

RENEWABLE ELECTRICITY

FOR A SUSTAINABLE FUTURE





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ABOUT THIS REPORT

CK Power Public Company Limited has prepared annual sustainability reports beginning in 2020 to disclose its performance in corporate governance, social, and environmental dimensions of the Company, reflecting its consideration to sustainable development in issues vital to business operations and to all stakeholders. The scope of this year's report covers data from January 1 - December 31, 2021 of companies in the CK Power Public Company Limited group and companies in which CK Power Public Company Limited holds more than 50% of the shares or has management power, referred to in this report as "the Company," and includes operation control data.

This report is in compliance with the Global Reporting Initiatives Standards (GRI Standards) and additional indicators for companies in the electric utilities sector (Electric Utilities Sector Disclosure), which is an internationally accepted practice. Operations undertaken in accordance with the United Nations Sustainable Development Goals (SDGs) are also presented. The content of this report, some of which has been disclosed on the Company's website, was obtained through the assessment of the Company's 11 key issues of materiality.

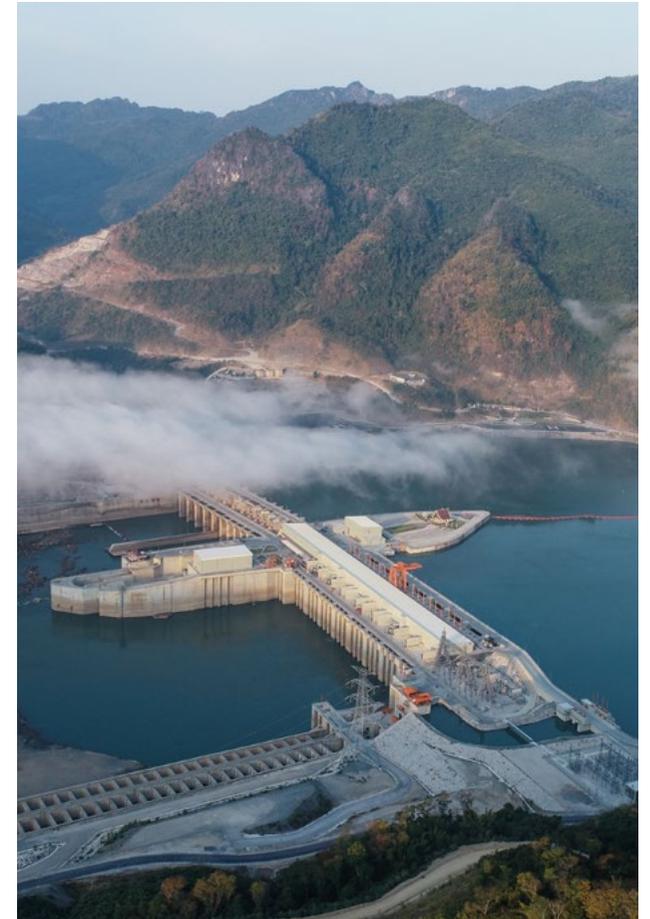
REPORT VERIFICATION

The report have been verified with limited assurance by EY Office Limited to ensure reliability, accuracy, and compliance with GRI Standards for third-party verification. The Company intends to continue this effort and strives to improve the quality of its reports to ensure that the information reported is accurate in accordance with the sustainable development reporting principles and to continuously upgrade the standards of disclosure. The Company welcomes various suggestions through its contact channel at ccsm@ckpower.co.th so that it may integrate any such opinions into the work process and collaborate with all stakeholders to promote sustainable development.

More information on
Sustainability Performance
Data Coverage
can be found here
[OR CLICK HERE](#)



The Company
welcomes various
suggestions through
its contact channel at
ccsm@ckpower.co.th



MESSAGE FROM THE MANAGING DIRECTOR

To our valued shareholders and stakeholders

The year 2021 was yet another challenging year as the issues of global energy consumption and climate change continued to loom large. In response, various nations have stepped up their efforts to curb global temperature rises to no more than 1.5 degrees Celsius and achieve the net-zero greenhouse gas emission goal by 2050 as agreed upon at the 26th United Nations Climate Change Conference (COP 26).

As for Thailand, a national policy has been introduced to promote clean and renewable energy. In line with such policy, **CKPower Group** has focused its efforts on clean and renewable power production for more than 10 years. As a leading power company with expertise in hydropower, CKPower seeks to advance its growth in clean energy development and lay a strong foundation for energy security both domestically and across Southeast Asia. With sustainability at the core of its missions and corporate culture, the ultimate goal is to help drive Thailand towards a low-carbon society.

As part of its strategic directions and missions across environmental, social, governance, and economic dimensions, CKPower plans to increase its investment in renewable energy-based power plants from 89% of its current total installed capacity to 95% by 2024. CKPower also strives to

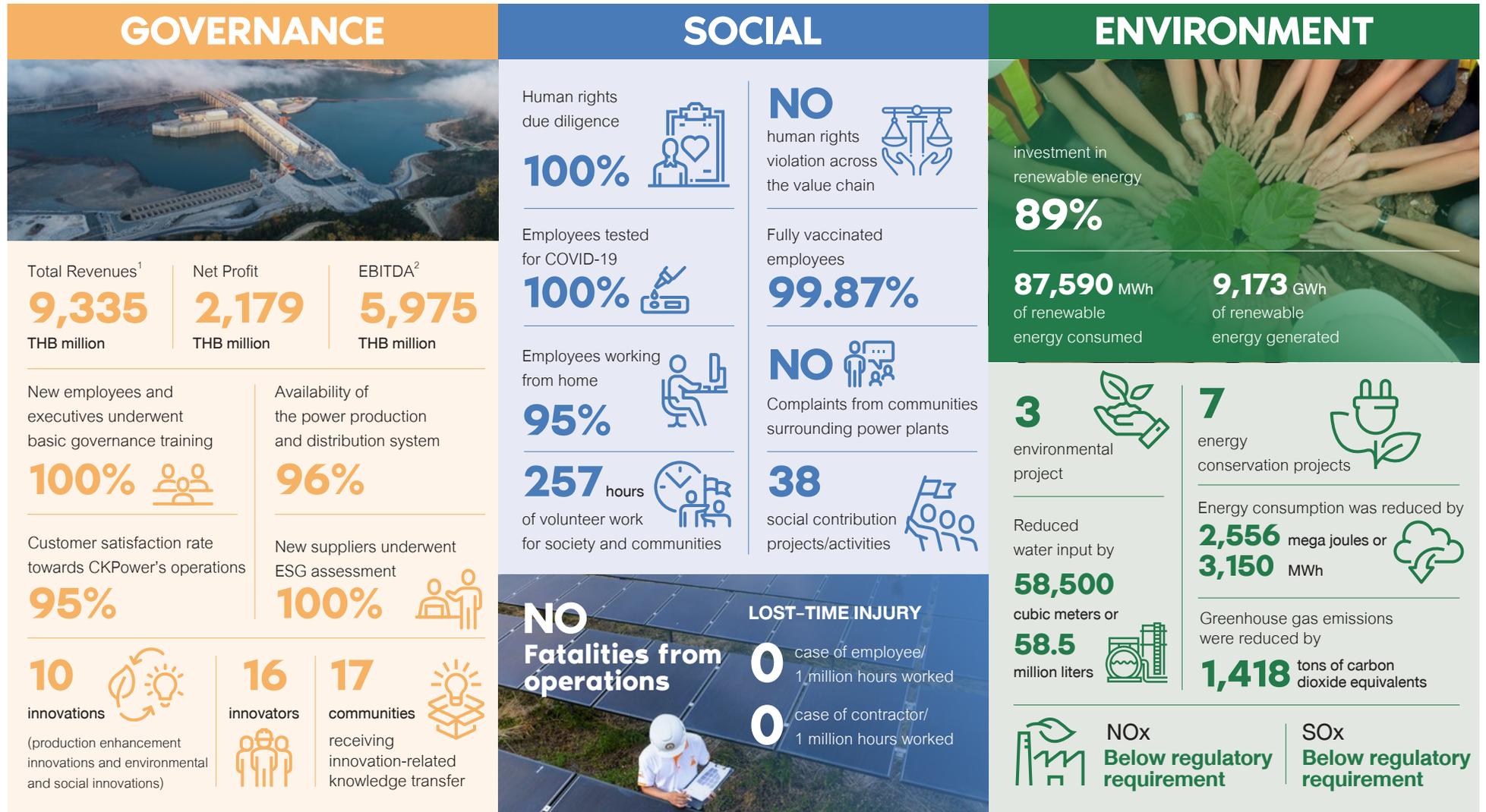
introduce measures and to further invest in projects that reduce greenhouse gas emissions and enhance energy efficiency in order to achieve the net-zero greenhouse gas emission goal by 2050, as well as incorporate world-class green technology and balance its business with environmental conservation in line with international sustainable development frameworks.

To generate added value, CKPower cultivates eco-consciousness among all employees and executives, encourages the development of innovation that improves power production efficiency, and seeks to protect the environment and enhance resource efficiency across the organization. CKPower has also been promoting employee and community engagement through various CSR initiatives, such as the Hing Hoi Project, which has been carried out for six consecutive years, with the goal of fostering sustainable growth and advancing “**Clean Energy towards a Low-carbon Society.**”

THANAWAT TRIVISVAVET
Managing Director



2021 HIGHLIGHTS



Remark: ¹ Excluding Foreign Exchange Gain

² Including Share of Profit from Investments in Jointly Controlled Entities and Associated Companies



SECTION

1

**ABOUT
CKPOWER**

POLICY AND BUSINESS OVERVIEW



HYDRO POWER



COGENERATION POWER



SOLAR POWER

POLICY AND BUSINESS OVERVIEW

CK Power Public Company Limited (the “Company” or “CKP”) was founded by CH. Karnchang Public Company Limited Group (“CH. Karnchang Group”) and registered its incorporation on June 8, 2011, with its registered capital of THB 1,000,000 with the objective of becoming the core company of CH. Karnchang Group, focusing on investment in the business of production and distribution of electricity generated from various types of energy sources. The Company registered its conversion into a public company on February 6, 2013, and its ordinary shares were listed as listed securities and began trading on the Stock Exchange of Thailand (“SET”) on July 18, 2013, with its registered fully paid-up capital of Baht 5,500 million. On April 10, 2015, the Company registered its capital increase to Baht 9,240 million. At present, the Company’s registered and paid-up capital amounts to Baht 8,129 million.

The Company currently invests in companies that produce and distribute electricity in three types of power plants, namely, hydroelectric power plants, cogeneration power plants, and solar power plants, divided into a total of seven subsidiaries and associated companies, as follows:

INVESTMENT IN POWER PLANTS UNDER THREE SUBSIDIARIES:



- 1) Nam Ngum 2 Power Company Limited (“NN2”); 46 percent owned by the Company via SouthEast Asia Energy Limited (“SEAN”). NN2 is the Company’s core company
- 2) Bangpa-in Cogeneration Limited (“BIC”); 65 percent owned by the Company
- 3) Bangkhenchai Company Limited (“BKC”); 100 percent owned by the Company

INVESTMENT IN POWER PLANTS AND JOINTLY CONTROLLED ENTITIES UNDER FOUR ASSOCIATED COMPANIES:



- 1) Xayaburi Power Company Limited (“XPCL”); 42.5 percent owned by the Company
- 2) Luang Prabang Power Company Limited (“LPCL”); 42 percent owner by the Company
- 3) Chiangrai Solar Company Limited (“CRS”); 30 percent owned by the Company
- 4) Nakhon Ratchasima Solar Company Limited (“NRS”); 30 percent owned by the Company

VISION

To be a leading power business company in Thailand and the ASEAN region, with efficient operation.

MISSION

01

To generate optimal, stable and fair returns for shareholders.

02

To be responsible to the environment, communities, and all stakeholders.

OPERATIONAL GOALS

To expand investment in electricity production and distribution from various types of energy sources in Thailand and the ASEAN region, with the objective of contributing to the energy security of Thailand's power sector through diverse power projects, a strong capital base, and cooperation among partners in its network to maximize returns for shareholders in a consistent and sustainable manner.

CKPOWER AND THE ADVANCEMENT OF SUSTAINABILITY

CKPower is committed to becoming a leader of the clean power-based electricity production and distribution in Thailand and Southeast Asia and seeks to maximize the use of renewable energy and minimize emissions of greenhouse gases through its sustainability strategies. One of its major goals, thus, is to drive its business through investments in clean power-based electricity production and distribution and ensure the energy stability and security of Thailand and Southeast Asia through business practices that foster stakeholder engagement in a sustainable manner, the adoption of cutting-edge world-class technology that meets eco-friendliness standards, the achievement of balance between business and environmental conservation in line with international sustainable development practices, and the fostering of cordial relations with communities and society in order to ensure the effectiveness and efficiency of sustainability management. In addition, CKPower conducts sustainability review and assessment, covering significant opportunities and risks in the areas of governance, social, and environment, on a yearly basis as well as reviews and improves its sustainability management guidelines regularly in order to achieve its goals, meet the expectations of the stakeholders, and rise to current and future challenges. The Company continues to work towards its sustainability goals, taking into account social responsibility in three dimensions: governance, social, and environment. To This end, a sustainability management framework has been formulated for CKPower and its subsidiaries to serve as guidance for directors, executives, and employees and ensure uniform and standardized practice. The policy is as follows:



GOVERNANCE

To promote the business sustainability of CKPower and its subsidiaries by expanding investment in clean power production and distribution businesses in Thailand and Southeast Asia to contribute to the regional energy security and generate good and fair returns for shareholders.



