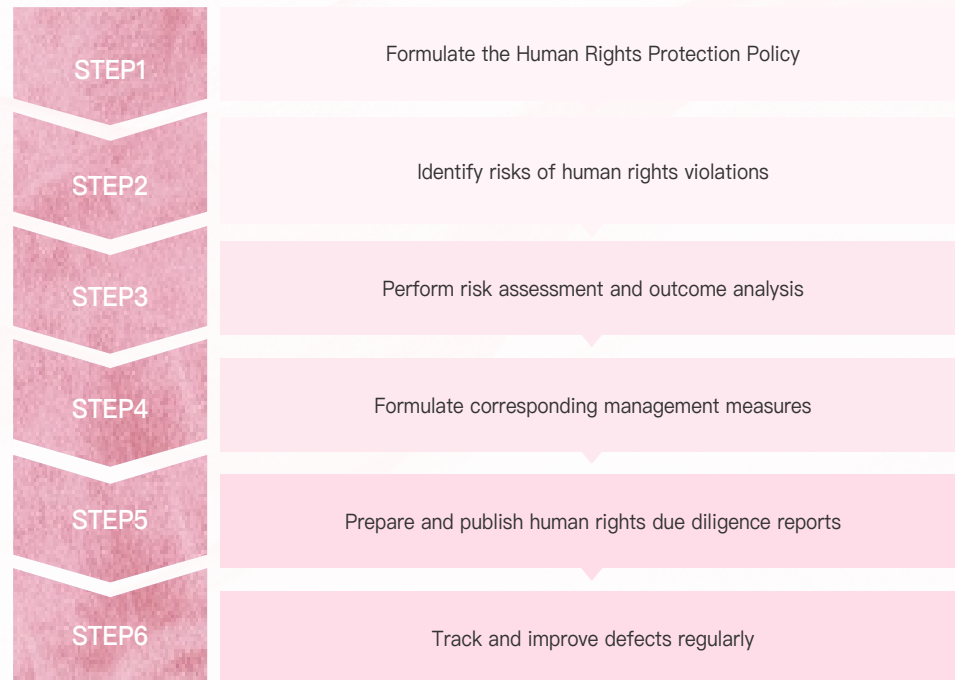
5.1.3 Human Rights and Communication

- Human Rights Policy**

Comply with international human rights regulations

Respecting human rights is one of the core values of HDRE, and we uphold several principles during all our operations. The principles are taken from the Universal Declaration of Human Rights, the UN Global Compact, the UN Guiding Principles on Business and Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, as well as relevant laws and regulations at the local operation sites. HDRE establishes and updates human rights policies based on principles of protection, respect, and remedy; our actions align with the principles of the Responsible Business Alliance Code of Conduct. At the same time, we have started formulating a human rights due diligence process this year, aiming to establish a human rights management process for internal assessment, risk mitigation, supervision and improvement. We plan to disclose the investigation results in 2024, demonstrating our commitment to human rights issues.





Human Rights Due Diligence Process



Since its establishment in 2016, HDRE has been dedicated to upholding the principles of the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and the ILO Declaration on Fundamental Principles and Rights at Work, ensuring the basic rights and interests of its employees, contractors, and interns. HDRE also ensures that child labor is not employed and works to prevent incidents of forced or compulsory labor. Some of the actions taken include:



- **Comply with domestic human rights laws**

Items	Measures
 <p data-bbox="129 459 544 488">Three Policy against Discrimination</p>	<ul style="list-style-type: none"> • Discrimination against workers based on race, color, age, gender, sexual orientation, ethnicity, disability, religious beliefs, political affiliation, union membership, nationality, or marital status is prohibited in recruitment, promotion, rewards, training opportunities, job assignments, wages, benefits, disciplinary actions, termination, and retirement. • Requiring pregnancy testing or discriminating against pregnant workers is prohibited, unless local laws or regulations require specific measures for pregnant workers. • Requiring workers or prospective workers to undergo discriminatory drug testing is prohibited, unless mandated by local laws or regulations or necessary for ensuring workplace safety.
 <p data-bbox="203 699 472 756">No workplace bullying/sexual harassment</p>	<ul style="list-style-type: none"> • Language violence, sexual harassment, physical violence, and psychological violence: We strictly prohibit the aforementioned behaviors, including sexual harassment, physical punishment, psychological coercion, bodily harm, or verbal abuse, as they are inappropriate and may be illegal.
 <p data-bbox="129 906 544 967">Respect for labor voluntary nature and freedom of association/speech</p>	<ul style="list-style-type: none"> • Workers have the freedom to leave their positions or terminate their employment relationship through proper notice or prearranged procedures. They cannot be required to surrender any government-issued identification documents, passports, or work permits as a condition of employment. It is also prohibited to demand any form of recruitment fees from employees. • The employment of child labor under the age of 15 is strictly prohibited, and employees under the age of 18 cannot be assigned to work during nighttime or overtime shifts.
 <p data-bbox="118 1206 555 1267">Comply with the Labor Standards Act and related labor laws</p>	<ul style="list-style-type: none"> • We abide by the Labor Standards Act, Labor Pension Act, and Gender Equality in Employment Act to safeguard individual employment relationships. • We adhere to the three labor laws: Trade Union Act, Labor-Management Dispute Resolution Act, and Collective Agreement Act to protect collective labor relationships. We also comply with the Occupational Safety and Health Act, Labor Inspection Act, and Occupational Accidents Compensation Act to ensure employment safety and a conducive working environment. • We provide wages and benefits that meet the minimum standards set by relevant laws. Overtime pay is provided for employees who work beyond regular working hours. We also send salary breakdowns to employees before monthly salary disbursement to ensure transparency in remuneration and benefits. • Workers have the right to freedom of association, the right to form and join labor organizations, seek representation, and engage in collective bargaining. Discrimination against workers based on their membership in a labor union is strictly prohibited during recruitment. It is also prohibited to terminate or discriminate against workers based on their union membership or participation in union activities outside working hours (or during working hours).



Inclusive and Diverse Workplace

HDRE adheres to the regulations and cultural norms of the locations where we operate and complies with relevant international human rights standards. We do not discriminate or provide differential treatment based on race, class, language, ideology, religion, political affiliation, birthplace, gender, sexual orientation, age, marital status, appearance, disability, or any other factors. We value diversity and our personnel employment policy is primarily based on job requirements, individual expertise, and developmental potential.

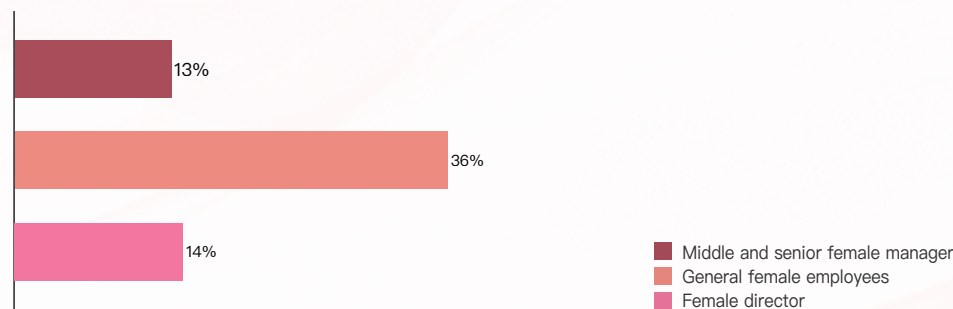
This year, the company hired 1 new employee with disabilities, bringing the total number of employees with disabilities to 1. We actively care for employees from different ethnic backgrounds and with diverse employment needs. Moving forward, we are committed to enhancing workplace rights for individuals from various backgrounds to promote workforce diversity at HDRE.

We regularly review the professional capabilities of our existing talent and optimize talent development to ensure balanced growth for all employees. Additionally, we engage in job redesign for employees with different professional backgrounds, ensuring that every team member's role contributes to the company's growth and improvement.

Gender-friendly

The human rights policy of HDRE ensures that gender or sexual orientation will not be a basis for differential treatment in promotion, compensation, or behavior. We strive to provide equal opportunities for all genders, enabling every employee to reach their full potential. In terms of gender representation, in 2023, female employees accounted for 49% of the total workforce at HDRE. Additionally, the Board of Directors consists of 7 members, including 1 female director. Moving forward, we aim to achieve a target of 25% female representation on the board, further enhancing gender equality within the Board.

Proportion of Female Employees at Various Levels



Promote Maternity Workplace Care

To create a family-friendly workplace environment and support employees in childcare, HDRE has established dedicated lactation rooms in the office area. These rooms are equipped with amenities such as comfortable chairs, tables, curtains for privacy, power outlets, a specialized refrigerator for storing breast milk, hand sanitizer, covered trash bins, telephone, and storage cabinets. These facilities are provided for female employees who require lactation breaks. In response to government policies, we have implemented a comprehensive parental leave system, including maternity leave, paternity leave, family care leave, and pre-delivery leave. In 2022, there were two female employees who applied for parental leave without pay. Both the rate of resuming work after parental leave and the retention rate reached 100%.

In 2023, we conducted workplace environment and operational hazard assessments for six employees focusing on maternal health protection. Here are the details:

1. The results of the hazard assessments showed no significant risks, allowing the employees to maintain their current positions without the need for job reassignment.
2. We provided guidance on precautionary measures during pregnancy, including COVID-19 education, prevention of varicose veins, and instructions on proper breathing techniques to avoid excessive ventilation. These health education recommendations were aimed at ensuring the well-being of pregnant employees.
3. If any pregnant employee had abnormal health check-up results, we provided health education specifically addressing the identified abnormalities. We advised regular follow-up visits to the clinic for monitoring and emphasized the importance of adhering to medical advice for regular prenatal check-ups.
4. We offered guidance on feeding complementary foods and provided consultation on the types of food and childhood vaccinations.

In 2023, the total number of employees eligible for parental leave, classified by gender, was 5 male and 9 females. The actual number of employees who took parental leave was 2 male and 7 females.

return-to-work rate after parental leave

retention rate after parental leave

	Male	Female		Male	Female
Number of people who should return to work after parental leave in 2023	1	3	The number of people re-turning to work in 2022	0	2
Actual number of people applying for reinstatement after parental leave in 2023	0	2	The number of people who have returned to work for one year in 2022	0	2
Reinstatement rate	0%	67%	Retention rate	0%	100%

- **Employee Care and Communication Channel**


HDRE is committed to establishing transparent and open labor-management relations and communication channels, ensuring the protection of employee rights. We have diverse channels for workplace communication and grievances. We handle complaints with cautious confidentiality and adhere to a prompt resolution approach. We take appropriate measures to minimize the impact on both labor and management in response to all incidents.


In terms of communication channels, we regularly hold labor-management meetings, welfare committee meetings, staff representative forums, and maintain an employee suggestion mailbox. These initiatives aim to maintain harmonious labor-management relations and uphold the principles of equality and fairness in employee participation. In 2023, our company held four labor-management meetings, and there were no significant labor disputes.


Workplace Violence and Sexual Harassment Complaint

We are committed to implementing the principles of respecting human rights. In addition to the stipulation of human rights policy, we also include the principles and measures of equality, anti-discrimination and communication channels in the management regulations related to the employee management system. Furthermore, we also organize education and training periodically. We pledge to create a workplace that is free from bullying and harassment. We incorporate prevention of sexual harassment into our new employee training materials and conduct annual education and training sessions for new and existing staff members. In case of any sexual harassment incident, employees may file compliant through either the dedicated sexual harassment complaint hotline or the designated e-mail address. Moreover, sexual harassment incidents and complaint cases submitted are statically analyzed in a report at the end of each year to facilitate the tracking and control of such cases. No complaints were received regarding workplace violence, discrimination, or sexual harassment in 2023.

HDRE Workplace Violence and Sexual Harassment Consultation and Complaint Channel

 HDRE holds all employees responsible for ensuring a work environment free from workplace violence and sexual harassment. Anyone may call the complaint hotline. Once a complaint is received, investigation will be conducted in a confidential manner.

 **Complaint Hotline**
 Human Resource Administrative Department: +886-4-2255-8858 # 301
 Audit Department: +886-4-2255-8858 # 220

 **Complaint E-mail**
 equality@hdrenewables.com

- **Employee feedback survey**

Aspects	Results
Understanding employee opinions through annual appraisals	The annual appraisals in 2023 have a 100% achievement rate, and employees' opinions are collected and heard, including feedback on salary and benefits, talent recruitment, educational training, cross-department communication, etc.
Message activities/ Therapists with disabilities	From September to December, a total of 16 message activities were held, with 176 people having participated. There were feedback forms of the activity, and most of them responded positively and supported the simultaneous employment opportunities for people with disabilities.

5.2 Deep-rooted Talent Cultivation

5.2.1 Diverse Educational Training and Talent Development

HDRE has established a comprehensive training system and framework to cultivate diverse professionals. We utilize various learning resources and tools to enhance employees' self-directed learning awareness. We continuously develop training plans based on the needs of each unit and individual performance requirements. This enables us to enhance employees' knowledge, job performance, and deepen their understanding of different professional areas, thereby promoting cross-unit collaboration and synergy.

We highly value the cultivation of industry talents who possess both theoretical knowledge and practical skills. These exceptional talents are the source of talent that HDRE requires. In the future, we will continue to deepen our industry-academia collaboration, creating opportunities for young students to learn about green energy and gain professional knowledge. This not only assists them in their future career planning but also allows us to attract outstanding potential talents and enrich the company's innovation capacity while strengthening our professional expertise.



• **Complete Education and Training System**

In order to enhance the integrity of employee training, we have introduced the "Job Description Manual" for each unit, which is supplemented by training provided by unit supervisors or designated senior employees. This ensures the completeness and professionalism of personnel training and contributes to effective manpower utilization, talent development, and competency assessment.

In response to the growth of our corporation, executive-level training courses are held annually to enhance the managing abilities of executives. Also, we consistently encourage employees to engage in various forms of learning activities based on the company's growth direction, organizational needs, and individual performance requirements. This continuous improvement of work efficiency helps gather more energy for the company's growth and contributes to the advancement of society. Additionally, we provide subsidies for employee education and training, set minimum mandatory environmental training hours and sessions per year, and offer comprehensive training courses tailored to the needs of different talents. These courses cover professional skills, management, occupational safety, and training for new employees. We design experiential activities, case studies, group discussions, and video appreciation based on the nature of different courses, making learning more enriching and lively.

Our company conducts various environmental, health, safety, and quality training programs, starting from new employee safety and health education training courses (mandatory and basic knowledge of management systems) to specialized courses (hot work, working at heights, electrical safety, contractor operation management, quality, etc.). We also provide training on employee health management topics and education for contractors before they enter the worksite.

New employee training



• **Internal Courses**

Targets	Courses	Number of classes	Number of trainees
General employee	PLM	1	3
	Department Introduction/Job Description	2	2
	Beseye-Attendance System Launch Briefing Meeting	1	5
	Propaganda of the Integrity Business Code	14	112
	Health and Safety Educational Training for Employees with 3-year Holdings	5	7
	Manager's Responsibilities and Authorization	1	35
	Performance Appraisal Briefing	2	37
	Keysafety inspections of mobile ladder and foldable ladder operations/ Measurement principles of solar photovoltaic modules	1	1
	Introduction to ISO 14064-1 provisions and internal audit	1	13
	Enterprise Sustainability Manager Certificate Training Course	1	12
Professional Training	Introduction to optoelectronic materials & electrical industry preparation flow chart	1	7
	EIP educational training	2	35
	Project petty cash application form basic operations	1	11
	Business trip application form online briefing session	1	32
	Global Net Zero Trends	1	16
	Undertake outsourcing management educational training	28	41
	Special operation health and safety educational training	21	27
	Video equipment operation and setting instructions	2	16
	Information Department-Dingxin ERP-Basic Operation Instructions	1	21
	Information Department-2023 ERP Q&A	1	11
New employees	Dingxin ERP_Related instructions for purchase requisition operations	1	15
	Dingxin ERP-Inventory Operation	1	7
	Introduction to the Command Center	1	35
	Introduction to energy storage systems and power auxiliary	1	64
	Accident Investigation and Corrective and Preventive Action Management	49	78
	Special operation health and safety educational training	3	5
	Health management promotion	38	74
	New employees health and safety educational training	48	74
	New employees educational training	9	65

External Courses

Courses	Number of classes	Number of trainees
2023 HR Legal Issues and System Application Briefing Session	1	1
ERP Planner Certification Appraisal	1	1
ISO 27001: 2022 Information Security Management System Lead Auditor Training Course	1	2
ISO/IEC 27001: 2022 Information Security Management System—Basic Course	1	1
ISO 14064-1: 2018 Greenhouse Gas Inventory Lead Verifier Course	1	1
WebAccesSCADA v9.0 IoT Software Rapid Development and Application—Basic	1	2
WebAccesSCADA v9.0 IoT Software Rapid Development and Application—Advance Application	1	1
2nd generation NHI supplementary premium and income tax withholding declaration	1	1
Subsidiary audit engagement	1	1
Occupational Safety Operation Class-1 Manager Retraining	1	1
Enterprise Sustainability Manager Certificate Training Course	4	8
Next Generation Marketing Annual Conference	1	2
Self-assessment practice	1	2
Roof operations supervisor	1	1
On-the-job retraining for roof operations supervisors	1	1
First responders	2	2
Government procurement case study	1	2
Assessment Techniques and Practice	1	1
Special safety and health educational training for aerial work vehicle operators	1	1
International Energy Storage Technology Conference	1	1
From concept to practice ASP.NET Core MVC framework development Part 1	1	1
From concept to practice ASP.NET Core MVC framework development Part 2	1	1
Briefing session on health insurance business for first-category insured units	1	2
Writing class for environmental and social audit documents of fishery and electricity symbiosis—introductory and advanced level	1	5

Education and Training Outcome

HDRE has always been dedicated and committed to talent development. We strive to create a continuous and diverse learning environment and gradually enhance the competence of our employees through five major training systems: Key Function Development, New Employee Training, Hierarchical Training, Professional Training, and Project Training. We aim to closely link employee development with company growth. Continuing the concept of "Learning By Doing," we design experiential activities, case studies, group discussions, and video appreciation based on the nature of different courses, making learning more enriching and lively.

In 2023, our investment in education and training amounted to NT\$710,403, which is more than doubled compared to NT\$283,450 in 2022. Whether it is new employee training or professional training, we have significantly increased the hours of training and invested resources in ESG education. HDRE is committed to providing employees with the resources they need to enhance their training and skill development.

2023 Staff Education and Training Statistics

Item	Male		Female		Total	
	Number of instances	Total hours	Number of instances	Total hours	Number of instances	Total hours
General employee	241	720.5	333	978	604	1752.5
Per capita (hour)	2.99		2.84		2.9	
Mid-level supervisor	108	389.5	118	669	226	1058.5
Per capita (hour)	4.3		5.9		5.2	
Senior-level executive	46	224	34	132.5	80	356.5
Per capita (hour)	4.87		3.9		4.46	



• **Performance Evaluation and Development**

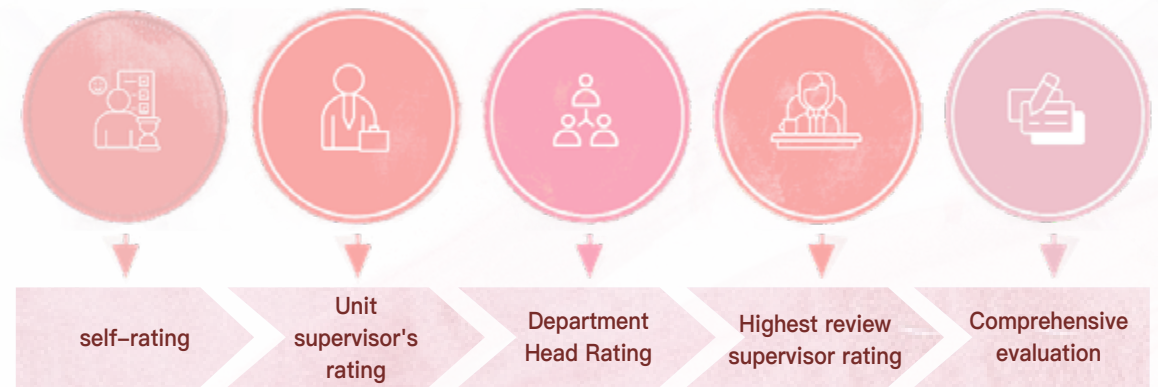
According to our company's business strategy and sustainable development goals, HDRE sets annual work objectives. We utilize a performance management mechanism that involves setting goals at the beginning of the year, monitoring progress throughout the year, and evaluating performance at the end of the year. These evaluations serve as the basis for promotions and performance bonuses. The year-end and performance bonuses are determined by the Chairman and the Board of Directors based on the annual operational performance and individual job performance.

Performance evaluation includes new employee assessment and annual assessment. The former is assessed during the initial 1 to 3 months of appointment to evaluate new employees' adaptability and work performance; the latter is conducted once every half year, in July and December, which will consider job functions, knowledge and development potential. In 2023, all of our employees had been evaluated. We link rewards to performance evaluation results and conduct regular assessments for employees at different levels. For those who demonstrate excellent performance, we provide tailored development opportunities based on their expertise and career plans. We offer timely promotions or rotation opportunities to encourage colleagues to grow alongside the company's development.

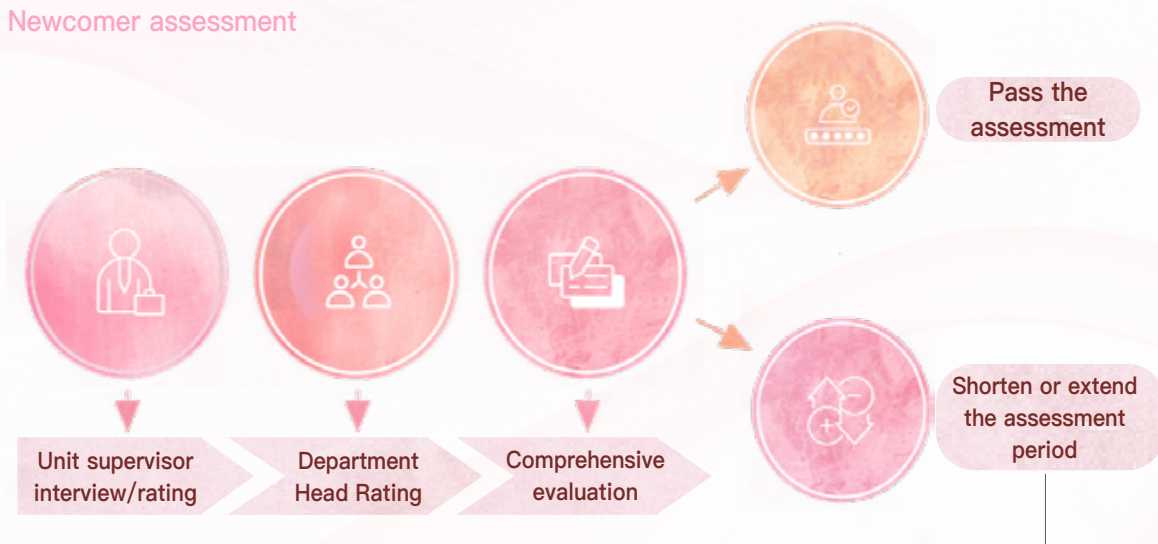
• **Talent development plan**

In response to the College Youth Recruitment Program launched by the Ministry of Labor, HDRE has signed a letter of intent for cooperation with Penghu University of Science and Technology in 2023, and will cooperate with the school through an industry-university cooperative internship project. On one hand, students will get to understand industrial practices during the internship, and apply what they have learned into practice. On the other hand, we are simultaneously training talents, and establishing the company's talent development. After interviewing the applicants, three have been hired to intern for one semester in the engineering and other maintenance-related units. If students wish to stay at HDRE after graduation, their seniority during the internship will be recognized, and they will continue to cooperate with the school.

annual assessment



Newcomer assessment



Supervisors may shorten or extend the assessment period based on actual needs, and must discuss and reach a consensus with colleagues on the reasons for adjusting the date, work goals and functional performance, and complete the assessment as scheduled in accordance with notifications from the Human Resources Department.

5.3 Friendly Workplace Realization

• Material Topic : Occupational Safety and Health



The actual and potential positive impacts (opportunities) on the economy, environment, and society

HDRE deeply recognizes that employees are the most valuable assets of the company. Therefore, we are committed to creating a safe and secure working environment, strengthening hazard prevention, and promoting the physical and mental well-being of our employees. Our goal is to ensure that all employees, as well as our suppliers and contractors, can work with peace of mind.



The actual and potential negative impacts (risks) on the economy, environment, and society

When potential risks occur in the workplace, such as work-related injuries or occupational accidents, they may attract the attention of labor inspection authorities. In severe cases, it may result in a negative image and have impacts such as investor withdrawal.



Resources invested in 2023

1. Accumulated a total of 559,620 accident-free working hours, which reached the target and was rewarded with a certificate.
2. Introduced the three major management systems of ISO 14001, ISO 45001, and ISO 9001, and obtained third-party verification.
3. Set environmental, safety and health execution performance and goals, and continue to track and assess.

• Strategic Goals



The company's policies and commitments to occupational safety and health

1. We are committed to establishing a safe and secure work environment, enhancing hazard prevention, and promoting the physical and mental well-being of our employees. We strive to provide and create an excellent workplace and environment.
2. We prioritize employee health by conducting regular health checks and providing on-site healthcare services and health education seminars.
3. We offer subsidies and appropriate training programs and encourage employees to actively participate in training and development opportunities.
4. Develop and implement various management procedures, including work codes, occupational safety and health manuals, so that all employees can be committed to continuously improve the environment, safety and health matters.



Short-term goals (1 year)

1. The operation, management and maintenance of various environmental, safety and health and ISO management systems are 100% able to meet the needs.
2. Set up a special area for environmental, safety and health announcements. The evaluation and planning will be conducted in 2024 and completed by 2025.
3. Develop annual occupational safety and health KPIs to distinguish between positive (opportunity) performance and negative (risk) losses. Each performance indicator has over 95% achievement rate (compliance rate) compared with the previous year, and will be reviewed monthly/quarterly.
4. Strengthen emergency response management, and implement 100% itemized management and emergency response drills based on the company's size and case type.
5. Carry out online supplier/contractor assessment matters to ensure that all relevant units complete the assessment and implement supervision measurement performance results.
6. Assist subsidiaries in the implementation and management monitoring of environmental, safety and health matters, and gradually introduce the management system model.



Medium to Long-term goals (3-5 years)

1. Construct an internal digital management platform for environmental, safety and health matters. The platform integrates functions such as education and training, licenses, documents and internal announcements. Planning is expected to start in 2024, and is expected to be fully integrated by 2025.
2. Obtain ISO 45001 management system certification for similar work sites.
3. Provide guidance to subsidiary companies in implementing and completing management system verification.
4. Continue to accumulate accident-free working hours and achieve the 720,000-hour certification.
5. Assist contractors in developing their occupational health and safety risk assessment capabilities.
6. Promote and introduce safety and health culture, plan safety and health activities, including supervisor training on safety and health education management.



5.3.1 Occupational Safety and Health Management Measures

HDRE is committed to creating a high-quality, safe, and stable working environment. We have established a professional safety and health organization and implemented a safety and health audit system. Our goal is to enhance the safety and health awareness of all employees and systematically improve our occupational safety and health management performance through three main aspects: regulatory compliance, employee participation, and creating a zero-accident environment. We will actively implement occupational health and safety management verification in each office and project site. Additionally, we will continue to organize various activities related to environmental and occupational health and safety to encourage employee participation and raise awareness of occupational hazard prevention and their importance.

The units responsible for occupational health and safety at HDRE are:

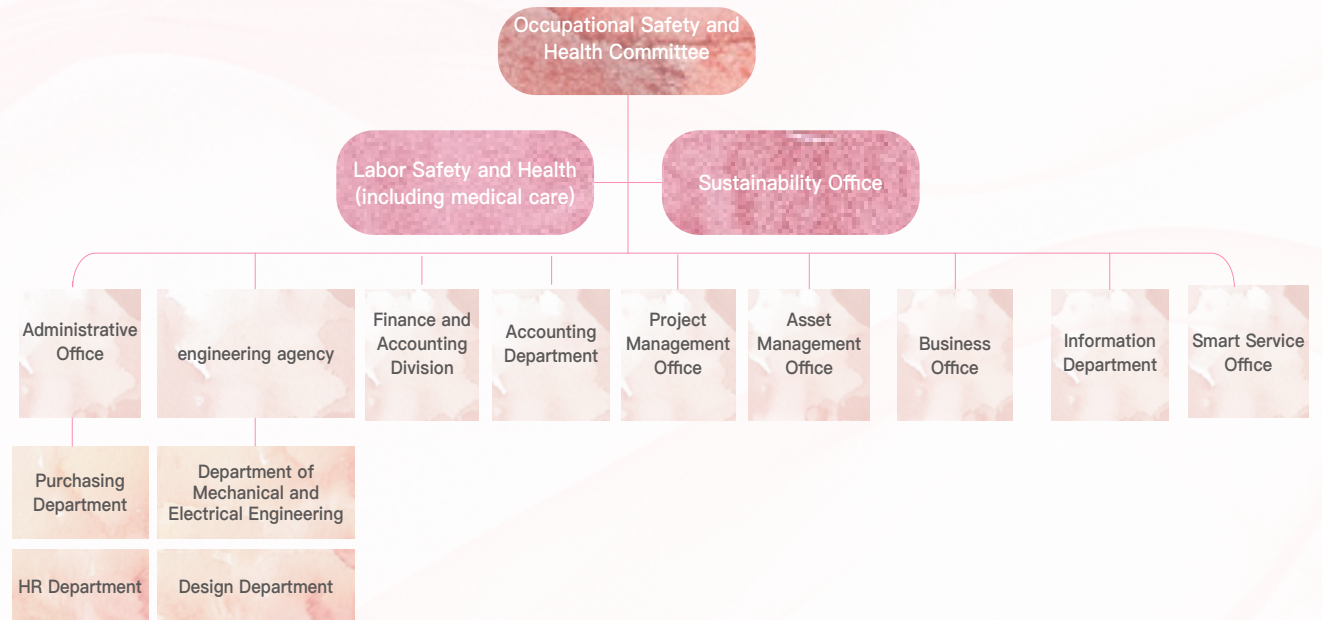


• Establish Occupational Safety and Health Committee

To enhance occupational safety and health management and promote workplace safety, HDRE established a dedicated unit and formed the “Occupational Safety and Health Committee” in 2021. The committee consists of 15 members, including 5 worker representatives, accounting for 33% of the committee. The Occupational Safety and Health Committee holds quarterly meetings, a total of four meetings were held in 2023. The discussed topics covered employee health management implementation, ISO management system introduction and implementation effectiveness, environmental safety and health performance supervision, contractor (supplier) environmental safety and health management, etc.