SOCIAL

To demonstrate responsibility in developing the quality of life in society and communities as well as for those directly and indirectly involved in the business of CKPower and its subsidiaries



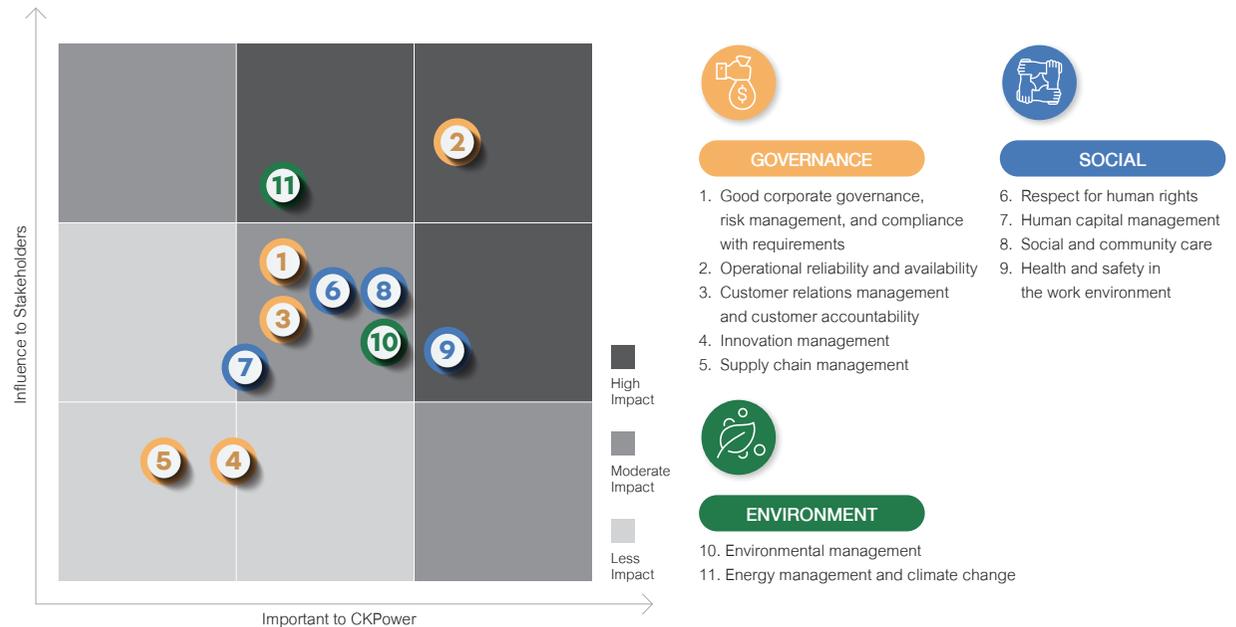
ENVIRONMENT

To choose and adopt eco-friendly technology and innovation in the business in order to achieve a balance between environmental conservation and efficient operations.

MATERIALITY

CKPower prioritizes effective and efficient sustainability management and encourages involvement of all units in consistently promoting engagement with stakeholders across the value chain, comprising shareholders, customers, communities and society, suppliers and contractors, employees, as well as government and related agencies. To this end, the Company incorporates the suggestions and comments of stakeholders, encompassing significant opportunities and risks in the dimensions of governance and economy, society, and the environment, in its annual review of materiality in order to revise and improve its sustainability management, in adherence to the four core principles of the sustainability reporting standards of the Global Reporting Initiative (GRI): stakeholder inclusiveness, sustainability context, materiality, and completeness.

In 2021, sustainability issues of materiality for shareholders and for CKPower, with potential economic, environmental, and social impacts, can be summarized as follows:



In response to such material issues, CKPower has formulated plans with regard to corporate risk management and resolution and innovation development in order to ensure its adaptability to a rapid shift in global trends.

2021 MATERIALITY AND CREATION OF SHARED VALUE

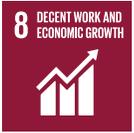
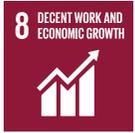


| RELEVANT SHAREHOLDERS | RELEVANT GRI STANDARDS TOPICS | RELEVANT SDGs | ACHIEVEMENTS |
|---|--|---|---|
| 1. GOOD CORPORATE GOVERNANCE, RISK MANAGEMENT, AND COMPLIANCE WITH REQUIREMENTS | | | |
| <ul style="list-style-type: none"> Employees Government agencies Customers Communities and society Suppliers Investors and shareholders | GRI: 3-3, 205-2, 205-3, 2-9 |   | <ul style="list-style-type: none"> 100% of employees and executives underwent basic governance training (CKPower's business ethics policies and protocols, anti-corruption policy, and corporate values). CKPower considered ESG risks and identified emerging risks. |
| 2. OPERATIONAL RELIABILITY AND AVAILABILITY | | | |
| <ul style="list-style-type: none"> Employees Government agencies Customers Communities and society Suppliers Investors and shareholders | GRI: 3-3,201-1, EU1, EU2, EU28, EU29, EU30 |     | <ul style="list-style-type: none"> 96% availability of the power production and distribution system 89% investment in renewable energy |
| 3. CUSTOMER RELATIONS MANAGEMENT | | | |
| <ul style="list-style-type: none"> Employees Customers Communities and society Suppliers Investors and shareholders | GRI: 3-3 |   | <ul style="list-style-type: none"> No complaints from customers 95% customer satisfaction rate towards CKPower's operations |



| RELEVANT SHAREHOLDERS | RELEVANT GRI STANDARDS TOPICS | RELEVANT SDGs | ACHIEVEMENTS |
|--|--------------------------------------|---|--|
| 4. INNOVATION MANAGEMENT | | | |
| <ul style="list-style-type: none"> • Employees • Customers • Communities and society • Suppliers • Investors and shareholders | GRI: 3-3 |     | <ul style="list-style-type: none"> • 10 innovations (production enhancement innovations and environmental and social innovations) • 16 innovators • 17 communities received innovation-related knowledge transfer |
| 5. SUPPLY CHAIN MANAGEMENT | | | |
| <ul style="list-style-type: none"> • Employees • Customers • Communities and society • Suppliers • Investors and shareholders | GRI: 3-3, 308-1, 308-2, 414-1, 414-2 |    | <ul style="list-style-type: none"> • 100% of new suppliers underwent ESG assessment. • 80% of all procured office suppliers were green labelled products. |



| RELEVANT SHAREHOLDERS | RELEVANT GRI STANDARDS TOPICS | RELEVANT SDGs | ACHIEVEMENTS |
|---|---|---|---|
| 6. RESPECT FOR HUMAN RIGHTS | | | |
| <ul style="list-style-type: none"> • Employees • Government agencies • Customers • Communities and society • Suppliers • Investors and shareholders | GRI: 3-3, 412-1, 412-2, 405-1, 405-2 |   | <ul style="list-style-type: none"> • No human rights violation across the value chain • 100% human rights due diligence, with relief, rectification, and remediation measures established • 8.7% of all employees underwent training on key human rights principles and human rights due diligence tools |
| 7. HUMAN CAPITAL MANAGEMENT | | | |
| <ul style="list-style-type: none"> • Employees | GRI: 3-3, 401-1, 401-2, 401-3, 404-1, 404-2, 404-3, 406-1 |    | <p>Employee care during the COVID-19 pandemic</p> <ul style="list-style-type: none"> 100% of employees tested for COVID-19 99.87% of employees were fully vaccinated. 95% of employees worked from home. |
| 8. SOCIAL AND COMMUNITY CARE | | | |
| <ul style="list-style-type: none"> • Employees • Customers • Communities and society • Suppliers • Investors and shareholders | GRI: 3-3, 413-1, 413-2 |     | <ul style="list-style-type: none"> • No complaints from communities and society around the power plants • 38 social contribution projects/activities • 257 hours of volunteer work for communities and society |



SOCIETY

| RELEVANT SHAREHOLDERS | RELEVANT GRI STANDARDS TOPICS | RELEVANT SDGs | ACHIEVEMENTS |
|---|---|---------------|---|
| 9. OCCUPATIONAL HEALTH AND SAFETY | | | |
| <ul style="list-style-type: none"> Employees Government agencies Customers Suppliers Investors and shareholders | GRI: 3-3, 403-1, 403-3, 403-4, 403-5, 403-6, 403-7 | | <ul style="list-style-type: none"> No fatalities from operations No recordable work related injuries among employees No Lost-time injuries frequency rate (LTIFR) <ul style="list-style-type: none"> 0 case of employee/1 million hours worked 0 case of contractor/1 million hours worked |
| 10. ENVIRONMENTAL MANAGEMENT | | | |
| <ul style="list-style-type: none"> Employees Government agencies Customers Communities and society Suppliers Investors and shareholders | GRI: 3-3, 303-1, 303-2, 303-3, 303-4, 303-5, 306-1, 306-2, 306-3, 306-4, 306-5, 307-1 | | <ul style="list-style-type: none"> ✓ 3 environmental projects Reduced water input by 58.5 million liters. Waste Management and waste to value into 6,600 face masks ✓ 7 energy conservation projects Energy consumption was reduced by 2,556 mega joules or 3,150 MWh. Greenhouse gas emissions were reduced by 1,418 tons of carbon dioxide equivalents. ✓ NOx: Below industry requirement regulatory ✓ SOx: Below industry requirement regulatory |
| 11. ENERGY MANAGEMENT AND CLIMATE CHANGE STRATEGIES | | | |
| <ul style="list-style-type: none"> Employees Customers Communities and society Suppliers Investors and shareholders | GRI: 3-3, 302-1, 302-2, 302-3, 302-4, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7 | | <ul style="list-style-type: none"> 89% investment in renewable energy 87,590 MWh of renewable energy consumed 9.2 MWh of renewable energy generated |

9. OCCUPATIONAL HEALTH AND SAFETY

- Employees
- Government agencies
- Customers
- Suppliers
- Investors and shareholders

GRI: 3-3, 403-1, 403-3, 403-4, 403-5, 403-6, 403-7



- No fatalities from operations
- No recordable work related injuries among employees
- No Lost-time injuries frequency rate (LTIFR)
 - 0 case of employee/1 million hours worked
 - 0 case of contractor/1 million hours worked

10. ENVIRONMENTAL MANAGEMENT

- Employees
- Government agencies
- Customers
- Communities and society
- Suppliers
- Investors and shareholders

GRI: 3-3, 303-1, 303-2, 303-3, 303-4, 303-5, 306-1, 306-2, 306-3, 306-4, 306-5, 307-1



- ✓ 3 environmental projects
- Reduced water input by 58.5 million liters.
- Waste Management and waste to value into 6,600 face masks
- ✓ 7 energy conservation projects
- Energy consumption was reduced by 2,556 mega joules or 3,150 MWh.
- Greenhouse gas emissions were reduced by 1,418 tons of carbon dioxide equivalents.
- ✓ NOx: Below industry requirement regulatory
- ✓ SOx: Below industry requirement regulatory

11. ENERGY MANAGEMENT AND CLIMATE CHANGE STRATEGIES

- Employees
- Customers
- Communities and society
- Suppliers
- Investors and shareholders

GRI: 3-3, 302-1, 302-2, 302-3, 302-4, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7



- 89% investment in renewable energy
- 87,590 MWh of renewable energy consumed
- 9.2 MWh of renewable energy generated



ENVIRONMENT

SUPPORTING SUSTAINABLE DEVELOPMENT GOALS (SDGs)

CKPower drives its sustainability operations by supporting the United Nations Sustainable Development Goals (SDGs) that correspond with CKPower's business capabilities and potential across three dimensions: environment, society, and governance and economy, known collectively as ESG.

CKPOWER SUPPORTS 9 OUT OF 17 SDGs.



Environment



Society



Governance and Economy



WE SUPPORT



As a member of the United Nations Global Compact (UN Global Compact), CKPower operates in accordance with its 10 international principles and demonstrates basic responsibility with regard to human rights, labor standards, environmental protection, and anti-corruption efforts, in order to raise awareness of adherence to such principles in business practice in Thailand's business sector.

MEMBERSHIP IN PARTNERSHIP NETWORKS

TASK FORCE ON
CLIMATE-RELATED FINANCIAL
DISCLOSURES SUPPORTER: TCFD



CKPower has joined the Task Force on Climate-related Financial Disclosures Supporter (TCFD) as a supporter.

THAILAND CARBON
NEUTRAL NETWORK : TCNN



CKPower has become a member of the Thailand Carbon Neutral Network (TCNN).