The committee is committed to ensuring the realization of employee occupational safety. In addition to complying with the fundamental labor regulations, we focus on maintaining hygiene and safety in the work environment, raising awareness among employees regarding safety and health, and reducing the likelihood of occupational accidents. We regularly conduct disaster statistics, investigations, and incident analyses, implementing effective management in occupational health and safety. Our utmost goal is to prioritize the health and safety of our employees and strive towards a safe workplace.

Organizational Chart of Occupational Safety Committee



• Occupational Safety and Health Management System

In 2023, we introduced three major management systems: ISO 14001, ISO 45001 and ISO 9001, and obtained third-party verification. In the future, we will integrate the verification scope, procedures and execution records of these management systems, thereby being able to reduce the execution interference of each unit, improve integration, shorten verification time, promote the rationality of subsequent planning by relevant system managers, and reduce verification costs and audit frequency. At the same time, experience is

introduced into subsidiaries to effectively introduce and verify the management systems and operate with efficiency.

In addition, to integrate management and accelerate the dissemination of environmental, safety and health information, the knowledge base system had been evaluated and introduced in 2023. The base knowledge includes document management (system), education and training database (including professional licenses), ISO management system

announcement database, regulatory management database, etc. In improving the quality of document management, it also reduces document management costs, demonstrates effective management and control compliance, and brings about environmental safety and health execution performance (including ISO) results. Moreover, the information flows more effectively among colleagues, allowing them to understand and comply timely. The integration will continue in 2024.

	ISO 14001	ISO 45001	ISO 9001
Purpose	<ul style="list-style-type: none"> • Introduction of this management system can enhance workplace commitment to prevent and manage environmental pollution. • Satisfy customers or serve as a basis for submitting to government public awards. 	<ul style="list-style-type: none"> • Since the introduction of the management system in 2021, occupational safety, health and quality awareness have been gradually implemented in the workplace. • As a leader in the introduction of management systems into the energy industry, we enable manufacturers to abide by and support each other, and jointly maintain occupational safety and health & excellent quality engineering 	
Description	<ul style="list-style-type: none"> • System introduction assessment and scope confirmation • Program file formulation, import and execution • After the verification is completed, obtain the verification certificate, announce it internally, and also post on the official website to make stakeholders aware of and support the commitment. 	<ul style="list-style-type: none"> • Management system execution and compliance review and management • Management system execution matters and performance measurement (evaluation) • Internal and external audit • After the verification is completed, obtain the verification certificate, announce it internally, and also post on the official website to make stakeholders aware of and support the commitment. 	
	<ul style="list-style-type: none"> • Verification completed in November 2023 and verification certificate obtained in December 2023. • The management system will be introduced to related site projects in 2024. 	<ul style="list-style-type: none"> • Verification completed in August 2023 and verification certificate obtained in October 2023 • Verification and inspection of new site projects in 2024 	



• **Execution performance and goals**

The company took the initiative to formulate environmental, safety and health execution performance and goals in October this year. Through the review process of monthly management plans and monthly reports, the company completed performance measurement before the annual external audit, and finally used the performance measurement results as the basis of next year's plan. The basis ensures compliance and regular review of implementation effectiveness. In 2023, all six indicators were 100% in line with the target



Indicators	Measurement method	Measurement frequency	Criteria (target)/ year	Measurement results	Remark
Annual achievement rate of environmental and occupational safety and health goals (%)	Number of completed items over the total target number	annually	100%	On going	Risk/Opportunity
Environmental and occupational safety and health management plan progress completion rate (%)	Number of cases that have followed the schedule over the total number of cases	quarterly	100%	Corresponding to environmental and occupational safety and health management plans	Opportunity
Number of environmental and occupational safety and health fines	Number of fines	quarterly	5 or less	No fines	risk
Environmental and occupational safety and health management improvement suggestions	Number of improvements after suggestions	quarterly	100%	0	Opportunity
Major occupational accidents (excluding traffic accidents) and major environmental violations	Number of major occupational accidents	quarterly	2 or less	0	risk
	Number of major environmental pollution incidents	Quarterly statistics from each site project	2 or less	0	risk (Referring to the petition cases)
Major environmental pollution petition cases	Number of cases in which people appealed to environmental protection agencies in writing or verbally about environmental pollution	Quarterly statistics from each site project	2 or less	0	risk (Referring to the petition cases)

• **Occupational safety and health education and training**

The total hours of occupational safety education and training in 2023 reached 1,992 hours, and a total of 1,011 people participated. The courses include general courses and professional courses in 7 topics, covering basic knowledge, health management, health and emergency response, accident investigation, fire drill, special operations, and management systems. Moreover, to ensure the safety of personnels during operations, we actively train each unit to be able to evaluate and assess risk level, and can react accordingly with well-planned safety and health management and cost assessment. For example, when they need to improve equipment protection, evaluate the purchase of protective equipment, regularly check equipment, implement personnel occupational safety and health education and training, etc.

In order to strengthen the management capabilities of the occupational safety and health management system, HDRE has obtained the ISO 45001 occupational safety and health management system verification certificate this year, and will continue to uphold the principles of the management system in every aspect. We will assist all colleagues working at project sites to understand and join in on the management, with the main goal of maintaining system verification.

In addition, as a leader in the integration of management systems into the energy industry, we have passed the verification and officially launched the ISO management system this year. This system gradually integrates ISO 14001, 45001 and 9001, and implements occupational safety, health and quality awareness in all our operating sites. We will expand the integration to include our subsidiaries, and have our manufacturers jointly abide by and support the system. The collective effort is to maintain occupational safety and health, and provide quality service.

Projects	Project description	Actual results and future plans
ISO management system	<ul style="list-style-type: none"> Integrate management system verification scope, procedures, and execution records to reduce interference and improve integration of seed execution in each unit. The validity period of management system certificates is gradually tuned (the verification schedule is adjusted to be simultaneous), which can simplify future planning for system managers and reduce verification costs. The system managers can easily manage and adjust the unit's seed execution and audit schedule and reduce the frequency of audits. Provide subsidiaries with the experience to efficiently introduce and obtain the verification of management systems. 	<ul style="list-style-type: none"> Verification completed in August 2023, and certificate obtained in October 2023. Conduct verification and inspection for new project sites in 2024. Introduce the management systems to subsidiaries

General Knowledge Course Relevant educational and training materials will be provided to new employees upon their arrival. The content of these materials will primarily follow the fundamentals of occupational safety based on regulations.

Course Type	Basic Knowledge	Basic Knowledge
Topic	General safety and health education and training	On-the-job safety and health education and training for general employees (employees with at least 3 years of service)
Course Content	<ul style="list-style-type: none"> Company Introduction Occupational safety and health education and training Foundational knowledge of Management systems Fire and emergency response 	<ul style="list-style-type: none"> Policy & safety and health KPI Safety and health trends Occupational safety and health management system Workplace health, safety, and epidemic prevention management Occupational accidents and rights
Actual Outcome	Number of trainees:198 Number of training hour:3hr Total:594hr	Number of trainees:52 Number of training hour:3hr Total:156hr

Course Type	Health Management	Health and Emergency Response
Topic	Healthy food and diet	Love knows no barriers, it's right by your side
Course Content	<ul style="list-style-type: none"> National survey on nutritional and health status Updated dietary guidelines We need sugar, but we don't need to consume sugar Understand "sugar" and "carbohydrate" Potential harm caused by sugar World Health Organization (WHO) recommendations on sugar intake My healthy meal 	<ul style="list-style-type: none"> Emergency and Rescue Instructions CPR+AED Defibrillator Operation Tutorial Simple Wound Dressing Practice
Actual Outcome	Number of trainees:251 Number of training hour:1hr Total:251hr	Number of trainees:66 Number of training hour:1hr Total:66hr

Course Type	Accident Investigation	Fire Drill
Topic	Accident investigation and corrective and preventive action management	Participate in the fire drill training program in the building
Course Content	<ul style="list-style-type: none"> Policy and KPI Purpose of accident investigation Related procedural documents 	<ul style="list-style-type: none"> Fire control and response AED operation demonstration and drills Evacuation and escape instructions
Actual Outcome	Number of trainees:283 Number of training hour:1hr Total:283hr	Number of trainees:6 Number of training hour:2hr Total:12hr



Professional Courses For staff of the on-site engineering department and quality control team, specialized courses will be offered specifically. Employees in these departments are required to complete the assigned course within specified deadline.

Course Type	Special operation	
Topic	Contracting and outsourcing management procedure	Confined space, hot work, electrical and overhead operation management procedure
Course Content	<ul style="list-style-type: none"> Department responsibilities Construction permit application Operation management and other matters management 	<ul style="list-style-type: none"> Introduction to accident case studies Safety and health regulations explanation Hazard prevention strategies and other matter management
Actual Outcome	Number of trainees:41 Number of training hour:1hr Total:41hr	Number of trainees:41 Number of training hour:1hr Total:41hr

Course Type	Management system		
Topic	ISO 45001 article content introduction and hazard identification	ISO 45001 Internal Auditor Training	ISO 14001 Internal Auditor Training
Course Content	<ul style="list-style-type: none"> Article content introduction Regulatory identification and risk assessment Team discussion and drill 	<ul style="list-style-type: none"> Internal audit method Team discussion and drill 	<ul style="list-style-type: none"> Introduction to the provisions Hazard identification Internal audit training
Actual Outcome	Number of trainees:30 Number of training hour:6hr Total:180hr	Number of trainees:30 Number of training hour:6hr Total:180hr	Number of trainees:25 Number of training hour:12hr Total:300hr

5.3.2 Improve Safety and Health Environment, Prevent Occupational Accident

• Accident Prevention Management Measures

At HDRE, we consider our employees as our most valuable assets, and we place great importance on ensuring a safe and healthy working environment for all our staff. To implement occupational health and safety policies and create a "zero-accident" work environment, we develop an annual Occupational Health and Safety Management Plan and Occupational Health and Safety Management Regulations. We review each item in the plan and implement comprehensive occupational health and safety management measures.

In addition to regularly updating our digital monitoring equipment systems, our engineering department enhances hardware safety measures at the work sites, ensuring improved safety maintenance. The number of recorded occupational injuries in 2023 was 1 person, and the statistics of accident-free working hours of HDRE employees and contractors this year reached 559,620 hours, an increase of 3.9% compared to 2022.



• Occupational injury incident description

Occupational injury incident

At 18:55 pm on November 13, 2023, colleagues assisted in waterproofing and shielding operations at the Hualien case site. Due to insufficient lighting equipment in the initial construction of the case site, they accidentally stepped on the ground and fell, causing bruises on their bodies. After being sent to the hospital, they returned to their residence to rest on the same day.

approach

1. Relevant protective shielding operations are stopped at the case site, and non-related personnel are prohibited from working.
2. Add safety protection or warning equipment at the opening of the wire slot.

preventive improvement measures

prevent recurrence:

1. Improvement of operating procedures

Formulate SOP for material storage area and material placement.

2. Education and training

- (1) Notification of risks and hazards at the case site (including material storage area) and SOP for material placement.
- (2) Non-related personnel are prohibited from performing operations.

3. Improvement of environment/working area protection

- (1) Set up necessary lighting and protective equipment according to the type of case site.
- (2) Material storage areas should be set up and placed away from openings.
- (3) Design evaluation of wire trenches installed at the case site.



危害預防措施

1. Corner vertices are set at fall risk points and warning tapes are circled to prevent people from stepping on the air and falling.
2. Keep materials away from openings when stacking.



開口改善進度

1. The wire trough at the current opening has been set up, and the height difference is less than 1.5m.
2. After subsequent completion, the opening will be covered with a cover to prevent people from tripping when walking.



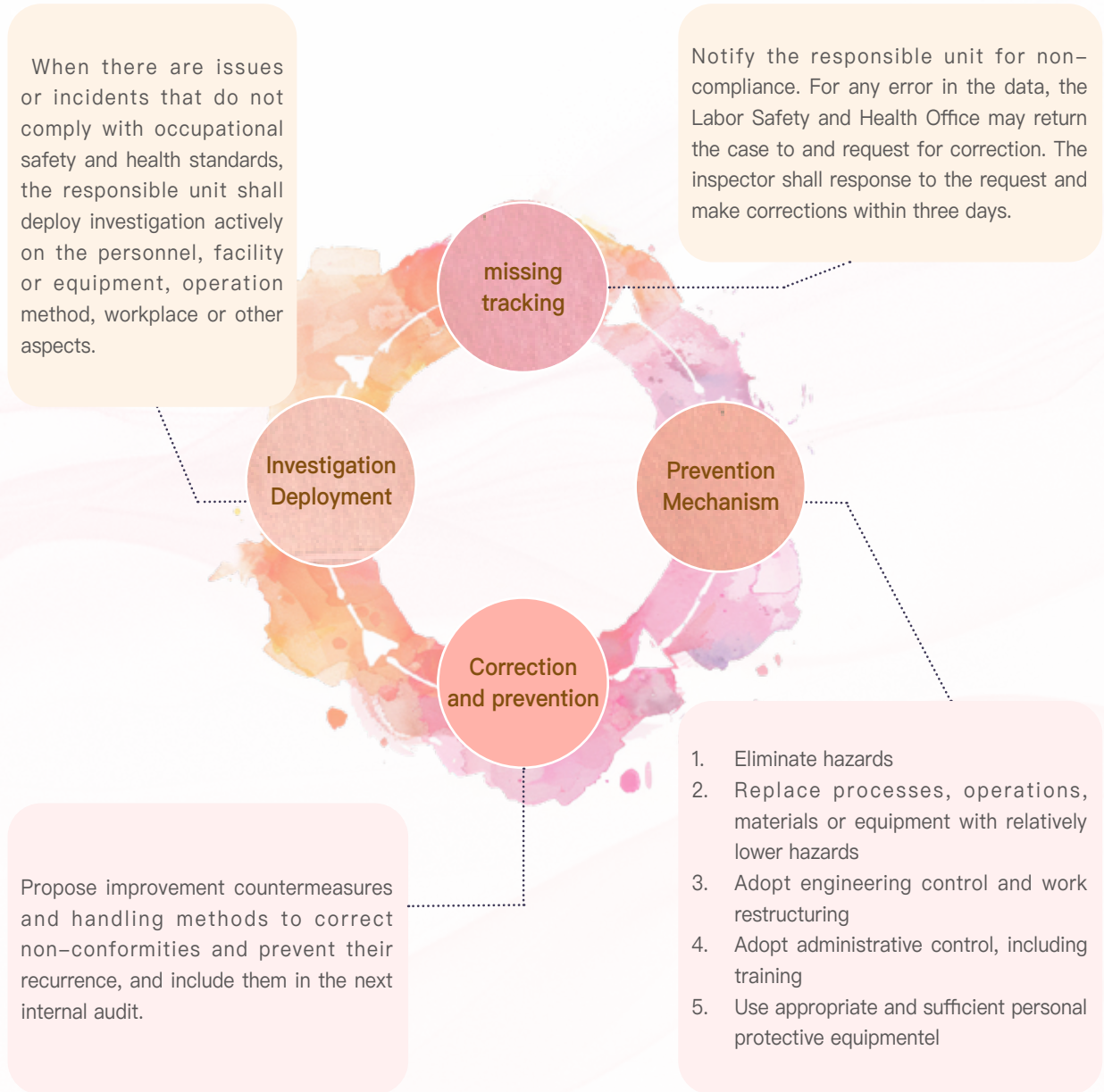
HDRE Occupational injury data in 2023

	Employee type	HDRE staff	Con-tractor	Total
	Incident Rate (IR) (Number of lost work incidents/ total work hours) *200,000	0.60	0	0.37
	Occupational Disease Rate (ODR)= (Total number of occupational diseases/ total work hours) *200,000	0.00	0	0
	Lost Day Rate (LDR)= (Total number of lost workdays / total work hours) *200,000	1.20	0	0.74
Head office	Absence Rate (AR)= (1) total hours of sick leave +(2) personal leave / total work hours *100%	0.00	0	0
	Functional Rate (FR)= (Number of lost work cases *106)/ total work hours	3.00	0	1.84
	Severity Rate (SR)= (Number of lost workdays *106)/ total work hours	6.00	0	3.68
	The Serious Occupational Injury Rate= (Number of serious occupational injuries / total work hours) *200,000	0	0	0
	Recordable Occupational Injury Rate= (Number of recordable occupational injuries in 2022 / total work hours) *200,000	0.60	0	0.37