RE100 THAILAND CLUB



CKPower has become a member of the RE100 Thailand Club.

AWARDS AND RECOGNITION

THAILAND SUSTAINABILITY INVESTMENT
INDEX (THSI) 2021 FOR THE SECOND
CONSECUTIVE YEARS

CKPower was included in the Thailand Sustainability Investment Index (THSI) for the second consecutive year in 2021 - a testament to the priority the Company has given to sustainable business practice with regard to the environment, society, and governance and economy (ESG) in a tangible manner.



THE ASSET ESG CORPORATE AWARDS 2021

CKPower won the Gold Award at the Asset ESG Corporate Awards 2021 from The Asset, Asia's leading financial magazine. This award testifies to CKPower's sustainable business operations that take into account all stakeholders across all ESG aspects in accordance with international standards.





**CORPORATE GOVERNANCE REPORT OF THAI LISTED COMPANIES
(THAI INSTITUTE OF DIRECTORS: IOD)**

CKPower received an excellent rating in the Corporate Governance Report of Thai Listed Companies from the Thai Institute of Directors (IOD) for the fourth consecutive year in 2021.



ASIAN POWER AWARDS 2021

CKPower won the Innovative Power Technology of the Year Award - Thailand at the Asian Power Awards 2021 for its project and relevant innovation at Bangpa-in Cogeneration Power Plant, which successfully reduced energy consumption, environmental impact, and expenses without affecting the power production.



GPSC GRAND PRIX OPERATION EXCELLENCE AWARDS 2021

CKPower won two awards at the GPSC Grand Prix Operation Excellence Awards 2021 for projects at Bangpa-in Cogeneration Power Plant, namely the Best Practices Sharing Award for the invention, development, and delivery of innovation for the reduction of energy consumption and environmental impacts, and the 1st runner-up award in the Realized Benefit Category for the excellent overall performance of its innovation projects.



**KASETSART UNIVERSITY CITATION
OF MERIT AWARDS 2021**

CKPower was presented with a Citation of Merit Award at Kasetsart University in 2021 for supporting the operation of KU COVID-19 vaccination center, giving Thai people access to 213,182 additional doses of vaccine, and contributing to COVID-19 prevention.

COVID-19 MANAGEMENT

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

The spread of the 2019 coronavirus disease (COVID-19) and continued emergence of new strains have had a heavy economic impact on all sectors, whether in terms of the way of life of the general public, consumer behavior, business operations, investments, and various government rules and regulations, such as travel restrictions and social distancing. Likewise, the Company's business operations have been directly and indirectly affected, and thus it has had to adapt and prepare itself to deal with ever-changing situations as well as appropriately manage the risks that arise by establishing prevention guidelines and strict pandemic control measures while simultaneously maintaining capabilities and efficiency in business operations to ensure the safety of employees, suppliers, and contractors as well as build confidence among customers and take part in helping society to overcome this crisis together.

STRATEGIES FOR SUCCESS

COVID-19 Management

In response to the spread of the 2019 coronavirus disease (COVID-19), which began in 2020 and continued into 2021, the Company assessed the pandemic as an emerging risk in the year 2020 and has consistently monitored the situation to prepare for and adapt to the pandemic as well as established various regulations in accordance with the government.

CKPower has established a BCP Pandemic Team, a unit responsible for closely monitoring the COVID-19 situation and for determining and continuously improving prevention and control measures as well as communicating such measures to the employees, suppliers, and contractors of the Company and its subsidiaries in Thailand and Lao PDR on a weekly basis to ensure awareness and strict adherence. Based on assessment and analysis of the impact of the pandemic on various operations, the Company has identified the four following key factors related to business operations for which suitable and rigorous preventive measures must be put in place:

More information on
Responding to Covid-19
(Emergency Response)
can be found here
[OR CLICK HERE](#)



EMPLOYEE
WELLBEING



OCCUPATIONAL
SAFETY AND
HEALTH



MAINTAINING
SYSTEM
RELIABILITY



CARING FOR
COMMUNITIES
AND SOCIETY

IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION



With the rapid spread of COVID-19 in Thailand, the Company has established guidelines to protect the health and safety of employees as follows:



EMPLOYEES OPERATED UNDER THE BUBBLE AND SEAL DISEASE PREVENTION AND CONTROL MEASURES

CKPower has stepped up its work-from-home measures by clearly allocating and dividing responsibilities according to necessity for on-site work at power plants or offices and requested employees for cooperation in working and conducting meetings online as much as possible. In the event that on-site work is necessary, employees must notify their supervisors directly every time prior to entering the workplace to enable monitoring and risk assessment and strictly adhere to COVID-19 measures. In 2021, 146,700 hours of employees under work from home measures, 95% of employees involved in the power plant production processes in Thailand operated under work-from-home measures, while 5% of employees operated under the Bubble and Seal disease prevention and control measures.



SUPPORTING THE COST OF VACCINATION FOR EMPLOYEES AT ALL LEVELS

CKPower has provided assistance in procuring and supporting the cost of vaccination for employees at all levels. In the past year, the Company assisted in fully vaccinating 99.87% of employees.



WORK SYSTEM AND FURTHER FACILITATE ONLINE OPERATION

Digital technology has been introduced to transform the Company's work system and further facilitate online operation in order to minimize the risk of the spread of the disease.



TRAVELING BY PUBLIC TRANSPORT FOR NECESSARY ON-SITE WORK

The Company recognizes the risks faced by employees when traveling by public transport for necessary on-site work, particularly those who are pregnant, those with chronic illnesses, and those over 60 years of age. As such, the Company has arranged for a shuttle bus service.



TESTED FOR COVID-19

CKPower has arranged for and encouraged employees in at-risk groups to be tested for COVID-19 using the RT-PCR method as well as encouraged weekly screening prior to operation by providing free antigen test kits (ATKs). The Company also ensures an adequate supply of equipment for COVID-19 prevention, such as alcohol sprays and masks, at all times.



DISINFECTION OF OFFICES AND BUILDINGS

Disinfection of offices and buildings, including within the power plant/working areas, is carried out on a weekly basis.



REDUCE THE RISK OF THE SPREAD OF COVID-19

Cleaning crews are arranged in shifts to reduce the risk of the spread of COVID-19.



VARIOUS COMMUNICATION CHANNELS CKP PANDEMIC-LINE GROUP

CKPower disseminates policies and measures to prevent the spread of the virus as well as strategies for self-protection against infection through various communication channels, such as e-mail and the Company's CKP Pandemic-Line Group.

EMPLOYEE INTERVIEW

Ensuring Employee Wellbeing During the COVID-19 Pandemic



**MS. SIWAPORN
WIMOLJARIYABUL**
Pregnant Employee
Manager - Accounts Payable

"The Company has demonstrated concern for pregnant employees with vaccine procurement and work-from-home measures in order to reduce the risk of contracting COVID."



**MS. PAWITTRA
THATTHONG**
Employee who utilizes
public transportation
Senior Officer - Recruitment

"The Company has reduced the risk of contracting COVID while commuting by providing shuttle buses for employees who use public transportation and ensuring safety by requiring the drivers to undergo ATK screening."



**DR. VIRAWAN
SOMBUTSIRI**
Advisor - SSC Environment

"I'm impressed with the support provided by the IT team, which enabled us to work from home with efficiency in order to reduce the risk of contracting COVID during go to workplace."

Occupational Safety and Health

CKPower is aware of and concerned about the occupational health and safety of the employees, suppliers, customers, shareholders, and stakeholders involved in its operations and has thus established comprehensive measures and policies to prevent the spread of the disease, including the following screening measures for workers and visitors to prevent and control the spread of COVID-19:



NEW E-WORK PERMIT SYSTEM

Designating the Occupational Safety, Health, and Environment Committee to be responsible for establishing various policies and guidelines during the COVID-19 pandemic, such as the new E-Work Permit System



BARRING ENTRY AND EXIT

Barring entry and exit from power plants and arranging sufficient accommodations and food for all employees and contractors within the area of the power plants

Screening employees and visitors upon entering power plants by measuring temperature and testing for COVID-19 using ATKs, as well as taking prevention measures such as providing sufficient PPE kits, face masks, and face shields in all power plants



Measuring Temperature



Face Masks



PPE Kits



MAINTAIN SOCIAL DISTANCING

Preventing the spread of infection by isolating elevators and work areas for contractors and employees in order to maintain social distancing



MAXIMUM CONTROL ZONE WITH ENTRY AND EXIT

Establishing a response plan in the event that personnel are found to be infected so that the Company's operation can continue seamlessly and designating the control room of the power plant as a maximum control zone with entry and exit restricted only to authorized employees in order to ensure the reliability of the power generation process and the ability to effectively carry out production according to the action plan without impacting customers.



ORGANIZED THE 2021 ANNUAL GENERAL MEETING OF SHAREHOLDERS VIA VIRTUAL CHANNELS

With regard to shareholders, CKPower organized the 2021 Annual General Meeting of Shareholders via virtual channels and regularly communicated news and updates to them to ensure their safety and health.

Maintaining System Availability

As 95% of the employees had to work from home, CKPower needed to adjust its work process for necessary on-site operations to efficiently maintain system availability and prevent impact on power delivery to its customers. To this end, the personnel were arranged in rotating shifts, and separate work areas were clearly designated, with entry to offices and/or power plants barred for external parties. In addition, power plants were designated maximum control zones with strict entry and exit restrictions. Backup teams were also formed to handle emergencies with power generation and maintenance in collaboration with domestic and international customers.

In addition, CKPower introduced cutting-edge digital technology to enable the remote operation of its power plants as well as put in place the SCADA system and established the National Control Center (NCC) to coordinate operations online. Due to effective and prudent operation control, CKPower was able to effectively maintain its operating performance.

Introduced cutting-edge digital technology to enable the

REMOTE OPERATION



of its power plants

Put in place the

SCADA



system

Established

NCC



(National Control Center) to coordinate operations online

Social and Community Care

CKPower has declared its intent and demonstrated its care for society amid the 2019 coronavirus disease (COVID-19) pandemic, putting emphasis on conducting business alongside developing and assisting society across all dimensions - another key factor contributing to its business growth. In 2021, the Company carried out various social contribution societies both in Thailand and Lao PDR to enable not just the Company but also society and communities to overcome the COVID-19 pandemic together.

5.5 THB million



CKPower's contribution to COVID-19 relief efforts for communities and society

1.37 THB million



The total value of the medical equipment, such as PPE, face masks, rubber gloves, face shields, and alcohol gel, CKPower contributed to medical professionals for COVID-19 prevention.

“CKPOWER OFFERS SUPPORT AGAINST COVID-19”

Supporting Medical Units and Government Agencies in Thailand and Lao PDR



01

CKPower supported the construction of negative pressure units, along with equipment, and the installation of negative-pressure air-conditioners at Bhumibol Adulyadej Hospital under the Royal Thai Air Force, valued at THB 1.3 million in total.



02

CKPower presented an ambulance and a donation to the Ministry of Public Health of Lao PDR through the Royal Thai Embassy in Vientiane and extended support to the Xayaburi Public Health Unit for COVID-19 management in Lao PDR, worth THB 1.5 million in total.



03

CKPower supported the operations of Kasetsart University's KU Fight COVID-19 vaccination center right from its establishment to the phase of public service. More than 200,000 doses of vaccine have been administered. The Company's contribution was worth THB 2 million in total.



04

CKPower provided necessary equipment, such as pressure monitors and fingertip oximeters, to Public Health Center 4 Din Daeng, Department of Health, Bangkok Metropolitan Administration to support public vaccination services, worth in total THB 50,000.

Caring for Communities Around the Power Plants



01

Volunteer employees visited communities around CKPower's power plant in Bangpa-in Industrial Estate in Ayutthaya to provide COVID-19 prevention equipment, such as alcohol-based hand sanitizers, face masks, and medications, as well as daily essentials right from the onset of the pandemic, worth THB 300,000 in total.



02

CKPower, in collaboration with the Bangkhenchai Solar Power Plant, contributed essential items, alcohol-based hand sanitizers, face masks, and medical products, worth in total THB 250,000, to 400 households in communities in Khok Thai Sub-district, Pak Thong Chai District, Nakhon Ratchasima.



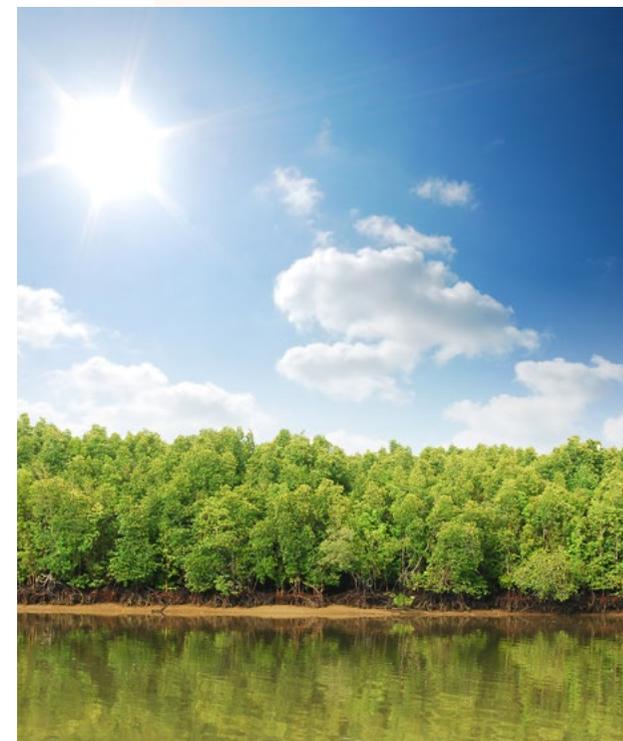
CK POWER'S RESPONSE TO GLOBAL TRENDS

In 2021, CKPower took various steps in response to global trends in climate change, human rights, and biodiversity by establishing a group-wide climate strategy and conducting human rights due diligence to assess the risks of human rights violations throughout the Company's supply chain, all in the effort to prepare for and cope with the rapid changes of the world as well as foster confidence among stakeholders as part of its commitment to sustainable development.

CLIMATE CHANGE

One of the agreements from the 26th United Nations Climate Change Conference (COP26) is to further escalate humankind's large-scale effort to reduce Greenhouse gases. This is in conjunction with the existing commitment to prevent the global temperature from rising by more than 1.5 degrees Celsius in order to fulfill the Paris Agreement, with leaders of more than 100 countries around the world acceding to end deforestation, halt methane emissions, and reduce the use of coal by 2030. Moreover, financial institutions/organizations have agreed to promote investment in green technologies, such as the use of renewable energy, in the private sector and avoid funding industries that use fossil fuels.

In accordance with the aforementioned COP26 agreement, the Company recognizes the importance of contributing to the global community's efforts to reduce Greenhouse gas emissions and has thus established a comprehensive climate change strategy encompassing the entire organization in order to reach the goal of net-zero GHG emissions by 2050. CKPower strongly believes that its climate change strategy will create competitive advantage as well as prepare it for upcoming measures or laws related to Greenhouse gases.



HUMAN RIGHTS

As a result of many important world events involving the violation of fundamental human rights, unfair labor practices, and discrimination, as well as the impact that the spread of COVID-19 has had on vulnerable groups, human rights issues have risen to the forefront of global trends. Stakeholders expect private companies to protect their employees as well as external stakeholders throughout the supply chain without discrimination. In addition, both national and international sustainability laws and standards also place an emphasis in raising the stakes when it comes to the issue of human rights violations. If the Company neglects to prevent human rights violations, it may lose the confidence and trust of stakeholders as well as large sums of money.

In order to prepare for and prevent potential damage with regards to the human rights trend, CKPower has conducted a risk assessment of 14 issues related to human rights violation against all of the company's stakeholders, from employees, contractors, and suppliers all the way to vulnerable communities near all of its power plants. The Company has also established a human rights policy which adheres to human rights principles to preventing and minimizing loss as well as involves ongoing assessment on the impacts of existing and potential human rights violations, strict preventive measures, and impact monitoring, as well as communication with the public in order to ensure that affected persons receive attentive care and treatment.

BIODIVERSITY

Biodiversity is considered a fundamental factor that supports human beings in various aspects of their livelihood, such as food, clean water, medicine, and shelter. The World Wide Fund for Nature (WWF) revealed that between 1970 and 2012, the world's biodiversity was greatly impacted, with animal habitats in many areas destroyed and many plants and animals gone extinct in a short period of time. The World Biodiversity Index also shows a 58% decline in the population of vertebrates with a continued drop of 2% every year. It is therefore an urgent necessity for all sectors to build a better relationship with nature and maintain ecological balance and biodiversity for the stability of both terrestrial and aquatic resources.

In 2021, the 15th session of the United Nations Convention on Biological Diversity (COP 15) was held, during which it was argued that healthy ecosystems are one of the keys to mitigating the problem of climate change and helping communities adapt to living with its effects. From this meeting, it is likely that the UN will mandate NGOs around the world to compile reports in accordance with the Taskforce on Nature-Related Financial Disclosure (TNFD) in order to fulfill Sustainable Development Goal (SDG) 15, which will directly affect the business sector.

CKPower recognizes the importance of maintaining ecological balance and biodiversity, especially in the business of hydroelectric power plants, to which the Company has applied modern technology to strictly prevent and mitigate impact on biodiversity, such as by designing the first run-of-river power plant on the lower Mekong and implementing world-class technology to design multi-system fish passage facilities. In doing so, the Company aims to take part in the social initiative to preserve biodiversity, food security, and the livelihood of those who live in the vicinity of its power plants as a good neighbor to the community.



SECTION
2

GOVERNANCE

CORPORATE GOVERNANCE

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

CKPower prioritizes good corporate governance in its business operations and has prescribed transparent practices as well as responsibilities of its directors towards their duties, which promote its adaptability and strengthen its competitiveness amid changes in business, social, and environmental circumstances. This is to ensure CKPower's long-term growth and ability to create value to meet expectations and foster confidence among investors, all stakeholders, capital markets, as well as the general public.

CKPower's business operations adhere to the principles of corporate governance, which form the foundation of its business growth. The Company's corporate governance policy covers key issues according to such principles across five categories, namely shareholder rights, equitable treatment of shareholders, shareholder roles, disclosure and transparency, and the responsibilities of directors, encompassing all stakeholder groups across the supply chain.

STRATEGIES FOR SUCCESS

At present, the Board of Directors consists of 12 directors. Of these, one is female and four are independent directors. CKPower's policy prescribes that at least one third of the Board of Directors shall be independent directors and there shall be at least three independent directors, who are selected and appointed in compliance with legal requirements, Notifications of the Stock Exchange of Thailand ("SET") and the Securities Exchange Commission ("SEC") Re: Qualifications of Independent Directors in Accordance with the Notification of the Capital Market Supervisory Board No. TorChor. 39/2559 Re: Application for Approval and Granting of Approval for Offering of Newly Issued Shares, including amendments, as well as stipulations on qualifications of the Board of Directors in the Charter of the Board of Directors, which prescribe stricter qualifications and definition of independent directors than SET's Notification Re: Qualifications and Scope of Work of the Audit Committee B.E. 2558, SET's Regulations Re: Listing of Ordinary Shares or Preferred Shares as Listed Securities B.E. 2558, and the Notification of the Capital Market Supervisory Board No. TorChor. 39/2559 Re: Application for Approval and Granting of Approval for Offering of Newly Issued Shares (including amendments). Independent directors are charged with controlling and managing the Company's business operations to ensure compliance with legal requirements and consistency with its vision and good practices as well as protecting the Company's interests, creating checks and balances between independent directors, executive directors, and non-executive directors, and inspecting voting in meetings to ensure transparency. In 2021, the Board of Directors convened a total of seven meetings.

The structure of the Board of Directors is detailed below.

| BOARD OF DIRECTORS | NUMBER OF PERSON | BOARD OF DIRECTORS | NUMBER OF PERSON |
|-------------------------|------------------|--------------------|------------------|
| Executive Director | 1 | FEMALE | 1 |
| Non-executive Directors | 11 | Male | 11 |
| Independent directors | 4 | TOTAL | 12 |



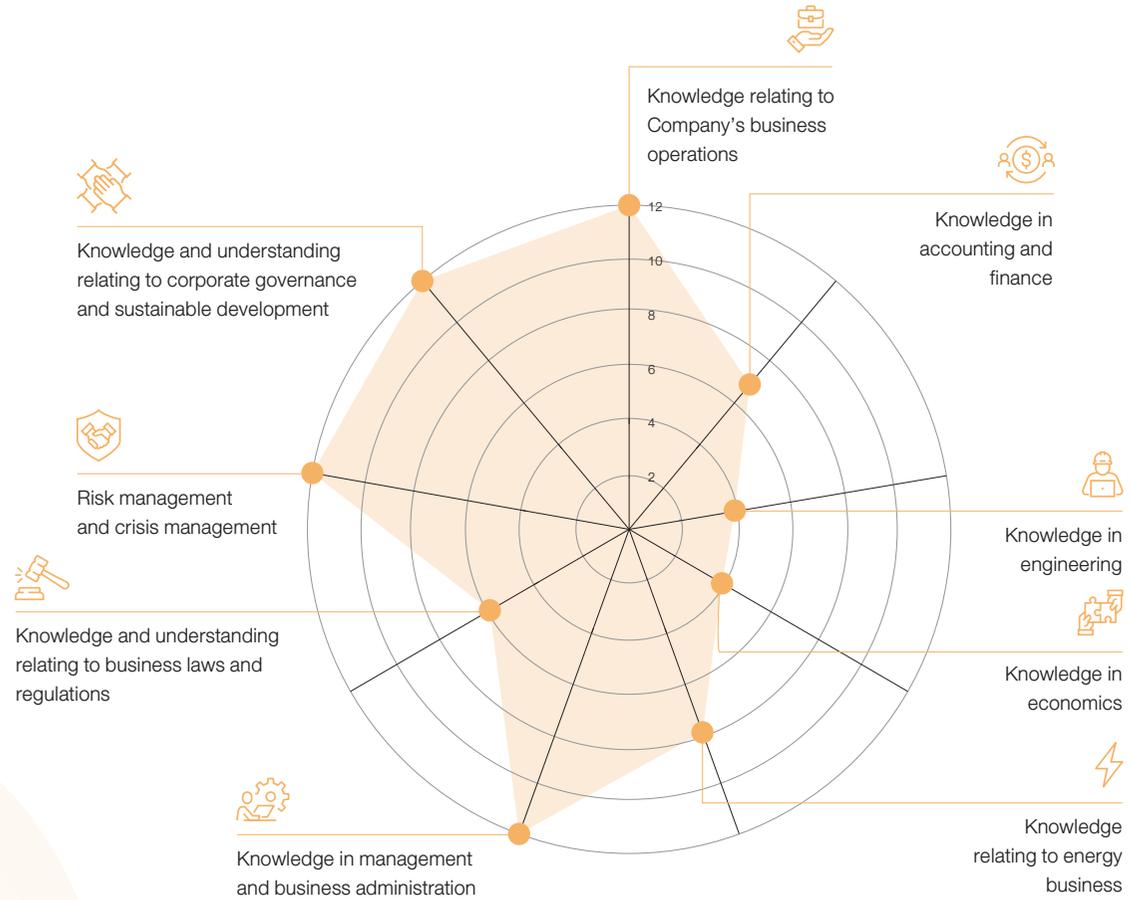
More information on
The structure of the
Board of Directors
can be found here
[OR CLICK HERE](#)



Director Nomination

The Nomination and Remuneration Committee is charged with the responsibility of nominating suitable candidates with a diverse range of qualifications for directorship, such as professional skills and specialization, without discrimination based on age, gender, nationality, religion, and physical impairment. Director nomination is based on the expertise of the directors, education, training records, membership in sub-committees or other positions in the Company or other companies, and job experiences, which are formulated into a board skill matrix, which helps ensure that director nomination is in alignment with corporate strategies and supports CKPower's sustainable business growth.

Board Skill Matrix



Code of Business Conduct

In addition to corporate governance principles, CKPower has prescribed a code of business conduct to demonstrate its intent to base its business operations on transparency, accountability, and responsibility to all stakeholders. As such, directors, executives, and employees of CKPower and its subsidiaries, including directors and/or executives appointed to CKPower and its subsidiaries, and all stakeholders are required to comply with this code of business conduct in addition to legal requirements and criteria of relevant regulatory agencies.

More information on the code of business conduct can be found here.

[OR CLICK HERE](#)



Anti-corruption

CKPower has prescribed anti-corruption measures in writing as part of the code of business conduct, the code of conduct for directors, the code of conduct for executives and employees, and anti-corruption guidelines, in view of the rights of stakeholders and the duties of directors and executives. In addition, CKPower has established a corruption investigation unit and provided whistleblower channels, where all data and reports are kept confidential with restricted access and are disclosed only to relevant individuals, to give assurance and a sense of security to whistleblowers. The Company has also announced a no-gift policy and communicated it to all stakeholders via various communication channels, such as its website and Facebook page.

More information on the anti-corruption guidelines can be found here.

[OR CLICK HERE](#)



Whistleblower Channel

CKPower has established various reliable and independent whistleblower channels, through which whistleblowers will be given protection and ensured fairness. Any non-compliance with the codes of conduct, violation of laws, or any suspected fraud or misconduct committed by personnel of the Company can be reported through the following channels:



Contact the Investor Relations Division directly through the Company's website at: www.ckpower.co.th/th/ir



Send an e-mail

- To the corporate secretary at compliance@ckpower.co.th
- Directly to members of the Audit Committee and the Board of Directors at directors@ckpower.co.th
- The Investor Relations at ir@ckpower.co.th



Send a Sealed Letter to
CK Power Public Company Limited
587 Viriyathavorn Building,
Sutthisan Winitchai Road,
Ratchadaphisek Sub-district,
Din Daeng District,
Bangkok 10400.