• **Work Improvement Measures**

To strengthen occupational health and safety management in the workplace, we adhere to a rigorous approach in controlling and managing any safety and health-related incidents. If any non-compliance with occupational health and safety standards is identified, we require relevant department colleagues to document the reasons on a "Corrective Action Request Form." In the event of an accident, the causes are documented on an "Accident Investigation Form." After the non-compliance/accident occurs, the responsible department needs to conduct investigation, review and planning within one week, and propose improvement countermeasures and handling methods. Moreover, a monthly report to the company's first-level supervisor is required, which needs to include the contractor's safety and health performance, whether there are any major deficiencies, etc., and non-compliance should be addressed and prevented from happening again. Improvements will be listed as part of the next internal audit.



5.3.3 Health Promotion and Employee Care

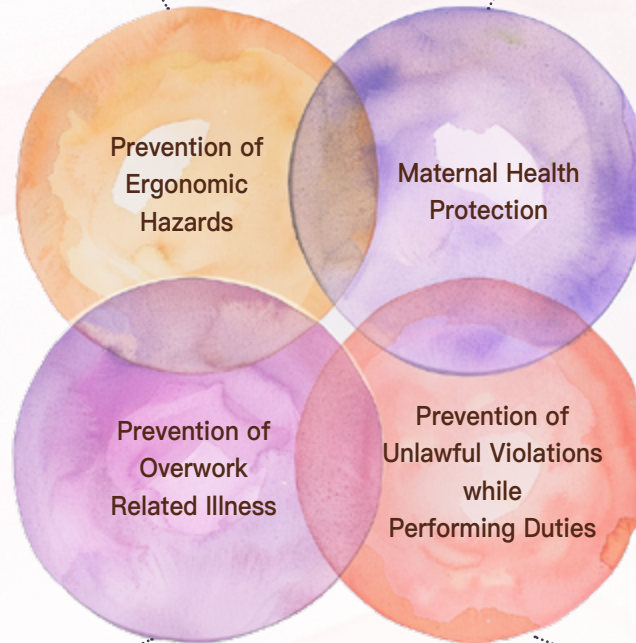
- **Employee Healthcare**

In order to properly care for the health of our colleagues, we provide four major employee care plans, including Prevention of Ergonomic Hazards, Maternal Health Protection, Prevention of Overwork Related Illness, and Prevention of Unlawful Violations while Performing Duties, to better improve workplace care and protect our colleagues. For measures and actual results, please see below the table of “Occupational Safety and Health Risk and Opportunity Topic Control Measures”.

The Four Major Care Plans

The company's plan is based on the “Guidelines on Preventing and Managing Ergonomic Hazards” of the Occupational Safety and Health Administration of the Ministry of Labor. According to the survey on nordic musculoskeletal (target participants: colleagues who have been employed for one year), those who have a self-assessment score of 3 or above need to carry out health management. This is to reduce the risk of accidents caused by human factors and establish prevention measures, ensuring the safety and health management system be effectively implemented and carried out.

We care for our employees and their health. In addition to formulating an illness prevention plan due to abnormal workload, we designed an overwork scale survey. For those reporting over workload, an interview with the RPN will be arranged to conduct worker overload prevention, health education, and provide guidance.



To protect the health of employees, a maternal health protection plan is conducted. The plan is to enhance colleagues' sense of identification with the company and compliance with laws and regulations. Measurements include maternal health risk assessment and RPN interviews for female colleagues in the company. Moreover, breastfeeding rooms are established in new office buildings (Asia Pacific Cloud Office, Hongpu Building Office) to provide a safe and comfortable area for breastfeeding.

Establish a prevention plan for illegal violations during the execution of duties. Senior managers are required to sign a “Prevention of Workplace Violence”, which includes the anti-stalking law within its scope of violations. Moreover, risk assessments are conducted on internal businesses, projects, engineering units and supervisors that are more likely to face stakeholders. These assessments ensure that employees are not subject to unlawful physical or mental violations in the workplace.








• **Awarded with the Badge of Accredited Healthy Workplace**

HDRE is committed to workplace health promotion and provides comprehensive health resources; all efforts put in to build a healthy workplace. In 2023, with our commitment to taking care of employees' physical and mental health, several measures were implemented to ensure health management and enhance a healthy workplace environment. Our effort was awarded by the Ministry of Health and Welfare the same year with the Badge of Accredited Healthy Workplace. We will continue the spirit of building a healthy workplace. To put into practice, we will apply for the "Workplace Health and Safety Week" held by the Occupational Safety and Health Administration of the Ministry of Labor. All occupational health and safety activity plans will be reported to our internal supervisors and the Ministry of Labor, and results will be provided to the Occupational Safety and Health Administration. This is our commitment to promote occupational safety and health management.

Occupational Health Service Plan

Employee occupational health services and programs are one of the major focuses of HDRE to enhance employees' workplace happiness. A total of NT\$780,850 was invested in the 2022 occupational health service plan, including employee psychological consultation services, health promotion sessions, physical health examinations, on-site occupational physician services and the installation of AED first aid equipment.

Services	Control measures	Actual results
 <p>Employee psychological consultation services</p>	<ol style="list-style-type: none"> When employees suffer from physical or mental discomfort, or when work stress affects their lives, we will first ask them to take the "overwork scale survey". For colleagues with higher overload factors, we will arrange for an interview with a RPN to understand the degree of hazard factors, give suggestions and keep records for follow-up health monitoring. In addition, if a colleague constantly feels unspirited, we will also arrange interviews with a health service nurse, provide information such as psychological support treatment institutions, government platforms, etc., and conduct follow-up tracking. In order to enhance the health and safety of middle-aged and senior workers in the workplace, we conduct fitness assessments for them. 	<ol style="list-style-type: none"> In 2023, we held 12 stress adjustment and RPN/psychologist care activities, with a total of 23 participants (19 received care from RPNs and 4 from psychologists). We carried out 3 worker fitness assessments for middle-aged and senior employees. The assessment included their current working environment and workload. They are all well-fitted for their positions.
 <p>Health promotion session</p>	Organized online promoting sessions in cooperation with on-site health services.	Organized 3 health promotion online sessions: "Muscle Training Using Resistance Bands", "On Abnormal Glucose Metabolism and Diabetes", and "Zero Tolerance for Harassment—Establishing a Balance of Clear Boundaries and Respect".
 <p>Physical health examination</p>	We implement general health checks that exceed regulations for all employees, allowing them to understand their own health conditions. Moreover, we increase healthcare subsidies on an annual basis to ensure our employees monitor and maintain their health status.	<ol style="list-style-type: none"> There is an additional budget of NT\$500 per person for employee health examinations compared with last year, with a subsidy of NT\$2,500 per person, bringing the total amount to NT\$586,050. In 2023, the health check process was brought into the company for the first time, and all general examinations were included with an addition of several new items. This practice enabled our employees to be more self-aware and self-manageable of various health factors.
 <p>On-site occupational physician service</p>	Arrange for occupational physicians to come on site regularly to provide health examination, assessment, consultation and other services	<ol style="list-style-type: none"> RPN: 4 times/month Occupational physician: 1 time/quarter
 <p>AED first aid equipment</p>	To provide employees with a safe and healthy environment and strengthen the ability to handle emergencies, emergency response personnel are established in each unit and AED first aid equipment is set up in each office.	<ol style="list-style-type: none"> There are 4 AED first aid equipment in total. New and more AED equipment is expected to be set up in the new offices in 2024. With more staff coming in, first aid courses (AED, CPR training) will continue to be provided.

2023 Counseling Services

1. We provide empathetic listening, professional assessment, and analysis for employees facing challenges in the workplace and personal life. We offer basic mental health education and stress relief techniques, along with suggestions for seeking formal psychological counseling in the future. We also provide a list of resources for psychological counseling, encouraging employees to seek help when needed.
2. We help employees recognize and understand their emotional coping patterns by employing empathetic speculation techniques. We guide them to connect with their own emotions and learn how to navigate them.
3. Through the counseling process, we observe and discuss employees' patterns of interpersonal interaction, aiming to enhance their self-awareness and understanding of their own behavior.
4. We acknowledge and affirm the unique strengths and qualities of each individual case, while also encouraging employees to pay attention to and express their true inner needs.
5. We guide employees in examining how their internal cognitive beliefs and assumptions can influence their coping strategies when faced with external pressures. We help them differentiate between emotional experiences and rational thoughts, and encourage them to accept and address their emotional needs.



掌握黃金救命時間 北/中/南辦公室設置完成

台北天母總部

台北宏普辦公室

台中亞太雲端辦公室

台南佳里辦公室

彈力帶肌力訓練

以徒手肌力訓練動作為基礎，搭配彈力帶為局部肌肉帶來更大的阻力刺激，搭配正確的伸展動作，可強化心肺功能，增加柔軟度，達到雕塑身材與燃脂的效果。

講師：Terry

課程特色：

- 01 提升心肺功能
- 02 提高基礎代謝
- 03 強化骨節關節穩定度
- 04 降低體脂肪
- 05 增加身體的運動能力、柔軟度及協調性

影片參考

拍攝提問

隨聲養成

糖代謝異常與糖尿病線上講座

原因、症狀、診斷、預防一次懂

蕭立偉 醫師

李源就雲頂的立偉醫師 線上開講囉！

現任：
彰濱秀傳紀念醫院
- 泌尿內科主任及泌尿科主任
- 泌尿代謝科主治醫師

相信很多人在聽到異常血糖報告心情都會五味雜陳，但為了自己的健康還是更一起努力正視糖代謝的問題！！

Agenda

1. 糖代謝異常與糖尿病是什麼？
2. 糖代謝異常與糖尿病的原因
3. 糖代謝異常與糖尿病的狀況
4. 糖代謝異常與糖尿病診斷標準
5. 糖代謝異常與糖尿病會好嗎？
6. 糖代謝異常與糖尿病常見治療方法
7. 糖代謝異常與糖尿病常見的併發症
8. 糖代謝異常與糖尿病的日常保健

上課日期：2023/9/21
上課時間：12:00-12:50

福氣安康線上講座

從電影的Tool運動場景在社會裡已久的現象進行，探索華人傳統文化的脈絡，公開自己的故事，並與觀眾對話，探討社會現象之外，面對不同類型的性騷擾侵害，我們如何做到「不要我做壞事了」。

謝慶榮 律師：國立交通大學法律學院教授、性別平等專員

許少平 精神科社工師

彰濱秀傳紀念醫院精神醫學部社工組長
彰濱秀傳紀念醫院護理人員發展諮詢輔導員
彰化地檢署監獄處分科小組委員
彰化縣家庭教育中心審判處委員
彰濱秀傳/西/廈門加西人醫務處臨床護理師
南華大學學生學系兼任講師
國立暨南國際大學兼任講師
彰濱秀傳產後護理之家親子講師



• Occupational doctor on-site service

Professional nurse

Field stationing frequency: 4 times per month

Execution Effectiveness

- New Employee Health examination abnormality follow-up management: 63 people-time.
- Health examination/physical examination abnormality follow-up management: 68 people-time.
- Maternal health care: 6 people-time.
- Ergonomic musculoskeletal survey for employees on-board for one full year: 98 people; health management for individuals at high-risk ergonomic: 6 people-time.
- Annual overload survey: 118 people; health management for high-risk overload: 23 people-time
- Unlawful infringement risk assessment: 5 persons-time
- Completed Supervisor-Level Workplace Misconduct Self-Assessment Checklist: 57 Participants.
- Return-to-Work Assessment and Support: 4 persons-time.
- Medium and high age group health care: 3 persons-time.
- Provided a total of 25 health care education presentations irregularly to enhance the health management awareness of employees.

Employees' Opinion and Feedback

- The effectiveness of the consultations is high, and it can assist employees to understand their health examination reports and how to follow-up further.
- Employees actively schedule monthly on-site health services and express immense benefits from the health education information and medical resources provided by the nurses. They also feel that the company places significant emphasis on employee health.

Taipei Office

Taichung Office

Tainan Office



Professional physician

Field stationing frequency: Once per quarter

Execution Effectiveness

- Through the examination form, assistance is provided to improve the lifestyle habits of individuals at high risk of ergonomic hazards, and health education to effectively reduce discomfort scores related to musculoskeletal issues is implemented.
- For employees of high overload risk, psychological support, clinical health education, job corresponding consultation are provided, and referral resources are also provided.

Taipei Office

Taichung Office



Tainan Office



Self-Health Monitoring Installation of first aid kit and sphygmomanometer

Execution Effectiveness

Through the advancement of training and daily advocacy, we promote the importance of respecting human rights among our colleagues. Additionally, we review and require our suppliers and partners to ensure that their direct and indirect operational activities do not violate fundamental human rights. We are committed to doing our utmost to ensure that all stakeholders related to the company are treated fairly and with dignity.