The investigation process is as follows:

1. Gather facts related to non-compliance with codes of conduct or corruption and/or assign a suitable person to carry out this step.
2. The manager of the Internal Audit Office gathers and presents evidence to the Managing Director and appoints an investigation committee.
3. The investigation committee gathers data and evidence related to the report.
4. The investigation committee deliberates on the case.
5. Establish resolution or remedial measures and report to the Managing Director or the Board of Directors for acknowledgment.
6. Inform the whistleblower or the impacted parties of the deliberation and remedial measures. Track the progress of the remediation and consider additional measures and guidelines to prevent recurrence in the future.
7. Prepare a report detailing all relevant facts to formulate measures and guidelines to prevent corruption or non-compliance with codes of conduct in the future.

TARGETS AND PERFORMANCE INDICATORS



100%

of employees and executives undergo basic training on governance, policies, and protocols related to CKPower’s code of business conduct, anti-corruption policy, and corporate values.



IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION



In 2021,

100%

of employees and executives underwent training on governance, policies, and protocols related to CKPower’s code of business conduct, anti-corruption policy, and corporate values.

2021 HIGHLIGHTS



CKPower implemented a **no-gift policy** and raised awareness to promote practice across the organization. In 2021,

100%

of CKPower’s employees acknowledged and complied with the policy.

EMPLOYEE INTERVIEW



MR. TARIT PROMMAWAN
Engineering Supervisor
– Hydrology Engineering

“The basic governance training on my first day of work has helped me understand CKPower’s corporate governance policy and practice as well as the code of conduct for business operations across the supply chain. It has enabled me to follow the corporate governance guidelines, especially with respect to anti-corruption, which is vital and applicable to operations.”

RISK MANAGEMENT



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

The current business landscape is subject to impacts from a range of ever-changing factors, such as water shortage due to severe climate change, COVID-19 pandemic, rapid energy technology and digital disruption, as well as state policies, under which regulations are formulated to control operations in the business sector. Given the competition and emerging risks resulting from these factors, it is necessary for CKPower to implement risk management and monitor all risks prudently, including emerging risks, so as to minimize damage, ensure steady growth, and generate good operating results towards achieving energy technology leadership in a sustainable manner.

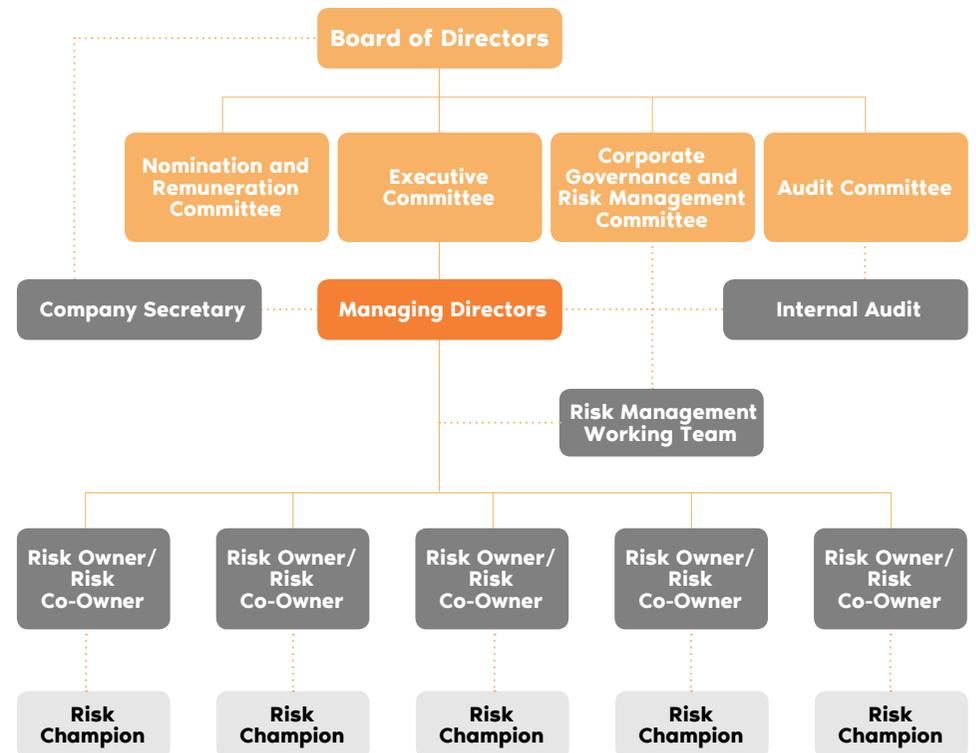
STRATEGIES FOR SUCCESS

CKPower recognizes the importance risk management system on fostering its preparedness and ability to respond to changes that may impact its business operations suitably and promptly and assess business opportunities and identify avenues for sustainable business growth. To this end, CKPower has established a risk management policy to promote corporate risk management and appointed the Risk Management Working Group of CKPower and its subsidiaries, consisting of executives from all lines of work, namely, business planning, engineering, operation and maintenance, power plant manager, with a duty of drawing up an annual risk management plan. In addition, the Corporate Governance and Risk Management Committee convenes at least four meetings per year to review agenda items related to corporate governance, risk management, and sustainable development. CKPower's risk management covers four aspects:

| | | | |
|--|--|--|--|
| <p>01 STRATEGIC RISKS (S)</p>  | <p>02 OPERATIONAL RISKS (O)</p>  | <p>03 FINANCIAL RISKS (F)</p>  | <p>04 COMPLIANCE RISKS (C)</p>  |
|--|--|--|--|

Risk Management Structure

The Board of Directors has appointed the Corporate Governance and Risk Management Committee to review and approve the risk management of CKPower and its subsidiaries. The committee is also responsible for establishing policies, provide recommendations, and audit risk management to ensure effectiveness. CKPower has also assigned the Internal Audit Division, which is independent from the Risk Management Working Group, to monitor and review the risk management process as an additional layer, to provide further assurance on risk management.



Risk Management Process

CKPower manages potential risks that may impact its business operations.

The risk management process comprises six steps:



The Risk Management Working Group reviews emerging risks, analyzes their potential impacts, and prescribes the risk appetite/risk tolerance, risk indicators, and risk management measures, while the risk management process is monitored and audited by the Internal Audit Division, which works independently from the Risk Management Working Group. In addition, CKPower has prescribed risk management assessment and performance reporting on a quarterly basis to keep internal risks within the risk appetite.

Please scan for more information
[OR CLICK HERE](#)



TARGETS AND PERFORMANCE INDICATORS

2021 TARGETS

- To develop and improve the risk management process to ensure consistency with CKPower's business operations, current circumstances, and international standards
- To foster a risk management culture at the levels of the Board of Directors and top executives

LONG-TERM GOAL

- To foster a risk management culture across CKPower and its subsidiaries



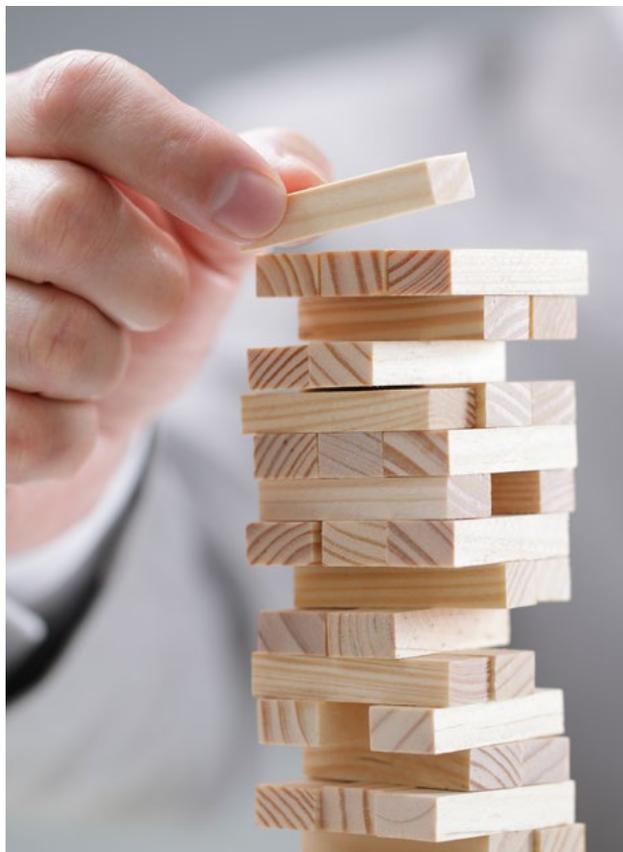
IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION

In 2021, CKPower reviewed various risk factors and analyzed potential impacts and opportunities as well as established the risk appetite/risk tolerance, enterprise risk management (ERM), and a process for formulating business strategies and goals with risk indicators in accordance with the international a corporate risk management framework COSO-ERM 2017 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)a. In addition, CKPower assessed and monitored its risk management measures on a regular basis and was able to keep risks within its risk appetite. In 2021, most risks were at or below the acceptable level, except strategic risks, which involved relations with communities, society, and the environment surrounding the power plants and were at a very high level. In response, a risk management plan was prudently formulated.

2021 RISK MANAGEMENT PERFORMANCE

| RISKS | DESCRIPTION | MANAGEMENT PLAN |
|---|---|--|
| STRATEGIC RISKS  | Risks that affect CKPower's operational strategies and may cause damage to the Company's business operations in both short and long terms | CKPower has appointed the Exploration Team to study and research the development of new power production business models as well as analyze internal and external environments to establish the Company's directions and strategies while also developing the capabilities and preparedness of its personnel to accommodate future business growth. CKPower has also formulated ESG strategies and established the Corporate Sustainability Working Group to support and implement its sustainable development activities and operations. |
| OPERATIONAL RISKS  | Risks resulting from the operations of the Company and its power plants due to personnel shortage, inappropriate operational plans, as well as accidents or natural disasters beyond the control of the Company | CKPower manages the availability of its power plants, machinery, and equipment by establishing annual preventive maintenance plans in order to inspect the machinery and equipment according to the schedule and by ensuring the implementation of such plans as well as sufficient and suitable backup of necessary equipment, supplies, and critical spare parts for maintenance of the power plants. CKPower has also applied the ISO 9001: 2015 Quality Management System (International Organization for Standardization: ISO) to its power plants. |



| RISKS | DESCRIPTION | MANAGEMENT PLAN |
|---|---|---|
| FINANCIAL RISKS  | Risks related to expense and budget management and control for ensuring the Company's continuous financial liquidity or risks that may arise as a result of external financial circumstances, such as interest rates, foreign exchange rates, and inflation, that may impact the Company's revenue and expenses | CKPower implements risk management, prepares case flow projections, and update the data on a regular basis as well as manages its loan agreements and coordinates closely with the lending banks to minimize risks of breaching the loan agreement terms. CKPower also manages its excess cash by investing in bank deposits and short-term high-liquidity investments with reliable financial institutions as well as arranges for credit availability when fund is needed. |
| COMPLIANCE RISKS  | Risks from failure to comply with operational procedures and applicable laws | CKPower keeps abreast with the situation and new developments regarding new laws enforced in Thailand and in countries related to its business operations on a regular basis to ensure that it has sufficient time to make preparations to improve and handle changes with significant impact on every aspect of business operations. CKPower also shares knowledge with its employees and engages legal advisors when there are inquiries or when expert opinions are required to ensure that CKPower operates prudently, transparently, and in compliance with corporate governance principles. |

EMERGING RISKS

As intensifying climate change may result in new risks and affect its future business operations, CKPower has studied and analyzed significant issues that may potentially affect the Company and might become emerging risks in the near future as follows:



CHANGES IN ENERGY TECHNOLOGY

POTENTIAL IMPACTS

Energy technology is evolving rapidly to keep pace with consumer demand for energy, such as technology for energy storage and power production from renewable energy, resulting in stronger competition in the electricity industry while also bringing new opportunities and enhancing operational flexibility. Timely adaptation will not only reduce strategic risks and prevent loss of market shares but will also foster confidence in the Company among customers and investors.

MANAGEMENT

CKPower conducts feasibility studies and assessment of enhancing the capabilities of renewable energy business and has increased investment in technology research and development, personnel, innovation, as well as relevant policies and laws to ensure its adaptability to change.



CYBERSECURITY

POTENTIAL IMPACTS

Information critical to business operations and vital information of the Company, its suppliers and customers, as well as relevant parties across the supply chain may be used illegally, leading to damage to the Company, or may be targeted by cyberattacks, which can cause various impacts on the Company, such as business disruptions or disclosure of internal information, which may harm stakeholders' confidence in the Company.