Taipei Office



Taichung Office



Tainan Office



操作說明

- 接上電源。
- 綁壓帶空氣管—側應在手肘內側上方 1~2公分處

- 啟動：按下[START/STOP]鍵將自動進行量測

注意事項

- 測前30分鐘避免運動、菸酒、咖啡、情緒起伏等
- 測前5分鐘：放鬆休息
- 測量時：
 - 舒適坐姿，讓手臂有穩定支撐
 - 手臂與壓帶放與心臟同高位置
 - 雙腳平放，保持靜止不要說話

血壓值分類

此圖適合電腦系統螢幕

	收縮壓 (mmHg) 收	舒張壓 (mmHg) 收
正常血壓 (綠)	<120	<80
高血壓前期 (黃)	120-140	80-90
高血壓前期 (紅)	>140	>90





• Occupational Safety and Health Risk and Opportunity Topic Control Measures


Impact	Health Risk Issue	Control Measures	Actual Outcome
High Risk	Occupational Disaster Investigation	<ul style="list-style-type: none"> Consider risk factors during early planning of the project site and include significant risks in the assessment. Informing and warning project site contractors of risks and establishing prevention and protection devices in advance. 	<ul style="list-style-type: none"> With the development of business scale, an occupational accident occurred in December 2023. The accident was reported and timely investigated. All project sites need thorough investigation and improvement, which have been done and improved.
Medium Risk	Office environment and drinking water monitoring	<ul style="list-style-type: none"> Office management of carbon dioxide levels and lighting conditions. Engage qualified organizations to conduct drinking water monitoring. Implement and track improvements for non-compliant issues. 	<ul style="list-style-type: none"> Ensured monitoring standards comply with regulations. Provided adequate lighting and a comfortable working environment. Implemented periodic monitoring and follow-up to prevent occurrence of nonconforming incidents.
	Maternal Health and Protection	<ul style="list-style-type: none"> Incorporate the implementation plan into the management program. Conduct maternal health risk assessment and establish lactation room planning and setup. Conduct on-site nurse interviews assessments. 	<ul style="list-style-type: none"> Implementation started in January 2022 and ensured compliance. Completed maternal health risk assessment: 6 colleagues conducted maternal health protection interviews with occupational physicians/RPN (including 4 during pregnancy and 2 after childbirth). Breastfeeding rooms are established in new office buildings (Asia Pacific Cloud Office, Hongpu Building Office). Enhanced employees' identification and compliance with the company.
	Ergonomic hazard prevention	<ul style="list-style-type: none"> Establish relevant management procedures. Conduct ergonomic hazard investigations. Install appropriate improvement tools. 	<ul style="list-style-type: none"> Established ergonomic hazard prevention plan. As of February 2023, a total of 123 colleagues have completed musculoskeletal surveys; 5 of them were assessed as high-risk groups, and were subsequently transferred to RPN for human factors education interviews and guidance. Completed ergonomic hazard assessment for employees and included it in the on-site nursing interviews. Provided employees with computer stands in order to alleviate the shoulder and neck pain caused by computer operation. 6 colleagues received musculoskeletal discomfort care from occupational physicians/RPN.


Impact	Health Risk Issue	Control Measures	Actual Outcome
	Prevention of illness resulted from abnormal workload	<ul style="list-style-type: none"> • Implement overwork scale survey • Arrange a psychological counselor to conduct care interview • Plan lecture sessions, conduct assessments and provide psychological consultation resources to employees. 	<ul style="list-style-type: none"> • A total of 123 colleagues were surveyed. Among them, 5 colleagues scored higher on the scale, which is identified as over workload. We prioritize them for care interviews and keep records. • Carry out risk identification and management measures for the types of violence that may occur and where.
Medium Risk	Prevention of Unlawful Violations	<ul style="list-style-type: none"> • Develop relevant management procedures. • Draft a written declaration for the prevention of workplace violence, to be announced after being approved by senior management. • Implement hazard identification and risk assessment forms for the prevention of workplace unlawful violations. 	<ul style="list-style-type: none"> • In accordance with the revised “Guidelines for the Prevention of Unlawful Violations while Performing Duties” announced by the Ministry of Labor on August 17, 2022, the Stalking and Harassment Prevention Law has been incorporated into this procedure, and the formulation of a plan to prevent illegal infringement has been completed. • Senior management signed and announced the written declaration for the prevention of workplace violence, highlighting the commitment and determination of HDRE. • Completed hazard identification and risk assessment forms for the prevention of workplace unlawful violations in the northern, central, and southern offices, assessing them to be within acceptable safety levels. • Implemented the annual environment inspection record form to prevent unlawful violation.
	Workplace health and safety	<ul style="list-style-type: none"> • Establish dedicated personnel for safety and health management. • Assess the arrangement of on-site RPN to implement employee health management and monitoring. • Organize annual health examinations for employees. • Implement safety and health management measures for contractors. 	<ul style="list-style-type: none"> • Completed the establishment of a safety and health dedicated unit and the reporting of government personnel in August 2021. • Assessed and implemented on-site RPN. • Conducted employee health checks with subsidies to a total of 244 employees in November 2023. • Operation safety management across six areas was implemented, involving a total of 26,335 contractors.
Opportunity	Occupational Safety and Health management system planning and implementation	<ul style="list-style-type: none"> • Assess the implementation of the management system. • Establish education and training procedures for employees. • Record and manage the verifications of external institutions. • Assess and manage subcontractors' capabilities for new business projects. 	<ul style="list-style-type: none"> • After integrating ISO 45001, ISO 9001 and ISO 14001, 3 manuals, 39 procedure documents, 34 regulations and plans, and 233 execution forms were produced. • Completed verification and obtained management system certificate in August 2023. • Inspected and reviewed the effectiveness of the management system periodically.





• **Achievements in Promoting a Happy Workplace**

HDRE has made significant efforts to strengthen four major aspects: "diverse workplace inclusion," "gender equality," "maternal health protection," and "workplace safety." In terms of human rights policies and measures, we have conducted more comprehensive reviews and planning to lead our employees towards a more diverse and equal workplace. This includes promoting new employee education and daily advocacy to emphasize the importance of respecting human rights among our colleagues. Additionally, we have reviewed and required our suppliers and business partners to ensure that they do not violate basic human rights in any of their direct or indirect operational activities, aiming to safeguard the fair and dignified treatment of all stakeholders related to our company to the best of our abilities.

Items	Description	Actual Action	2023 Execution Result
 Diverse Workplace Inclusion	We follow relevant international human rights regulations and value multiculturalism. Our personnel employment policies are mainly based on factors such as job requirements, personal professional abilities and development potential. We do not treat gender, race, etc. differently.	<ul style="list-style-type: none"> Promote gender-friendly workplace. Promote maternal workplace care. Provide employment opportunities for people with disabilities 	<ul style="list-style-type: none"> Employed 1 employee with disabilities. Strengthen gender diversity workplace education and training. Set up breastfeeding rooms in the office areas. Added a "Job Description for Each Unit Position".

Items	Description	Actual Action	2023 Execution Result
 Gender Equality	Implement education and awareness program on sexual harassment prevention for new employees	<ul style="list-style-type: none"> Set up sexual harassment consultation and complaint channels. 	There were no sexual harassment incidents in 2023.

Items	Description	Actual Action	2023 Execution Result
 Maternal Health and Protection	Build a maternity-safe and supportive workplace environment and system to reduce the overall burden on employees from pregnancy to postpartum.	<ul style="list-style-type: none"> Incorporate the implementation plan into the management program. Conduct maternal health risk assessment and plan the establishment of breastfeeding rooms; the new office buildings have completed establishments. Conduct field nurse interview assessment. Implement corporate childcare services. 	<ul style="list-style-type: none"> We have conducted maternal health protection, workplace environment and operational hazard assessments for six individuals. The breastfeeding rooms have been set up in the new office buildings. The Asia-Pacific cloud office was completed in 2022; the Hongpu Building office in 2023; and the Yangde office is expected to be set up by 2024. In 2023, "HESS Educational Enterprise Co., Ltd." was commissioned to provide corporate childcare services.

Items	Description	Actual Action	2023 Execution Result
 Workplace Safety	Promote all employees to participate in quality control, environmental safety and health, health promotion and energy efficiency-related activities activities, and continuously strive for improvement.	<ul style="list-style-type: none"> Evaluate the implementation of occupational safety and health management system. Provide personnel educational training and develop procedural documents Execute record management and verification of external institutions. Each office is equipped with AED first aid equipment 	<ul style="list-style-type: none"> After integrating ISO 45001, ISO 9001 and ISO 14001, 3 manuals, 39 procedure documents, 34 regulations and plans, and 233 execution forms were produced, which were incorporated into the documents of relevant departments for management and implementation. ISO 45001 completed verification and obtained certificate. Regularly verify and review the effectiveness of the management system

06

Sustainable Feedback and Mutual Prosperity

6.1 Social Co-prosperity Strategy

6.2 Energy Education

6.3 Public Welfare Contribution

6.4 Local Symbiosis

6.5 Ecological Protection









CH6 Sustainable Feedback and Mutual Prosperity

Core Vision and Commitment

Adhering to the philosophy of "taking from society, giving back to society," we are committed to practicing social responsibility through knowledge sharing and active engagement in society. HDRE upholds the principle of "Creating sustainable co-prosperity, Practicing Care and Rooted Education", and focuses on the four main issues of "energy education, public welfare contribution, local symbiosis, ecological conservation," aligning with the United Nations Sustainable Development Goals (SDGs). We implement ESG diverse actions to assist remote area development and promote social equality opportunities for vulnerable groups.

2023 Results and Performance

1. Offset carbon footprint by purchasing 22 tons of high-quality Peruvian forest carbon credits certified by VCS through the Singapore platform CIX, achieving "carbon-neutral travel" for the first overseas company trip.
2. Support the Pure Green Foundation in their tree planting project to preserve biodiversity. From 2021 to 2023, we planted a total of 4,000 trees.
3. Support the filming of the Taiwan Unsung Hero documentary series featuring Tommy Chen and has become the exclusive public welfare partner for the Taiwan Unsung Hero AR Digital Picture Book.
4. Our long cultivation of cultural sustainability has been recognized, winning us the Ministry of Culture's Arts & Business Awards' "Cultural Sustainability Award" and "Silver Award".

Material Topic : Local community		
 The actual and potential positive impacts (opportunities) on the economy, environment, and population	 The actual and potential negative impacts (risks) on the economy, environment, and population	 Resources invested in 2023
The development of the project site combines the local community, ecology, and environment, providing more job opportunities for residents and retaining the local youth population.	Failure to communicate effectively with the local community may create a negative impression of HDRE among stakeholders, leading to frequent operational disruptions or damage to the company's reputation.	<ol style="list-style-type: none"> 1. The amount of investment in social welfare reached 7,357,116 NTD. 2. Having long sponsored Formosa 3D Film Car to promote energy education, we supported the filming of the Taiwan Unsung Hero documentary series featuring Tommy Chen this year, which is made into AR Digital Picture Book.
Strategic goals		
 Company policies and commitments to the local community	 Short-term goals (1 year)	 Medium to Long-term goals (3-5 years)
Achieve a triple win in environmental ecology, fishermen livelihood, and green energy generation by conducting an Environmental and Social Impact Assessment to carefully assess the benefits and impacts, while respecting the wishes of the local community and safeguarding the rights of fishermen.	Collaborate with environmental organizations to promote energy education in schools near the project site.	Continuously promote energy education, public welfare contributions, local coexistence, and ecological conservation.

6.1 Social Co-prosperity Strategy

Each year, we allocate a budget for public welfare from the photovoltaic revenue to give back to the community. Moreover, we invite all our subsidiaries across Taiwan and all employees to participate in our charity activities. In addition, we actively respond to various social engagement activities and sign up for volunteering work to put social care into practice. Through diverse approaches, such as energy education, public welfare contributions, local symbiosis, and ecological protection, we aim to give back to society and achieve sustainable development as a whole.

Mutual Prosperity in Society Development Blueprint



6.2 Energy Education

HDRE has collaborated with the Formosa 3D Association, a non-profit organization, to promote energy education. Through the association's touring exhibitions, we aim to provide children in remote areas with diverse perspectives on life values. Building upon this foundation, we integrate the concept of sustainability and power the 3D touring vehicle with solar energy, allowing it to operate autonomously during the exhibitions. This not only exposes children to the practical application of sustainable energy but also fosters a more tangible understanding of the importance of sustainable energy sources. In addition to showcasing 3D films through the Formosa 3D Association, our collaboration enables us to educate children on how to love Taiwan and its land in a sustainable manner. This goes beyond movies and extends to teaching children how to use energy in a sustainable way. For more information.

Looking ahead, we have plans to expand our partnerships with environmental organizations. By collaborating with schools near HDRE's project sites, we aim to engage in energy and environmental education. This initiative serves a dual purpose: promoting students' awareness of sustainability and renewable energy while deepening our understanding of the local community and establishing positive relationships.



6.2.1 Focus on Energy Education

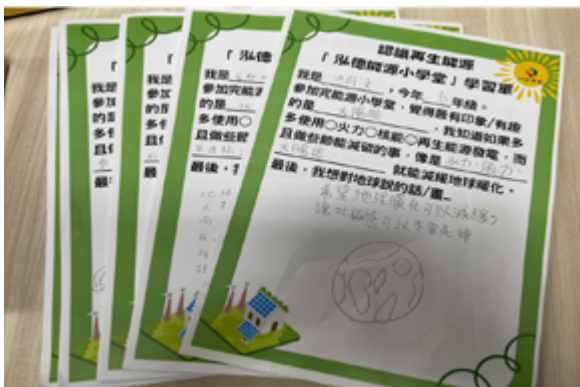
- **Formosa 3D movie vehicle traveled to all regions in Taiwan, and encouraged more than 3,000 school at remote areas**

HDRE Energy has partnered with the non-profit organization, Formosa Taiwan 3D Association, to launch a rural education program initiated by the director of "Formosa Taiwan 3D," Chu Chuanlee. With 3D filming techniques, the program showcases the beauty of Taiwan's nature and screens it on a mobile movie vehicle. Over the past year, it has successfully reached remote elementary schools across Taiwan, impacting an average of one student per kilometer. Formosa Taiwan has been on the road, inspiring the vision and dreams of the next generation. To date, the movie vehicle has visited nearly 3,100 schools, over 210 institutions for the vulnerable groups, and has traveled a total distance of over 260,000 kilometers, inspiring more than 260,000 students. With an average impact of one child per kilometer traveled.

Throughout the process of promoting this concept, the movie vehicle has faced challenges with unstable and insufficient power supply. HDRE has utilized its expertise to address this issue by installing solar panels on the rooftop of the movie vehicle and equipping it with energy storage devices. This innovation has resulted in the creation of Asia's first 3D mobile solar-powered movie vehicle, allowing the movie vehicle to be self-sufficient in terms of power supply as it travels across Taiwan.

In 2023, HDRE supported the filming of the Taiwan Unsung Hero documentary series featuring Tommy Chen and became the exclusive charity partner of Taiwan Unsung Hero AR Digital Parent-Child Picture Book. Additionally, we supported Formosa 3D on 110 3D-movie tours and green energy education performances in remote areas, reaching a total audience of 11,397 people. Due to this long-term cultural development support, HDRE received the Ministry of Culture's special award "Cultural Sustainable Development Award" and permanent award "Silver Award". We hope to continue to inspire — bring courage to the kids, broaden their horizons, and reach out to them!





2023 下半年開始執行
初步以苗栗縣、台東縣、嘉義縣、台南市等泓德案場周邊小學為主，完成將近 400 人次的宣導



HDRE and Formosa 3D Movie Vehicle

"Beauty is a force! I want to document more and better things for Taiwan," said director Chu Chuanlee. He spent 10 years capturing the most beautiful people, events, and objects that have existed in Taiwan, from Orchid Island to the Central Mountain Range, from small towns and rural areas to bustling cities, and from natural landscapes to traditional craftsmanship. Since February 2014, Formosa Taiwan 3D Movie Vehicle has been tirelessly promoting rural education, bringing positive energy to children, and helping them discover the true goodness and beauty of Taiwan.

Formosa Taiwan brought laughter to children in rural areas and touched the hearts of HDRE, officially becoming their philanthropic partner. Chairman of HDRE, stated that due to occasional power instability and outdated outlets in rural areas, after connecting with Director Qu, they immediately provided solutions using HDRE's core technology. They installed solar panels on the rooftop and increased energy storage devices. As a result, after a full charge, the power is sufficient to screen at least two movies in a day. This eliminates the worries of Formosa Taiwan about power supply issues. Furthermore, the power can be generated and stored simultaneously, realizing a small-scale microgrid in action.



Solar-Powered Mobile Movie Vehicle Introduces Children to Green Energy

The unique 3D mobile movie vehicle, in collaboration with HDRE, introduces a fresh and exciting concept that goes beyond traditional filmmaking. It incorporates new visual content, such as the "Taiwan Superman" film series, capturing the inspiring stories of ordinary individuals who radiate extraordinary brilliance in society. Through these heartfelt narratives, the movie theater showcases the remarkable significance of each person's life to the next generation of children.

Furthermore, we have integrated scientific knowledge into the mix, presenting energy education in a tangible way through the 3D movie vehicle experience. After watching the films, children's attention is directed back to the movie vehicle itself, where they learn that using green energy is not an unattainable goal but rather a part of their everyday lives. The aim is to cultivate a sense of sustainability and promote environmentally friendly lifestyles among the younger generation.



6.2.2 Construct All-Weather Basketball Courts with PV rooftops

- We have successfully assisted two schools in building all-weather basketball courts!

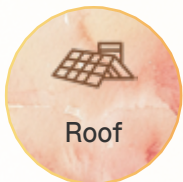
Pantau Elementary School, Miaoli

The basketball court at Pantau Elementary School in Miaoli County has been in use for many years and is outdated with no shelter from rain, unfavorable weather conditions hinder leisure activities for the public and impede sports activities for students. To provide a better basketball court and align with the government's green energy policies, HDRE invested in the transformation of the court into a solar-powered photovoltaic facility.

Despite encountering challenges such as escalated pandemic situations and design changes during the construction period, we successfully completed the project through patient communication, coordination, and strict monitoring of engineering quality. The transformed facility now serves as an indoor activity space, generates green energy, and promotes energy education, effectively resolving the issue of insufficient indoor sports spaces.

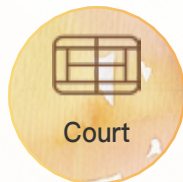
Total Installation Capacity at Pantau Elementary School 794.31kW

After the solar panels are installed, we encourage internal employees to enter the campus and serve as energy education lecturers to further promote energy education.



Roof

420.09 kW



Court

320.76 kW



Parking Lot

53.46 kW



Solar Photovoltaic Basketball Court of Pantau Elementary School, Miaoli County



After the installation of solar panels, we encourage our internal staff to enter the campus and serve as energy education instructors to further promote energy education. Through hands-on demonstrations using small solar panels, we aimed to help students realize the connection between energy and themselves. This initiative inspired children to contemplate the relationship between their daily lives, environmental conservation, and energy usage. In total, we reached over 200 students from Pantau Elementary School.

By guiding them, we helped students understand how to improve energy efficiency and reduce unnecessary waste while promoting economic development. In the future, we will continue to promote energy education by tailoring educational themes on renewable energy based on the different educational levels of the students. Our goal is to lead students in understanding renewable energy and its various applications in everyday life.



Promoting Energy Education Among Students: Teaching Energy Utilization

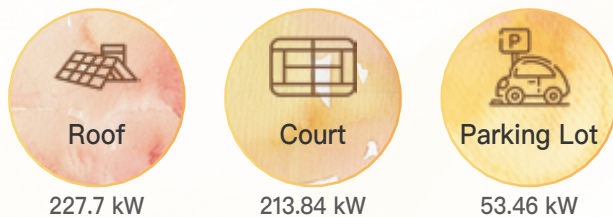


Zhuxing Elementary School, Miaoli County

Taking into consideration the limited indoor space at Zhuxing Elementary School, HDRE has funded the construction of a solar photovoltaic stadium, effectively addressing three major issues: indoor space constraints, self-sustaining solar power generation, and revitalizing the school grounds. This initiative not only provides the school with additional indoor space but also increases physical activity for students while significantly reducing the school's expenses through self-generated electricity. The projected benefits of the photovoltaic stadium are impressive, estimated to provide annual electricity consumption for 162 households, generating approximately 580,000 kilowatt-hours per year, and reducing carbon emissions by 319 metric tons.

Furthermore, the initiative of bringing green energy into schools has further raised children's awareness and knowledge of renewable energy. By showcasing tangible examples, sustainable energy has become ingrained in the daily lives of these young learners, fostering the development of sustainable concepts and everyday knowledge. This initiative is driving the advancement of energy education, starting from an early age.

Total Installation Capacity at Zhuxing Elementary School 495 kW



Solar PV Basketball Court at Zhuxing Elementary School, Miaoli County

6.3 Public Welfare Contribution

HDRE is leaving no stone unturned when it comes to social welfare. The company has made sustainable development its core value, and in recent years, it has made extensive contributions to various areas of social welfare, including religious organizations, government agencies, disadvantaged groups, and sports, demonstrating HDRE's commitment to mutual prosperity in society. Among them, our investment in energy education has reached new heights. We have dedicated our efforts to energy education in rural areas, expanding the horizons of children. Our investment has soared from NT\$160,000 last year to NT\$6 million in 2023. Moving forward, we will continue to invest in philanthropic actions, ensuring that every dollar spent yields maximum impact. We aim to expand this influence continuously, devoting our utmost efforts to the positive development of society.

2023 social welfare investment exceeded NT\$ 7,357,116

HDRE 2023 Donation Details

Category	Donation Recipient	Donation
Sponsored temples for event organization	Fo Guang Shan Temple	1,000,000
	Jianshan Hsianji Temple Management Committee	120,000
Energy education promotion	Formosa 3D Association	6,237,116
Total		7,357,116

In addition to the aforementioned donation support, Hongde is also involved in other charitable projects. They provide support and material donations for elderly care within the country and for children in need internationally. Additionally, they offer resources and assistance to students domestically, continually working to create a better learning environment. This includes practical field trips and scholarship programs.

Digital Humanitarian Association's Senior Welfare Project

Starting from the fourth quarter of 2023, funding has been provided to support fitness courses, health consultation services, and health promotion for the elderly.

As society ages, the health and well-being of seniors become increasingly important. Through this initiative, we hope to help seniors maintain their physical and mental health and improve their quality of life.



Old Shoes Save Lives

In 2023, HDRE Energy mobilized several colleagues to take practical action by donating old items and showing care. Within three days, a total of 251 pieces of old clothing, 68 pairs of old shoes, and 9 old backpacks were collected.

The significance of a pair of old shoes may exceed your imagination. This time, Hongde Energy sent the goodwill of its colleagues to East Africa, allowing local children to avoid injuries from sand fleas.



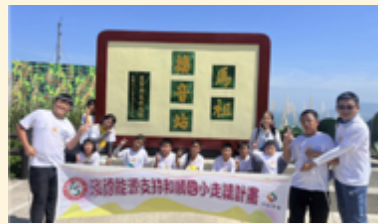
Encouraging students to learn, donation of scholarships to Yunlin University of Science and Technology

To further encourage students to strive for academic excellence, we have established a scholarship mechanism. This scholarship aims to reward students with outstanding academic performance, active participation in both school and community activities, and exceptional leadership skills. Through this scholarship, we hope to assist more promising young people by alleviating their financial burden, allowing them to focus on their studies and personal growth.



Sponsorship for Hsu Hsueh Elementary School Students to Matsu

Students completed a round-island trip in two days, gaining insight into Matsu's local culture through this practical field trip. The activity allowed students to gain a deeper understanding and appreciation of Matsu's history, culture, and natural scenery. Interaction with local residents also let students experience the warmth and kindness of the Matsu people and learn how to respect and protect local culture and environment during their journey.



6.4 Local Symbiosis

Farmer Land Lease Mutual Assistance

In recent years, abnormal climate patterns have had a significant impact not only globally but also on the agricultural sector in Taiwan. For farmers, crop yields are directly affected by the climate. As the effects of extreme weather on farmers become increasingly apparent, we have delved into the local communities, aiming to bring about meaningful change through collaboration.

By fostering care, interaction, and open communication with village and community leaders, we introduce new solutions to address climate-related issues. Through leasing portions of farmland for the establishment of solar power plants, we ensure that farmers can maintain their traditional way of life while engaging in cooperative arrangements that provide them with a stable rental income. This additional income serves as a supplement during times of poor agricultural yields. Local coexistence is a core value that is highly valued by HDRE. We aim to foster community and industry collaboration through the process of co-producing fishing rods, enabling local communities to keep pace with industry advancements.

Local Story

In Neipu Township, Pingtung, there is an elderly landlord who used to make a living by growing betel nuts. Next to his house, there was a large betel nut plantation, and he also cultivated guava at the same time. However, as the betel nut industry gradually declined, the second generation of his family no longer wanted to engage in farming and instead pursued opportunities in big cities. This left the elderly landlord in great distress, as his children were no longer by his side, and his aging body did not allow him to continue farming to sustain his livelihood.

Later on, the old landowner learned from others that by partnering with HDRE, he could not only generate stable income for his retirement life but also save money for the next generation. Accordingly, he decided to lease his land to HDRE for the construction of a solar photovoltaic field. Presently, every time when HDRE visits the field for maintenance, the old landowner always shows his hospitality and offers self-grown guava as gifts to our staff.

In the process of developing the project sites, HDRE also looks forward to assisting the residents by providing new development opportunities and stimulating the local economy. Meanwhile, we do not forget the emotional attachment that the elderly landlord has towards his land. HDRE strives to establish a foundation of trust and foster a good relationship with the local community.



Cooperation with Tainan Fishery Cultivation Industry

In the Beimen District of Tainan, where fishing and aquaculture are predominant, long-term subsidence issues have plagued the region. Additionally, the outmigration of young people has posed a significant challenge to the continuity of traditional industries. While fishing and aquaculture remain important local industries, many landowners are elderly and can no longer afford the labor-intensive tasks involved in aquaculture.

In response to these challenges, HDRE provides localized solutions to address social issues. We actively seek consensus with aquaculture farmers and integrate land through leasing or purchasing arrangements. By establishing fishery-electric symbiosis, we alleviate the livelihood difficulties faced by aquaculture farmers who are unable to continue their operations. Moreover, upon the completion of these projects, we prioritize employing the original aquaculture farmers and local residents, aiming to stimulate the local economy and resolve the issue of unemployment.

Local Story

There is a landowner in the coastal area of Tainan who has relied on aquaculture for generations to make a living. However, due to environmental change and land subsidence in recent years, they had to give up their family's long-standing memories of hard work and growth on this land.

Until the contact was established between the landowner and HDRE, the landowner gained an understanding of the integration between aquaculture and the photovoltaic industry. This not only provided an opportunity for the ancestral land to be revitalized but also contributed to Taiwan's energy transition.

HDRE actively engages in cooperation with the local industries and landowners to promote land reuse and energy transformation.

Currently, there are two projects underway in Tainan. During the construction process, special attention is given to raising the embankments and improving the drainage system to prevent future seawater intrusion. We look forward to developing a friendly living environment and to creating a mutually beneficial and sustainable future.



6.5 Ecological Protection

Protect and Maintain Biodiversity

HDRE takes into account the opinion of various stakeholders throughout the entire process, from site selection and planning to construction and operation. In addition to financial considerations, we place great importance on the environmental and social impacts of our projects. We thoroughly assess the potential benefits and consequences of our development activities. Our approach encompasses ecological harmony, public sentiment, and the rights of fishermen. When designing solar power facilities, we dedicate ourselves to preserving the original land usage and honoring the recommendations of local communities and environmental advocacy groups. We actively preserve ecologically sensitive areas identified in environmental and social impact reports. Our commitment to the preservation of the ecosystem means that we pledge not to exploit designated areas, ensuring the maintenance of biodiversity. Our aim is to conduct our business operations without causing harm or disruption to the local environment while simultaneously fostering a sense of community and inclusive development. For details, please refer to 4.3 Ecological Diversity Protection.

- **Forest restoration and tree planting project**

In response to World Earth Day, HDRE supports Pure Green Foundation's tree planting project to preserve biodiversity, committing to plant 2,000 trees in two years, and actively participating in the 1-hectare forest restoration that uses climate-smart forestry construction methods. On April 23, Chairman Xie Yuanyi also visited Hualien in person to participate in the tree-planting operation. In addition, through "Trees for the Future," the world's largest non-profit tree-planting organization, HDRE planted another 2,000 trees. From 2021 to 2023, a total of 4,000 trees were planted. HDRE has long been highly committed to social responsibility, environmental protection, corporate ethics, and management. In addition to external participation, the company has simultaneously promoted the "Green



Procurement Policy" and "Supplier Code of Conduct" internally to ensure a safe working environment within the supply chain, respect and dignity for employees, environmental responsibility, and adherence to ethical practices. For green procurement, please refer to 3.3.2 Source Tracking Management and Procurement Policy.

Salt Pan Restoration and Migratory Bird Season Charity Sale

2023, Hongde Energy invited employees to experience the ecological environment of the fan-shaped salt pans, engaging in activities such as waste removal and native plant restoration to safeguard the salt marshes and protect natural carbon sinks.

During this process, employees learned how to enhance habitat functionality, strengthen wetland ecological networks, conserve endangered bird species and wetland wildlife, and foster local community well-being. Additionally, the initiative aimed to enrich cultural identity in salt-affected areas.



• **Achieve carbon-neutral during overseas company trip**

For the first time, HDRE's overseas company trip focused on environmental sustainability. Taking into account the increased carbon footprint of overseas travel, it has made advance arrangements during travel planning and incorporated the concept of sustainability into every travel detail. Through sustainable communication and education training, all HDRE colleagues are willing to cooperate with sustainable tourism standards and support the company's environmental sustainability values.



Carbon footprint management

- Flying is the largest source of carbon emissions during the journey, so the carbon footprint derived from flying was calculated for 146 colleagues.
- Purchase 22 tons of high-quality Peruvian forest carbon rights certified by VCS through the Singapore platform CIX to offset our carbon footprint and achieve "journey carbon neutrality".
- This carbon rights project has brought 17,000 job opportunities to 54 local communities and protected 7 endangered species.