MANAGEMENT

CKPower has prepared against all forms of cyber threats as follows:

- Include IT security as part of business continuity management.
- Prescribe clear management steps and processes and responsible persons to ensure the security of the Company's vital information.
- Put in place a prompt situation reporting system to ensure that incidents and weaknesses related to IT security are handled appropriately and effectively.
- Organize training to build technology knowledge and raise awareness of IT security in all employees

BUILDING A RISK CULTURE

CKPower fosters an enterprise-wide risk culture by organizing an enterprise risk management sharing session for the Board of Directors and communicating a risk management framework according to COSO ERM 2017 to the Risk Management Working Group of CKPower and its subsidiaries through a virtual meeting to continuously improve their knowledge on risk and risk management. In addition, the Company also raises awareness of risk management among employees at all levels and has incorporated risk management as part of its operations.

2021 HIGHLIGHTS



Communicating a risk management
framework according to

COSO ERM 2017

to the Risk Management Working Group of
CKPower and its subsidiaries

CHAIR OF THE RISK MANAGEMENT WORKING GROUP INTERVIEW



**MS. MUNTANA
AUEKITKARJORN**

Deputy Managing Director,
Corporate Planning - Chair of the
Risk Management Working Group

“In the past year, the Company developed and improved the risk management system to meet standards in line with the current circumstances. The Company recognizes the benefits of risk management as well as makes pushes to foster an enterprise-wide risk culture from the levels of the Board of Directors to the top executives and the Risk Management Working Group, to ensure that the Company will achieve its defined goals efficiently and effectively, while also continuously developing and promoting risk management across the Company.”

RISK MANAGEMENT WORKING GROUP INTERVIEW



**MR. WASUN
PROMUPPATAM**

Sr. Engineer
- Electrical • Technician
- Risk Management Working
Group, Nam Ngum 2 Power
Company Limited

“Risk management is another practical management tool because once the Company recognizes what risks it is faced with, it can effectively formulate risk management plans. By fostering an enterprise-wide risk culture, employees will become aware that risks are part of the Company’s operations.”

SUPPLY CHAIN MANAGEMENT



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

CKPower attaches significance to supply chain management as good supply chain management can minimize business risks. By conducting business with suppliers with environmental, social and governance (ESG) management, the Company can reduce the risk of business disruptions as well as elevate its efficiency and promote the sustainable growth of its businesses. As such, CKPower places great emphasis on integrating ESG into supplier management, from supplier selection to performance evaluation, to ensure that joint business operations across the supply chain are responsible towards society and the environment and in compliance with both good corporate governance principles and the Supplier Code of Conduct.

STRATEGIES FOR SUCCESS

CKPower has established a Supplier Code of Conduct, policies, and criteria that make clear its intent regarding sustainable supply chain management, encompassing transparent, fair, and accountable procurement and hiring processes to selection criteria for new vendors and assessment and review criteria for current suppliers. This is so as to enable the Company to analyze and formulate strategies to improve suppliers at the root cause as well as gather information for risk assessment and formulate control and mitigation measures against potential impacts that could be brought on by each supplier. CKPower's supply chain management framework is as follows:

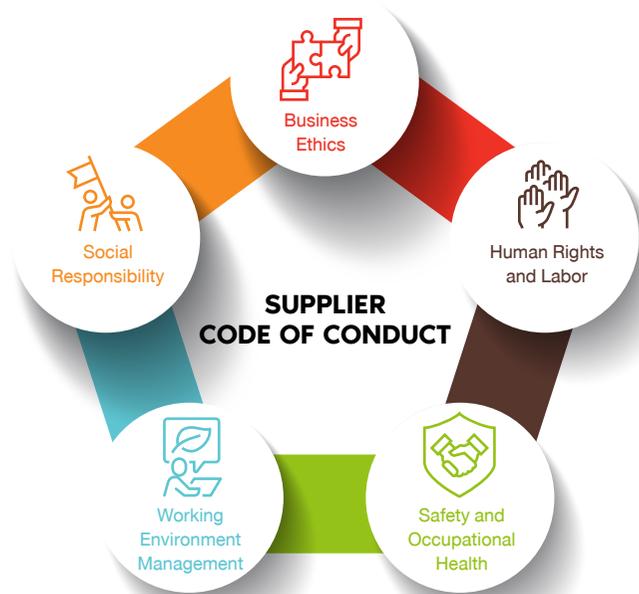


Supplier Code of Conduct

CKPower has established the Supplier Code of Conduct to promote commitment among the suppliers of CKPower and its subsidiaries to sustainable business practices that take into account the environment, society, and governance as well as to serve as guidelines on compliance with laws, regulations, requirements, and international standards. Relevant business practices are also communicated to suppliers on a regular basis via the Company's website.

Please scan for more information on the Supplier Code of Conduct.

[OR CLICK HERE](#)



Procurement Policies

CKPower has put in place a procurement policy and a green procurement policy to prescribe principles and practices that enhance procurement, with emphasis on green procurement and the use of products that are made from renewable resources and do not produce pollution, such as products with green labels, in order to promote environmental conservation and sustainable resource use while also reducing costs and expenses through sustainable consumption. In 2021, CKpower procured office supplies with ecolabels worth over THB 6.8 million, or 80% of the total value of all the office supplies procured.

Please scan for more information on the Procurement Policy

[OR CLICK HERE](#)



New Vendor Selection

CKPower has prescribed new vendor evaluation with criteria covering sustainable topics in economic, social, and environmental dimensions, such as product and service warranty, product delivery, environmental policies and social responsibility, compliance with labor laws, and safety standards. At the same time, the Company also actively and continuously promotes and communicates its supplier code of conduct to all suppliers.

New Vendor Evaluation

As part of vendor selection, CKPower screens vendor candidates by evaluating their qualifications based on criteria covering environmental practices and social responsibility, product and service quality, delivery, experience, product warranty, safety standards, and legal compliance.

Critical Supplier Analysis

CKPower classifies its suppliers into two major categories: critical suppliers and non-critical suppliers, to allow it to systematically analyze and formulate procurement strategies and assess supplier-related risks effectively.



10%
CRITICAL SUPPLIER



Critical suppliers: Suppliers with high-value contracts or high spending who supply hard-to-replace products and of components or devices vital to the manufacturing process. They present very high or high risks.



90%
NON-CRITICAL SUPPLIER

Non-critical suppliers: Suppliers with moderate- or low-value contracts who present moderate or low risks

Supplier Performance Evaluation and Monitoring

Supplier performance or efficiency evaluation is based on a set of criteria and CKPower's Supplier Code of Conduct and enables the social to collect data related to the capabilities of its suppliers across governance, social, and environment. Three types of supplier performance evaluation are conducted: yearly performance evaluation, mid-operation performance evaluation, and on-site audit.

Suppliers with low performance or failing to pass the evaluation will be suspended temporarily or removed from the approved vendor list. The evaluation is based on the site audit checklist. CKPower assists suppliers in resolving their issues and works with them to enhance their potential in order to increase their business capabilities.

Supplier Risk Assessment

CKPower has implemented supplier risk assessment to identify potential impact on its business in accordance with the criteria it has defined, which cover three key social-related areas, namely governance, social, and the environment and include such topics as business ethics, labor treatment and human rights, occupational health and safety, workplace environment management, and social responsibility.

TARGETS AND PERFORMANCE INDICATORS

2021 TARGETS



85%

of all suppliers undergo environmental and social assessment.



100%

of all new suppliers undergo ESG assessment.

2022 TARGET



100%

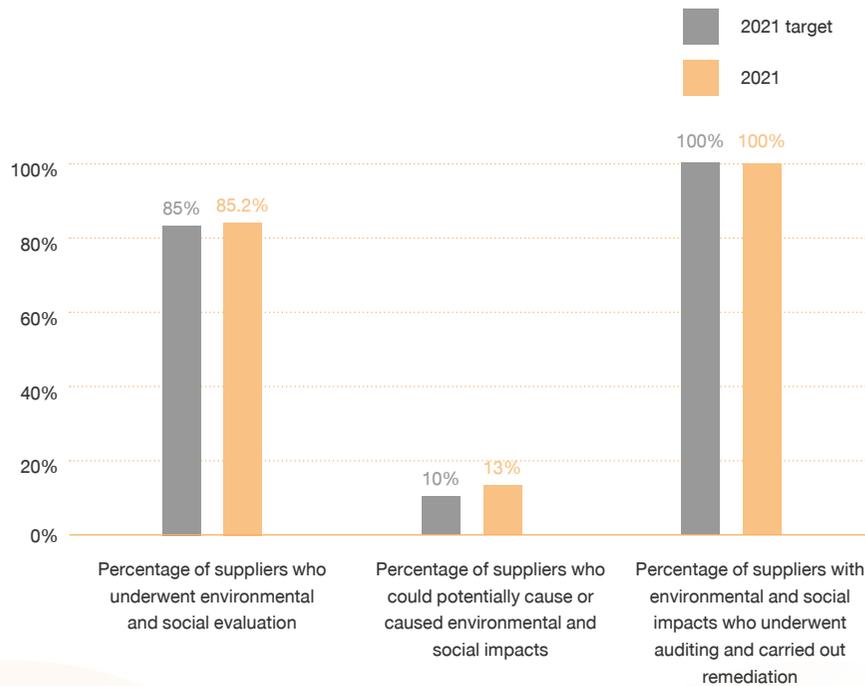
of all suppliers receive the performance rating of "satisfactory" (A).

EXECUTION AND PERFORMANCE EVALUATION

PERFORMANCE AND VALUE CREATION

Results of Supplier Performance Evaluation

In 2021, CKPower conducted performance evaluation covering ESG management on 214 suppliers, or 85.25% of all of its suppliers in 2021.



Percentage of suppliers with environmental and social impacts who failed to carry out remediation and whose status as the Company's supplier was terminated



Supplier Performance Ratings

| RATING | IMPACT ON CKPOWER | ACTION | 2021 |
|--------|-------------------|--|------|
| A (%) | Low | Suppliers are notified of the assessment results and informed to maintain their operational standards and compliance with CKPower's Supplier Code of Conduct. | 69% |
| B (%) | Moderate | Suppliers are notified of the assessment results and informed of areas that require improvement. | 13% |
| C (%) | High | Suppliers are notified of the assessment results and informed of areas that they need to improve on within one month. Once the improvement is complete, they are required to inform the Company and undergo another assessment. If they fail the assessment, they will receive two more months to address such areas again. Suppliers who fail to improve on such areas within two months will be removed from the Approved Vendor List. | 1% |
| D (%) | Very high | Remarks: Suppliers with the rating of D are notified of the assessment results and required to immediately remedy their shortcomings within one month. CKPower will conduct an on-site audit, using the on-site audit checklist. Suppliers who still fail to rectify their shortcomings will be removed from the Approved Vendor List. | - |

Supplier Environment Social and Governance Performance Rating

IN **2021**
CKPower selected
172 new suppliers,
accounting for
68.5% 
of all of its suppliers in 2021

Percentage of new suppliers
who underwent ESG assessment



2021 HIGHLIGHTS

Safety Training for Suppliers

Nam Ngum 2 Power Company Limited conducted a training program on the topic “Operational Safety Training for Nam Ngum 2 Dam Suppliers” for 23 suppliers, most of whom were non-critical suppliers, in order to educate them on power plant work safety, rules, and regulations, instill safety awareness, and provide information on environmental measurement as well as ensure that the suppliers were aware of the Company’s business guidelines, policies, and practices. As a result, 100% of the participating suppliers were equipped with knowledge on power plant work safety, and the rate of accidents in the power plant was effectively reduced. In 2021, zero case of loss-time injury was reported among the power plant’s employees and its suppliers.



“Operational Safety Training
for Nam Ngum 2 Dam Suppliers”
for

23 suppliers



As a result,

100%

of the participating suppliers were
equipped with knowledge on power plant
work safety



0

case of loss-time injury was
reported among the power plant
employees and its
suppliers

INNOVATION AND DISSEMINATION OF INNOVATION

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

Technology and innovation for production efficiency enhancement make it possible for CKPower to meet consumer needs and bolster its competitiveness in the power production industry, taking into account quality of life in society, environmental protection, and the sustainable development of the organization.

STRATEGIES FOR SUCCESS

1. Managing databases to advance internal knowledge development and exchange and spur innovation development within the organization.
2. Enhancing innovation capabilities by collaborating with external agencies or organizations to study new innovations that can advance engineering knowledge, eco-friendly management, and personnel performance.
3. Supporting knowledge and innovation transfer to all stakeholders



TARGETS AND PERFORMANCE INDICATORS

2021 TARGETS



Developing

10

new eco-friendly production
enhancement innovations



Developing

10

innovators



Transferring knowledge
and innovation to

300

stakeholders in the vicinity of
CKPower's power plant

IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION

CKPower has established policies that focus on integrating innovation management as part of efficient resource management, such as development of engineering knowledge, personnel performance, utilization of advanced technology, and an environmentally friendly management system to mitigate the environmental and social effects of the power plant's operations.