碳權項目：秘魯阿爾蘇山國家公園

Sustainable travel education

- The pre-trip briefing and itinerary instructions repeatedly emphasized the importance and coordination of "sustainable travel".
- Participating colleagues are asked to bring their own personal supplies (toothpaste, toothbrush, comb, razor) and avoid using disposable supplies provided by the hotel.
- Bottled water is not provided on the tour bus. You are required to bring your own environmentally friendly cup or water bottle and drink tap water directly from Okinawa.
- We enjoyed a happy 4-day journey to Okinawa while reducing plastic and waste.



- **Promote ecological awareness among colleagues**

In 2022, HDRE organized an ecological tour to Tainan Qigu for employees. We take employees out of the office and into our own RiYun Site for on-site experience. The tour includes cruising the lagoon in the Longhai eco-friendly boat and learning about the local topography, fisheries and mangroves. We also invite ecology guides and professors from the Department of Ecology of Tainan University to provide detailed guides. 91% of participating colleagues say that the overall experience is rewarding, and 55% think that the tour is enriching and interesting.

HDRE plans to conduct ecological tours for employees every six months. We hope that through direct contact with the environment, we can improve the ecological awareness of our colleagues and implement the concept of ecological conservation into daily operations.



Appendix 1: GRI content index with reference

- GRI 聲明

Statement of use	HDRE has reported the information cited in this GRI content index for the period 2023.1.1–2023.12.31 with reference to the GRI Standards.
GRI 1 used	GRI 1 : Foundation 2021
Applicable GRI Sector Standard(s)	none

- GRI 2 : General Disclosures 2021

Category	Index	Disclosure Requirements	Section or omission explanation	Page number
The organization and its reporting practices	GRI 2-1	Organizational details	1.1 About HD Renewable Energy (HDRE)	P.9
	GRI 2-2	Entities included in the organization’s sustainability reporting	About This Report	P.4
	GRI 2-3	Reporting period, frequency and contact point	About This Report	P.5
	GRI 2-4	Restatements of information	None	-
	GRI2-5	External assurance	Appendix 5: Assurance Report of Independent Auditors	P.185
Activities and workers	GRI 2-6	Activities, value chain and other business relationships	1.1.2 Industry Value Chain	P.19
	GRI 2-7	Employees	5.1.1 Employee Overview	P.35
	GRI 2-8	Workers who are not employees	5.1.1 Employee Overview	P.135
Governance	GRI2-9	Governance structure and composition	2.1.1 Governance Structure 2.1.3 Sustainable Development	P.42 P.46
	GRI 2-10	Nomination and selection of the highest governance body	2.1.2 Board of Directors	P.43
	GRI 2-11	Chair of the highest governance body	2.1.2 Board of Directors	P.43
	GRI 2-12	Role of the highest governance body in overseeing the management of impacts	2.4.1 Risk Management Mechanism	P.55
	GRI 2-13	Delegation of responsibility for managing impacts	2.4.1 Risk Management Mechanism	P.55
	GRI 2-14	Role of the highest governance body in sustainability reporting	About This Report	P.4
	GRI 2-15	Conflicts of interest	2.1.2 Board of Directors	P.43
	GRI 2-16	Communication of critical concerns	2.4.1 Risk Management Mechanism	P.55
	GRI 2-17	Collective knowledge of the highest governance body	2.1.2 Board of Directors	P.43
	GRI 2-18	Evaluation of the performance of the highest governance body	2.1.2 Board of Directors	P.43
	GRI 2-19	Remuneration policies	2.1.2 Board of Directors Refer to the annual report for detailed information on the remuneration of directors, supervisors, general manager, vice general manager, etc. for the most recent fiscal year.	P.43
	GRI 2-20	Process to determine remuneration	2.1.2 Board of Directors	P.43
	GRI 2-21	Annual total compensation ratio	5.1.2 Salary, Welfare and Employee Care	P.140

Strategy, policies and practices	GRI 2-22	Statement on sustainable development strategy	Message from the Management	P.6
	GRI 2-23	Policy commitments	2.1.3 Sustainable Development 5.1.3 Human Rights and Communication	P.46 P.143
	GRI 2-24	Embedding policy commitments	Refer to the Material Topic and Strategic Goals	-
	GRI 2-25	Processes to remediate negative impacts	Refer to the Material Topic and Strategic Goals	-
	GRI 2-26	Mechanisms for seeking advice and raising concerns	2.3.1 Corporate Integrity	P.51
	GRI 2-27	Compliance with laws and regulations	2.3.2 Legal Compliance	P.53
	GRI 2-28	Membership associations	2.2.3 External Organization Participation	P.51
Stakeholder engagement	GRI 2-29	Approach to stakeholder engagement	1.2.2 Key Stakeholders	P.23
		Collective bargaining agreements	No labor union, no collective agreement.	-

• GRI 3 : Material Topics 2021

Index	Disclosure Requirements	Section or omission explanation	Page number
GRI 3-1	Process to determine material topics	1.3.1 Material Process Analysis	P.28
GRI 3-2	List of material topics	1.3.2 Material Topics Analysis and Matrix	P.30
GRI 3-3	Management of material topics	Refer to the Material Topic and Strategic Goals	-

• GRI Specific Topic

Category	Index	Disclosure Requirements	Section or omission explanation	Material Topics	Page number
Economy	GRI 201 : Economic Performance 2016	201-1 Direct economic value generated and distributed	2.2.2 Financial Performance	-	P.50
		201-2 Financial implications and other risks and opportunities due to climate change	4.1.2 Identifying climate risks and opportunities	-	P.110
		201-4 Financial assistance received from government	2.2.2 Financial Performance	-	P.50
	GRI 204 : Procurement Practices 2016	204-1 Proportion of spending on local suppliers	3.3.2 Source Tracking Management and Procurement Policy	-	P.99
		205-1 Operations assessed for risks related to corruption	2.3.1 Corporate Integrity		P.52
	GRI 205 : Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	2.3.1 Corporate Integrity	Corporate Integrity & Legal Compliance	P.52
205-3 Confirmed incidents of corruption and actions taken		No corruption incidents occurred.		-	
GRI 206 : Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2.3.2 Legal Compliance		P.53	



Environment	GRI 302 : Energy 2016	302-1 Energy consumption within the organization	4.2.2 Energy Policy and Management	-	P.121
		302-3 Energy intensity	Appendix 3: Greenhouse Gas Inventory and Verification	-	P.183
		302-4 Reduction of energy consumption	4.2.2 Energy Policy and Management	-	P.121
	GRI 303 : Water and Effluents 2018	303-3 Water withdrawal	Appendix 4: SASB Standards	-	P.184
		303-5 Water consumption	Appendix 4: SASB Standards	-	P.184
	GRI 304 : Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	4.3.1 Environmental and Social Assessment		P.128
		304-2 Significant impacts of activities, products and services on biodiversity	4.3.1 Environmental and Social Assessment	Biodiversity	P.128
		304-3 Habitats protected or restored	4.3.1 Environmental and Social Assessment		P.128
	GRI 305 : Emissions 2016	305-1 Direct (Scope 1) GHG emissions	4.2.1 Greenhouse Gas Inspection	-	P.120
		305-2 Energy indirect (Scope 2) GHG emissions	4.2.1 Greenhouse Gas Inspection	-	P.120
305-3 Other indirect (Scope 3) GHG emissions		4.2.1 Greenhouse Gas Inspection	-	P.120	
305-4 GHG emissions intensity		Appendix 3: Greenhouse Gas Inventory and Verification	-	P.183	
GRI 306 : Effluents and Waste 2016	306-1 Water discharge by quality and destination	4.2.3 Waste Management	Waste Management	P.124	
	306-2 Waste by type and disposal method	4.2.3 Waste Management		P.127	
GRI 308 : Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	3.3.3 Supplier Management & Quality Monitoring	-	P.101	
	308-2 Negative environmental impacts in the supply chain and actions taken	3.3.3 Supplier Management & Quality Monitoring	-	P.101	

Society	GRI 401 : Employment 2016	401-1 New employee hires and employee turnover	5.1.1 Employee Overview	Talent retention and attraction	P.135
		401-2 Benefits provided to full-time employees that are not provided to temporary or parttime employees	5.1.2 Salary, Welfare and Employee Care		P.140
		401-3 Parental leave	5.1.3 Human Rights and Communication		P.143
	GRI 403 : Occupational Health and Safety 2018	403-1 Occupational health and safety management system	5.3.1 Occupational Safety and Health Management Measures	Occupational safety and health	P.151
		403-2 Hazard identification, risk assessment, and incident investigation	5.3.3 Health Promotion and Employee Care		P.158
		403-3 Occupational health services	5.3.3 Health Promotion and Employee Care		P.158
		403-4 Worker participation, consultation, and communication on occupational health and safety	5.3.1 Occupational Safety and Health Management Measures		P.151
		403-5 Worker training on occupational health and safety	5.3.1 Occupational Safety and Health Management Measures		P.151
		403-6 Promotion of worker health	5.3.3 Health Promotion and Employee Care		P.158
		403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	5.3.2 Improve Safety and Health Environment, Prevent Occupational Accident 5.3.3 Health Promotion and Employee Care		P.155 P.158
		403-8 Workers covered by an occupational health and safety management system	5.3.1 Occupational Safety and Health Management Measures		P.151
		403-9 Work-related injuries	5.3.2 Improve Safety and Health Environment, Prevent Occupational Accident		P.155
		403-10 Work-related ill health	5.3.2 Improve Safety and Health Environment, Prevent Occupational Accident		P.155
	GRI 404 : Training and Education 2016	404-1 Average hours of training per year per employee	5.2.1 Diverse Educational Training and Talent Development	Talent development and training	P.146
		404-3 Percentage of employees receiving regular performance and career development reviews	5.2.1 Diverse Educational Training and Talent Development		P.146
	GRI 405 : Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	2.1.2 Board of Directors 5.1.1 Employee Overview	Talent retention and attraction	P.43 P.135
		405-2 Ratio of basic salary and remuneration of women to men	5.1.2 Salary, Welfare and Employee Care		P.140
	GRI 406 : Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	5.1.3 Human Rights and Communication	-	P.143
	GRI 408 : Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	5.1.3 Human Rights and Communication	-	P.143
GRI 413 : Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	4.3.1 Environmental and Social Assessment	Local community	P.128	
GRI 414 : Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	3.3.3 Supplier Management & Quality Monitoring	-	P.101	
	414-2 Negative social impacts in the supply chain and actions taken	3.3.3 Supplier Management & Quality Monitoring	-	P.101	
GRI 417 : Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	No occurrence of any violation of relevant regulations.	Product quality and responsibility	-	
	417-3 Incidents of non-compliance concerning marketing communications	No occurrence of any violation of relevant regulations.		-	
GRI 418 : Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	No incidents of infringing upon customer privacy or complaints of lost customer data.	-	-	

Appendix 2: Climate-related information

- The risks and opportunities that climate change poses to companies and the relevant response measures taken by the companies.

The four key frameworks of TCFD	Item	Implementation status	Page number
Governance	1. Clearly articulate the board of directors and management's oversight and governance of climate-related risks and opportunities.	4.1.1 Climate governance	P.110
Strategy Risk Management	2. Articulate how identified climate risks and opportunities impact the company's business, strategy, and finances (short-term, medium-term, long-term).	4.1.2 Identifying climate risks and opportunities	P.112
	3. Explain the financial impact of extreme weather events and transition actions.	4.1.3 Climate Risk Scenario Analysis	P.113
Metrics & Targets Governance Strategy Risk Management	4. Describe how the process of identifying, assessing, and managing climate risks is integrated into the overall risk management system.	4.1.1 Climate governance	P.110
	5. If utilizing scenario analysis to assess resilience against climate change risks, the description should include the scenario, parameters, assumptions, analysis factors, and the primary financial impacts.	4.1.3 Climate Risk Scenario Analysis	P.113
	6. If there is a transition plan in place to manage climate-related risks, provide a description of the plan's contents, as well as the indicators and objectives used for identifying and managing physical risks and transition risks.	4.1.4 Climate Management Policy	P.117
Metrics & Targets	7. If internal carbon pricing is used as a planning tool, the basis for price determination should be explained. Not utilizing internal carbon pricing as a planning tool.		-
	8. If climate-related targets are set, provide information on the covered activities, scope of greenhouse gas emissions, planning timeframe, annual progress towards achieving the targets, etc. If carbon offsets or Renewable Energy Certificates (RECs) are used to meet the targets, explain the sources and quantities of carbon offsets or the number of RECs used for emissions reduction.	4.1.4 Climate Management Policy	P.117
	9. Greenhouse Gas Inventory and Verification	Appendix 3	

Appendix 3: Greenhouse Gas Inventory and Verification

Basic information	Implementation status
<input type="radio"/> Companies with a capital of over 10 billion, steel industry, cement industry. <input type="radio"/> Companies with a capital of over 5 billion but less than 10 billion. <input checked="" type="radio"/> Companies with a capital of less than 5 billion	<input checked="" type="radio"/> Individual investigation of the parent company. <input type="radio"/> Investigation of consolidated financial statements subsidiary. <input checked="" type="radio"/> Individual assurance of parent company. <input type="radio"/> Assurance of consolidated financial statements subsidiary.

Scope 1	Total emissions (metric tons CO ₂ e)	Intensity (metric tons CO ₂ e/thousand units)	Assurance institution	Description
Parent company	119.5800	0.002%	BSI	Refer to: 4.2.1 Greenhouse Gas Inspection
Subsidiary	-	-	-	
Other	-	-	-	
Total	147.4101	0.003%	BSI	
Scope 2	Total emissions (metric tons CO ₂ e)	Intensity (metric tons CO ₂ e/thousand units)	Assurance institution	
Parent company	192.1409	0.003%	BSI	
Subsidiary	-	-	-	
Other	-	-	-	
Total	-	-	-	
Scope 3 (voluntary disclosure)	294.6332	0.005%	BSI	

Note: Intensity is calculated based on the revenue in 2022 as the denominator = 5,770,414 (in thousand New Taiwan Dollars.)

Appendix 4: SASB Standards

Topic	Code	Accounting Metric	Description	Page number
Energy Management in Manufacturing	RR-ST-130a.1	Total energy consumed		
	RR-ST-130a.1	Percentage grid electricity	4.2.2 Energy Policy and Management	
	RR-ST-130a.1	Percentage renewable		P.121
Water Management in Manufacturing	RR-ST-140a.1	Total water withdrawn	2,694 m ³ 4.2.2 Energy Policy and Management	
	RR-ST-140a.1	Total water consumed	2,694 m ³	
	RR-ST-140a.1	Percentage of each in regions with High or Extremely High Baseline Water Stress	0% (Taiwan is not a high-water-stressed region.)	-
Hazardous Waste Management	RR-ST-150a.1	Amount of hazardous waste generated, percentage recycled	No hazardous waste generated in 2023.	-
	TR-AP-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	No hazardous substance spill incidents occurred in 2023.	-
Ecological Impacts of Project Development	RR-ST-160a.1	Number and duration of project delays related to ecological impacts	No delays occurred in 2023.	-
	RR-ST-160a.2	Description of efforts in solar energy system project development to address community and ecological impacts	4.3.1 Environmental and Social Assessment	P.128
Management of Energy Infrastructure Integration & Related Regulations	RR-ST-410a.1	Description of risks associated with integration of solar energy into existing energy infrastructure and discussion of efforts to manage those risks	2.4.1 Risk Management Mechanism	P.55
	RR-ST-410a.2	Description of risks and opportunities associated with energy policy and its impact on the integration of solar energy into existing energy infrastructure	4.1.2 Identifying climate risks and opportunities	P.110
Product End-of-life Management	RR-ST-410b.1	Percentage of products sold that are recyclable or reusable	Not applicable.	-
	RR-ST-410b.2	Weight of end-of-life material recovered, percentage recycled	The total weight of recycled steel molds in 2022 was 19,250 kg (19.25 metric tons), calculated as 55 kg * 350 (sets).	-
	RR-ST-410b.3	Percentage of products by revenue that contain IEC 62474 declarable substances, arsenic compounds, antimony compounds, or beryllium compounds	Not applicable.	-
	RR-ST-410b.4	Description of approach and strategies to design products for high-value recycling	Not applicable.	-
Materials Sourcing	RR-ST-440a.1	Description of the management of risks associated with the use of critical materials	2.4.1 Risk Management Mechanism	P.55
	RR-ST-440a.2	Description of the management of environmental risks associated with the polysilicon supply chain	Not applicable.	-
Activity Metrics	RR-ST-000.A	Total capacity of photovoltaic (PV) solar modules produced	Not applicable.	-
	RR-ST-000.B	Total capacity of completed solar energy systems	430MW	p.61
	RR-ST-000.C	Total project development assets	NT\$194,435,196	-

Appendix 5: Assurance Report of Independent Auditors



安永聯合會計師事務所

11012 台北市基隆路一段333號9樓
9F, No. 333, Sec. 1, Keelung Road
Taipei City, Taiwan, R.O.C.

Tel: 886 2 2757 8888
Fax: 886 2 2757 6050
www.ey.com/tw

會計師獨立確信報告

泓德能源科技股份有限公司 公鑒

確信範圍

本會計師接受泓德能源科技股份有限公司（以下簡稱泓德能源）之委任，對2023年度永續報告書中所選定之永續績效資訊（以下稱「標的資訊」），執行財團法人中華民國會計研究發展基金會所發布之確信準則所定義之「有限確信案件」並出具報告。

標的資訊及其適用基準

有關泓德能源之標的資訊及其適用基準詳列於附件一。

管理階層責任

泓德能源管理階層之責任係依據適當之基準編製標的資訊，包括參考全球永續性報告協會(Global Reporting Initiatives, GRI)所發布之2021年GRI 準則(GRI Standards)，泓德能源管理階層應選擇所適用之基準，並對標的資訊在所有重大方面是否依據該適用基準報導負責，此責任包括建立及維持與標的資訊編製有關之內部控制、維持適當之記錄並作成相關之估計，以確保標的資訊未存有導因於舞弊或錯誤之重大不實表達。

本事務所責任

本會計師之責任係依據所取得之證據對標的資訊作成結論。
本會計師依照財團法人中華民國會計研究發展基金會所發布之確信準則3000號「非屬歷史性財務資訊查核或核閱之確信案件」之要求規劃並執行有限確信工作，以對標的資訊是否存在重大不實表達出具有限確信報告。本會計師依據專業判斷，包括對導因於舞弊或錯誤之重大不實表達風險之評估，以決定確信程序之性質、時間及範圍。
本會計師相信已取得足夠及適切之證據，以作為表示有限確信結論之基礎。

會計師之獨立性及品質管理

本會計師及所隸屬組織遵循會計師職業道德規範中有關獨立性及其他道德規範之規定，該規範之基本原則為正直、公正客觀、專業能力及專業上應有之注意、保密及專業行為。
本事務所遵循品質管理準則1號「會計師事務所之品質管理」，該品質管理準則規定組織設計、付諸實行及執行品質管理制度，包含與遵循職業道德規範、專業準則及適用之法令規範相關之政策或程序。

所執行程序之說明

有限確信案件中執行程序之性質及時間與適用於合理確信案件不同，其範圍亦較小，因此，有限確信案件中取得之確信程度明顯低於合理確信案件中取得者。本會計師所設計之程序係為取得有限確信並據此作成結論，並不提供合理確信必要之所有證據。

A member firm of Ernst & Young Global Limited



儘管本會計師於決定確信程序之性質及範圍時曾考量泓德能源內部控制之有效性，惟本確信案件並非對泓德能源內部控制之有效性表示意見。本會計師所執行之程序不包括測試控制或執行與檢查資訊科技(IT)系統內資料之彙總或計算相關之程序。

有限確信案件包括進行查詢，主要係對負責編製標的資訊及相關資訊之人員進行查詢，並應用分析及其他適當程序。

本會計師所執行之程序包括：

- 與泓德能源人員進行訪談，以瞭解泓德能源之業務與履行永續發展之整體情況，以及永續報導流程；
- 透過訪談、檢查相關文件，以瞭解泓德能源之主要利害關係人及利害關係人之期望與需求、雙方具體之溝通管道，以及泓德能源如何回應該等期望與需求；
- 與泓德能源相關人員進行訪談，以瞭解用以蒐集、整理及報導標的資訊之相關流程；
- 檢查計算標準是否已依據適用基準中概述的方法正確應用；
- 針對報告中所選定之永續績效資訊進行分析性程序；蒐集並評估其他支持證據資料及所取得之管理階層聲明；如必要時，則抽選樣本進行測試；
- 閱讀泓德能源之永續報告書，確認其與本會計師取得關於永續發展整體履行情況之瞭解一致。

先天限制

因永續報告中所包含之非財務資訊受到衡量不確定性之影響，選擇不同的衡量方式，可能導致績效衡量上之重大差異，且由於確信工作係採抽樣方式進行，任何內部控制均受有先天限制，故未必能查出所有業已存在之重大不實表達，無論是導因於舞弊或錯誤。

結論

依據所執行之程序及所取得之證據，本會計師未發現標的資訊有未依照適用基準編製而須作重大修正之情事。

其他事項

本確信報告出具後，泓德能源對任何確信標的或適用基準之變更，本會計師將不負責就該等資訊重新執行確信工作之責任。

安永聯合會計師事務所

會計師：呂倩雯



民國一十三年八月十六日

A member firm of Ernst & Young Global Limited

附件一：

編號	章節	內文標題	標的資訊	適用基準
1	CH2 永續治理 誠信透明	2.3.2 法規遵循	2023年泓德能源因未依電業法換發發電執照，遭經濟部能源局裁處1,500,000元新台幣。 註：重大違規事件定義為重大不利之影響，指違反之後果，將對公司及/或子公司之運營、經營業績、狀況（包含業務、技術、法律、或財務狀況）、資產、負債產生嚴重影響之損害、損失、費用、支出或責任。	GRI 2-27 法規遵循 報導組織應報告以下資訊： a. 報導報導期間發生的重大違反法規事件總數，並按以下方式細分： i. 被罰款的事件； ii. 非金錢制裁的事件； b. 報導在報導期間內支付違反法規罰款的總數和金額，並按以下方式細分： i. 在當次報導期間內發生違反法規行為事件的罰款； ii. 在先前的報導期間內發生違反法規行為事件的罰款； c. 描述重大違規事件； d. 描述組織如何判定重大違規事件。

編號	章節	內文標題	標的資訊	適用基準																																																																																																																																																																		
2	CH5 永續人才 幸福職場	5.1.1 員工概況	2023年新進員工數為90人，佔年底總員工數之49.45%；此外，人員離職率則佔年底總員工數之23.63%。 ● 2023年新進員工組成 <table border="1"> <thead> <tr> <th rowspan="2">地區</th> <th colspan="2">合 計</th> <th colspan="4">男</th> <th colspan="4">女</th> </tr> <tr> <th>男</th> <th>女</th> <th>30歲以下</th> <th>31-40歲</th> <th>41-50歲</th> <th>51歲以上</th> <th>30歲以下</th> <th>31-40歲</th> <th>41-50歲</th> <th>51歲以上</th> </tr> </thead> <tbody> <tr> <td>台北</td> <td>56</td> <td>27</td> <td>29</td> <td>7</td> <td>6</td> <td>8</td> <td>6</td> <td>4</td> <td>12</td> <td>8</td> <td>5</td> </tr> <tr> <td>台中</td> <td>26</td> <td>10</td> <td>16</td> <td>2</td> <td>6</td> <td>2</td> <td>0</td> <td>4</td> <td>9</td> <td>3</td> <td>0</td> </tr> <tr> <td>台南</td> <td>8</td> <td>7</td> <td>1</td> <td>3</td> <td>3</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> </tr> <tr> <td>合計</td> <td>90</td> <td>44</td> <td>46</td> <td>12</td> <td>15</td> <td>11</td> <td>6</td> <td>8</td> <td>21</td> <td>12</td> <td>5</td> </tr> </tbody> </table> ● 2023年離職員工組成 <table border="1"> <thead> <tr> <th rowspan="2">地區</th> <th colspan="2">合 計</th> <th colspan="4">男</th> <th colspan="4">女</th> </tr> <tr> <th>男</th> <th>女</th> <th>30歲以下</th> <th>31-40歲</th> <th>41-50歲</th> <th>51歲以上</th> <th>30歲以下</th> <th>31-40歲</th> <th>41-50歲</th> <th>51歲以上</th> </tr> </thead> <tbody> <tr> <td>台北</td> <td>22</td> <td>13</td> <td>9</td> <td>4</td> <td>4</td> <td>4</td> <td>1</td> <td>1</td> <td>6</td> <td>1</td> <td>1</td> </tr> <tr> <td>台中</td> <td>15</td> <td>4</td> <td>11</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>2</td> <td>7</td> <td>2</td> <td>0</td> </tr> <tr> <td>澎湖</td> <td>2</td> <td>2</td> <td>0</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>台南</td> <td>3</td> <td>3</td> <td>0</td> <td>0</td> <td>3</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>花蓮</td> <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> </tr> <tr> <td>合計</td> <td>43</td> <td>22</td> <td>21</td> <td>7</td> <td>8</td> <td>5</td> <td>2</td> <td>3</td> <td>13</td> <td>3</td> <td>1</td> </tr> </tbody> </table>	地區	合 計		男				女				男	女	30歲以下	31-40歲	41-50歲	51歲以上	30歲以下	31-40歲	41-50歲	51歲以上	台北	56	27	29	7	6	8	6	4	12	8	5	台中	26	10	16	2	6	2	0	4	9	3	0	台南	8	7	1	3	3	1	0	0	0	1	0	合計	90	44	46	12	15	11	6	8	21	12	5	地區	合 計		男				女				男	女	30歲以下	31-40歲	41-50歲	51歲以上	30歲以下	31-40歲	41-50歲	51歲以上	台北	22	13	9	4	4	4	1	1	6	1	1	台中	15	4	11	1	1	1	1	2	7	2	0	澎湖	2	2	0	2	0	0	0	0	0	0	0	台南	3	3	0	0	3	0	0	0	0	0	0	花蓮	1	0	1	0	0	0	0	0	1	0	0	合計	43	22	21	7	8	5	2	3	13	3	1	GRI 401-1 新進員工與離職員工 報導組織應報告以下資訊： a. 在報導期間內，按年齡層、性別及地區劃分新進員工的總數及比例。 b. 在報導期間內，按年齡層、性別及地區劃分離職員工的總數及比例。
地區	合 計		男				女																																																																																																																																																															
	男	女	30歲以下	31-40歲	41-50歲	51歲以上	30歲以下	31-40歲	41-50歲	51歲以上																																																																																																																																																												
台北	56	27	29	7	6	8	6	4	12	8	5																																																																																																																																																											
台中	26	10	16	2	6	2	0	4	9	3	0																																																																																																																																																											
台南	8	7	1	3	3	1	0	0	0	1	0																																																																																																																																																											
合計	90	44	46	12	15	11	6	8	21	12	5																																																																																																																																																											
地區	合 計		男				女																																																																																																																																																															
	男	女	30歲以下	31-40歲	41-50歲	51歲以上	30歲以下	31-40歲	41-50歲	51歲以上																																																																																																																																																												
台北	22	13	9	4	4	4	1	1	6	1	1																																																																																																																																																											
台中	15	4	11	1	1	1	1	2	7	2	0																																																																																																																																																											
澎湖	2	2	0	2	0	0	0	0	0	0	0																																																																																																																																																											
台南	3	3	0	0	3	0	0	0	0	0	0																																																																																																																																																											
花蓮	1	0	1	0	0	0	0	0	1	0	0																																																																																																																																																											
合計	43	22	21	7	8	5	2	3	13	3	1																																																																																																																																																											

編號	章節	內文標題	標的資訊	適用基準						
3	CH5 永續人才 · 幸福職場	5.1.3 人權 與溝 通	2023年，按性別劃分，享有育嬰假的員工總數為男性5人、女性9人；實際使用育嬰假的員工總數為男性2人、女性7人。	GRI 401-3 育嬰假 報導組織應報告以下資訊： a. 按性別劃分，享有育嬰假的員工總數。 b. 按性別劃分，實際使用育嬰假的員工總數。 c. 按性別劃分，休完育嬰假後，在報導期間復職的員工總數。 d. 按性別劃分，休完育嬰假且復職後十二個月仍在職的員工總數。 e. 按性別劃分，休完育嬰假後復職和留任的員工比例。						
			獲假		2023年度育嬰假後應復職人數	1				
			男		2023年度育嬰假後實際申請復職人數	0				
					復職率	0				
			獲假		2023年度育嬰假後應復職人數	3				
			女		2023年度育嬰假後實際申請復職人數	2				
					復職率	67%				
			獲假		2022年度復職人數	0				
			男		2022年度復職滿一年人數	0				
					留任率	0				
			獲假		2022年度復職人數	2				
			女		2022年度復職滿一年人數	2				
	留任率	100%								
4	CH5 永續人才 · 幸福職場	5.2.1 多元 教育 訓練 與人才 發展	2023 員工教育訓練統計表	GRI 404: 訓練與教育 報導組織應報告以下資訊： a. 就下列劃分，組織員工在報導期間內接受訓練的平均時數： i. 性別； ii. 員工類別。						
			項目		男性	女性	合計			
					人次	時數	人次	時數	人次	時數
			一般同仁		241	720.5	363	1032	604	1752.5
			人均(小時)		2.99		2.84		2.90	
			中階主管		108	389.5	118	669	226	1058.5
			人均(小時)		3.61		5.67		4.68	
			高階主管		46	224	34	132.5	80	356.5
			人均(小時)		4.87		3.90		4.46	

編號	章節	內文標題	標的資訊	適用基準
5	CH3 永續 創新 · 綠色 智能	3.3.4 泓德 服務 客戶 滿意	2023年未有侵犯客戶隱私權之情事或遺失客戶資料的投訴	GRI 418: 客戶隱私 報導組織應報告以下資訊： a. 按以下分類，說明已證實之投訴屬於侵犯客戶隱私的總數： i. 來自外部各方並經由組織已證實的投訴； ii. 來自監管機關的投訴。 b. 經證實之資訊洩露、失竊或遺失客戶資料事件的總數。 c. 如果組織未認定任何的投訴，簡要陳述此一事實即可。



HD Renewable Energy Co., Ltd.

SF, No. 35, Dexing W. Rd., Shilin Dist., Taipei City
+886-2-2832-8057

Smarter Energy, Accessible Green