In 2021,
CKPower
developed

10

new eco-friendly
production
enhancement
innovations,



successfully
developed

16

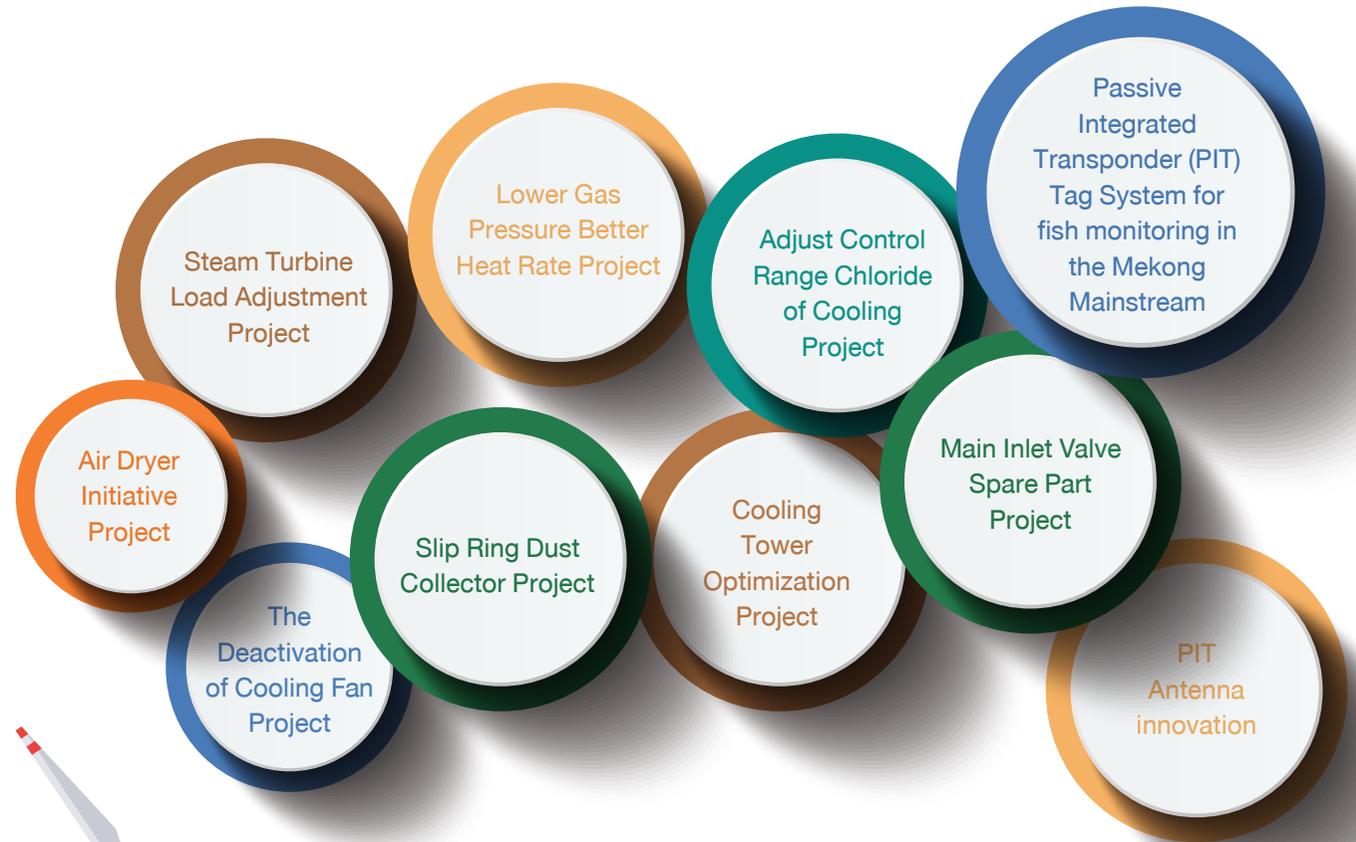
innovators



and transferred knowledge
and innovation to

350

stakeholders in the
vicinity of its plants



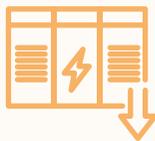
2021 HIGHLIGHTS

Production Enhancement Innovations

In 2021, CKPower carried out various production enhancement projects, including

- The lower gas pressure better - heat rate project
- The phase-2 steam turbine load adjustment project
- The air dryer deactivation project
- The deactivation of cooling fan during 00:00-06:00 A.M.
- The cooling tower optimization project
- The slip ring dust collector project
- The main inlet valve spare part project
- The adjustment and control of the CHLORIDE range
- The cooling tower project

As a result of these seven energy management projects, CKPower successfully reduced cumulative energy consumption by 3,150,419 MWh, equivalent to 1,418 tons of carbon equivalents of greenhouse gases otherwise emitted.



successfully reduced cumulative
energy consumption by

3,150,419

MWh



equivalent to

1,418

tons of carbon dioxide equivalent



Cooling Tower
Optimization Project

Bangka-in Cogeneration Power Plant has managed the activation and deactivation of the cooling fan in the cooling tower to reduce power consumption and the activation of a cooling pump to better divert heat to the cooling tower so as to reduce electricity use within the plant and loss of steam due to evaporation by the cooling fan. The initiative cut down power consumption by 98,498 kWh, equivalent to 40.7 tons of carbon dioxide equivalents per year. The project won the Innovative Power Technology of the Year at the Asian Power Awards 2021, hosted by Asia's leading magazine in the electric power industry.

cut down power
consumption by

98,498

kWh



equivalent to

40.7

tons of carbon dioxide
equivalents per year

Environmental Innovations

“Passive Integrated Transponder (PIT) Tag System for fish monitoring in the Mekong Mainstream”

Food security and biodiversity are vital to the way of life in communities along the Mekong River. As such, the Xayaburi Hydroelectric Power Plant has been conducting several studies to better understand the life cycles, migration pattern, and physiological features of the various fish species in the river. The Project has successfully implemented a PIT-tag system to trace tagged fish in the fish passage facilities.



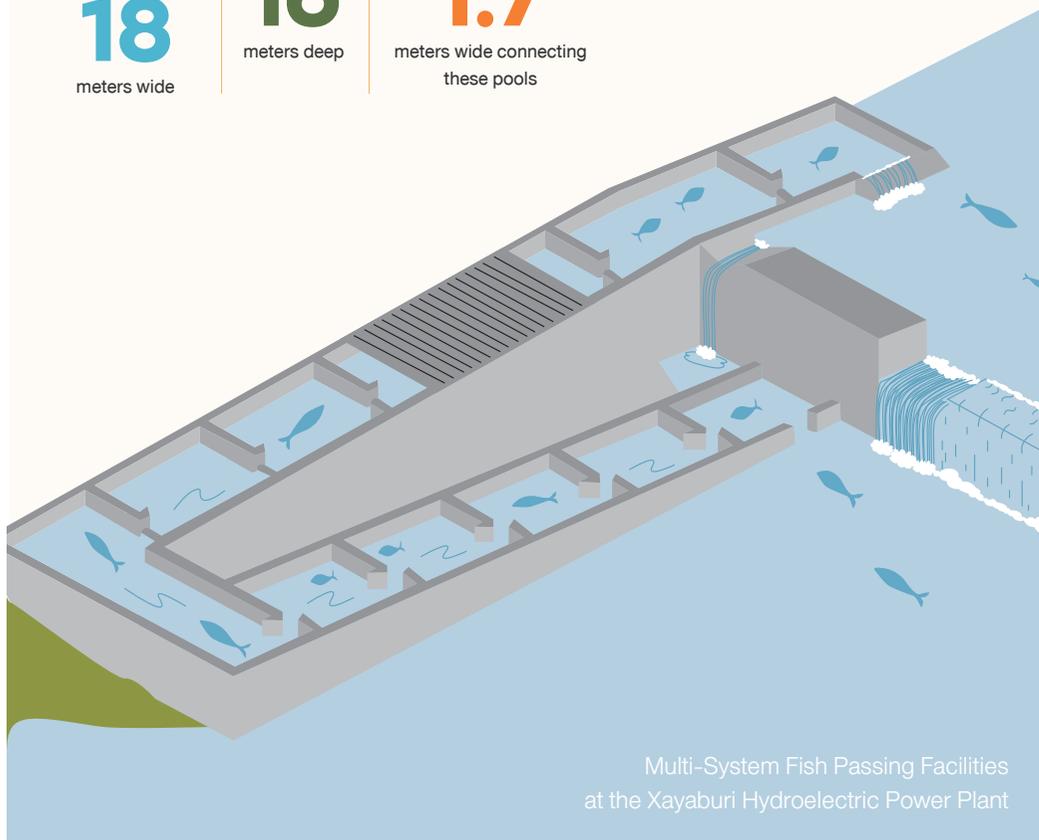
From a very early phase, even before project construction began, the Xayaburi Hydroelectric Power Plant studied and tracked the migration patterns of fish in the river. To enhance the fish monitoring system and to gain a better understanding of the behavior of various species, XPCL entered into a collaboration with Charles Sturt University in New South Wales, Australia, Kartek Pty Ltd, Australia, as well as the National University of Laos (NUOL) and the Living Aquatic Resources Research Center (LARREC) of Lao PDR to research, design, and develop the PIT-tag system.

The complex multi-system fish passage facilities at the Xayaburi Hydroelectric Power Plant, which combine a vertical-slot fishway and two fish locks, are considered one of the largest systems worldwide.

The pools in the fishway are
18
meters wide

up to
16
meters deep

slots between 0.5 to
1.7
meters wide connecting these pools



These large sizes had never before been covered by PIT-tag antenna, so one of the first questions which needed an answer was to check if existing antenna would function under these conditions. To design an effective PIT-tag system, the working group created a prototype to study its efficiency to detect PIT-tags. Once this was done, the system was installed at the sXayaburi Hydroelectric Power Plant. The major components of the system are the antenna which detect the tagged fish when passing through the slots. The largest antenna put in place is 8x1.5 meters and is able to detect tagged fish with very high accuracy. There are relatively few studies on fish migration in the Mekong compared to research in other regions, such as in America or Europe. In addition, physiological features and fish species vary greatly in different parts of the Mekong. Therefore, the fish migration monitoring system designed for the Xayaburi Hydroelectric Power Plant is considered an innovation and is the first deployed in the Mekong Mainstream.

Built upon existing technology, this system provides valuable data regarding fish behaviour and migration. The results from the PIT-tag monitoring allow the operation crew to adjust and optimise the conditions within the fish passing facilities to even further increase their efficiency and reduce the environmental impact of the Project.

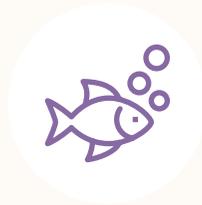


Added Value from the Project



PEOPLE

Fish serve as an important source of protein for local communities, and the fishery-based way of life along the Mekong River is preserved.



PLANET

The project is successfully preserving the life cycle of the fish in the Mekong River, including the variety of species and physiological features. In 2021, over 100 different species of fish passed through the fish passage facilities.



PROFIT

The power plant can produce power with maximum efficiency thanks to the eco-friendly design.



Educating Local Residents around the Xayaburi Hydroelectric Power Plant

To preserve the biodiversity and the life cycle of the fish in the Mekong, CKPower has not only developed and deployed innovations but has also been working with 17 communities around the plant and educating them on the PIT tag system to help them better understand how the migration patterns of the fish in the Mekong are monitored. In 2021, 500 members of these communities participated in this initiative.

In 2021,

500

members of these communities participated in this initiative



INNOVATOR INTERVIEW



**MR. PIRAPAT
CHANGKAEW**
Performance Engineer
Bangpa-in Cogeneration
Power Plant

“CKPower has encouraged employees to take part in creating new inventions and solutions to enhance production efficiency. I am proud to have played a part in generating ideas and taking action to build a strong foundation for the sustainable growth of the business.”



**MR. JEDNITI
SUPACHOKEPANICH**
Sr. Officer - Fish monitoring,
Xayaburi Hydroelectric
Power Plant

“It takes a strong team to harness cutting-edge technology. The application of the PIT tag system for efficient fish monitoring plays a vital role in the collection of accurate high-quality data. However, it is impossible to utilize this technology to the fullest potential without the cooperation of capable and experienced people, which also include the residents along the Mekong River, who have contributed to the sustainable preservation of the fish in the river.”



**MR. RATTEE
TANATITIVARAPONG**
Officer - Fish Monitoring,
Xayaburi Hydroelectric
Power Plant

“Additional studies were required before the passive integrated transponder (PIT) tag system, which is an imported innovation, could be applied to the monitoring of fish migration in the Mekong River. These included a PIT tag trial to determine a suitable location in the fish for implanting tags and study the impacts in relation to the size and weight of the fish that were and were not implanted with tags. During this study, I learned how to implant tags in fish from international experts and I am proud to be part of such a large-scale project.”

SYSTEM RELIABILITY AND AVAILABILITY



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

CKPower strives to produce and deliver electricity to customers with continuity to ensure consistency with the rising demand for power in the market and the supply generated by the government's investment promotion policies in accordance with its capacity development plans and renewable and alternative energy development plans.

CKPower's system reliability and availability are vital indicators that foster confidence among customers and stakeholders in the supply chain, facilitate expansion towards new customer bases, bolster business growth, and impact the country's overall capabilities for economic and social development. In addition, they reflect the Company's efficiency in handling potential risks and incidents that may impact its power production and distribution.

STRATEGIES FOR SUCCESS

CKPower places emphasis on enhancing the capabilities and allocating resources to personnel at all levels to enhance their efficiency in conjunction with the improvement of the reliability and availability of its power production and distribution systems. In addition, the Company has formulated resource efficiency enhancement and loss reduction plans as well as maintenance and business continuity management plans, while also overseeing management across the entire supply chain, including the transportation of raw materials and other materials vital to its business operations, to ensure that its power plants can maintain production levels to adequately meet customer demand.

More information System reliability and availability can be found here

[OR CLICK HERE](#)



TARGETS AND PERFORMANCE INDICATORS

CKPower strives to ensure production reliability and has thus established systematic operational plans and performance indicators regarding system reliability and availability.

2021 TARGET



No unplanned outage

IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION

Electricity Delivery to Customers

CKPower delivers electricity to customers for utilization in their business, which in turn generates value through the products manufactured and services rendered in the form of revenue.



In 2021, CKPower distributed a total of

10,716,597

MWh to its customers

| POWER PLANT | CAPACITY (MW) | NET ENERGY SOLD IN 2021 (MWH) |
|--|---------------|-------------------------------|
| NN2 Hydro Power Plant | 615 | 1,844,816 |
| Xayaburi Hydro Power Plant | 1,285 | 7,304,683 |
| Bangpa-in Cogeneration Power Plant *Excluding steam | 238 | 1,543,851 |
| Bangkhenchai Solar Power Plant | 15 | 23,247 |

Reliability and Availability of Power Production and Distribution Systems

In 2021, the system availability was at 96.4%. There were a total of 8 unplanned outages, resulting in THB 46 million in damages. To ensure the availability of its power plants for continuous operations with maximum efficiency and manage the readiness of its power plants, machinery, and equipment, CKPower formulates annual preventive maintenance plans, which ensure that equipment and machinery are inspected as scheduled and that maintenance is carried out as planned, as well as prepares suitable and adequate amounts of critical equipment, supplies, and spare parts for power plant maintenance. In addition, the ISO 9001:2015 standard has been introduced.

the system availability was at

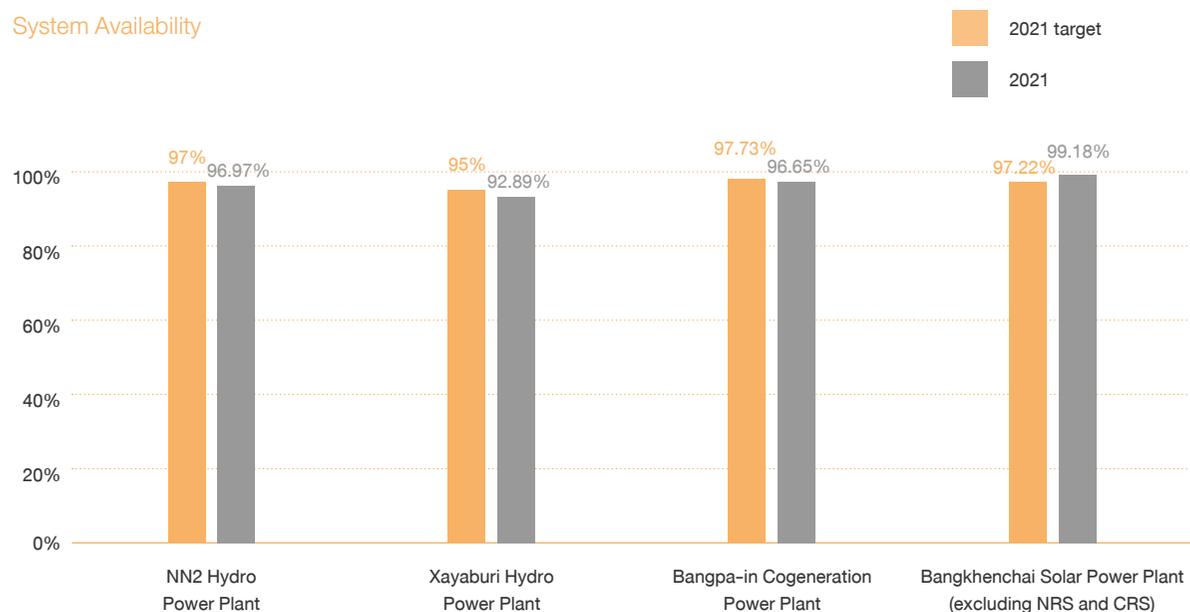
96.4%



ISO 9001:2015

standard has been introduced

System Availability



Unplanned Downtime

NN2 Hydro Power Plant

6 incident

Xayaburi Hydro Power Plant

1 incident

Bangpa-in Cogeneration Power

1 incident

Bangkhenchai Solar Power Plant (excluding NRS and CRS)

0 incident

Revenue Loss from Unplanned Downtime

NN2 Hydro Power Plant

15.97 THB million

Xayaburi Hydro Power Plant

28.54 THB million

Bangpa-in Cogeneration Power

9.97 THB million

THB million

Bangkhenchai Solar Power Plant (excluding NRS and CRS)

0 THB million

THB million

Crisis Management

To ensure smooth operations as well as the reliability and availability of the power production and distribution systems, CKPower has announced a business continuity management policy for the Company and its subsidiaries as well as issued emergency manuals and conducts emergency drills every year to prepare against unforeseen incidents, such as fires and floods. CKPower also analyzes and assesses risks from climate change on a year basis as it can have direct impact on the Company's operations, and once the climate change risks have been identified, mitigation plans are formulated in response to such risks. In addition, CKPower renovates its power plants to improve resistance to extreme heat / cold and flood-proof the utility systems, with a team of engineers and experts proactively monitoring safety through installed sensors and real-time monitoring systems.

2021 HIGHLIGHTS

Efficiency Enhancement and Loss Prevention in Production

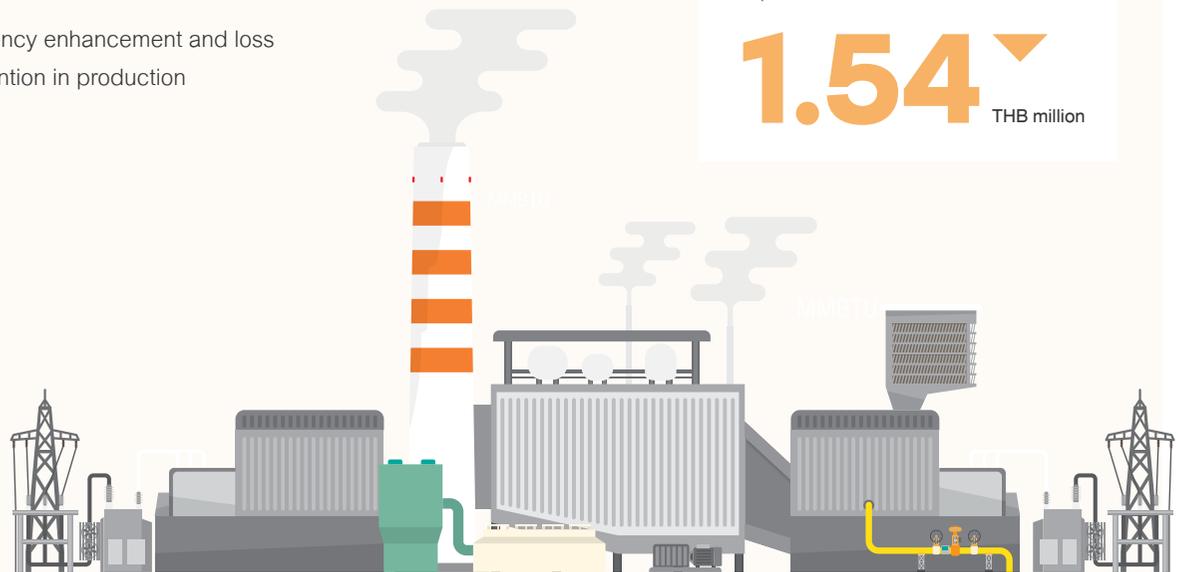
In 2021, CKPower implemented initiatives to enhance efficiency and prevent losses in production in accordance with the issue of climate change, encompassing machinery efficiency enhancement, energy consumption reduction, and loss reduction through blowdown water reutilization, all of which decreased expenses by over THB 6 million for the Company.

Adjustment and Control of the Chloride Range in the Cooling Water

Efficiency enhancement and loss prevention in production

Expenses reduced

1.54 THB million



Lower Gas Pressure Better Heat Rate Project

Inspection, analysis, and optimization of the flow pressure inside each part of the pipe system in the production process to reduce electricity use

Expenses reduced ▼
0.97 THB million

Air Dryer Deactivation Project

Setting adjustment and deactivation of an air dryer in BIC2 to reduce electricity use

Expenses reduced ▼
5 thousand baht

Cooling Fan Deactivation Project During 00:00-06:00 A.M

Efficiency enhancement to reduce energy consumption

Expenses reduced ▼
0.40 THB million

Cooling Tower Optimization Project

Optimizing equipment settings inside the power plant to improve efficiency and reduce the energy consumption rate for the equipment within the cooling system

Expenses reduced ▼
0.20 THB million

Steam Turbine Load Adjustment Project

Efficiency enhancement to reduce steam loss and divert steam towards power production

Expenses reduced ▼
4.96 THB million



CUSTOMER RELATIONS MANAGEMENT



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

CKPower strives to meet the expectations of its customers, who are key stakeholders in the supply chain. To this end, it has been working actively towards its goals of achieving efficient power production and distribution and maximizing stability in order to satisfy the power demand of the customers in Thailand and Lao PDR. It is a challenge for CKPower to adapt to new changes to accommodate its expansion towards clean electricity businesses in pursuit of the net-zero goal in order to foster confidence among customers, meet their expectations, and achieve maximum satisfaction while also supporting the sustainable growth of the Company.

STRATEGIES FOR SUCCESS

To accomplish the objectives of customer relations management, CKPower consistently seeks to enhance customer satisfaction through management consistent with accepted standards as well as by strictly honoring the terms of power purchase agreements and operating its power plants with maximum efficiency so as to be able to distribute electricity as required by such agreements.

Achieving Customer Satisfaction

CKPower operates electricity generators in compliance with the strict standard of the Electricity Generating Authority of Thailand (EGAT) to ensure stable electricity delivery to customers, thus fostering their confidence in the stability of its electricity delivery system. In 2021, electricity generator test runs conducted in three power plants revealed that CKPower's electricity generators operated with maximum efficiency in accordance with the standard. CKPower also manages its Power Purchase Agreements and has put in place electricity delivery monitoring guidelines for three levels of personnel as follows:



MANAGEMENT

Review policies, formulate plans, assign responsible persons, and establish management guidelines for the monitoring of stable electricity delivery.

SUPERVISOR

Review performance to ensure consistency with agreement terms, such as peak power volumes at each period, as well as plan system tests, control electricity quality, electricity distribution, and preparedness of electricity delivery to satisfy agreement terms.

OPERATIONS

Inspect machinery operation and power outputs. The staffing has been arranged to allow 24-hr. operations.

Complaint Handling and Customer Satisfaction

CKPower has put in place channels for communication, complaints, and mutual conflict resolution as well as customer satisfaction surveys, including 24 hr. direct line to the control rooms, Line Group on Line application, and e-mail to customer relations officers, so as to consistently improve its operations. The complaints received through these channels are cascaded to relevant units so that they can be remedied appropriately and prudently.

Complaint Channels



24 hr. direct line



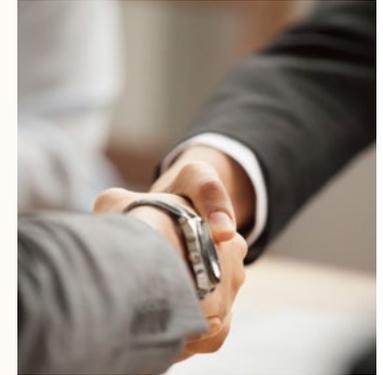
Line application



e-mail to customer relations officers

Customer Relations Management

CKPower formulates annual plans for customer relations management to continuously build confidence and relations with customers. Examples of customer relations activities include friendly golf matches for executives and electricity users and friendly bowling matches for operations-level employees. In 2021, due to COVID-19, CKPower carried out customer relations activities in line with new normal practices to meet customer needs and demand, further complete its services, and contribute to the sustainability of society in collaboration with its customers.



TARGETS AND PERFORMANCE INDICATORS



Maintain the performance and efficiency of the electricity generation system to foster confidence among customers in CKPower's operations.



Be able to deliver electricity to customers in accordance with the terms of Power Purchase Agreements



85%
customer satisfaction towards CKPower's operations



0
Zero customer complaints

IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION

CKPower has provided complaint channels for customers and external parties through which customers can report issues resulting from CKPower's operations or related to its employees. In addition, CKPower conducts interviews to obtain insights into customers' problems and needs so as to be able to address them more suitably and promptly. In 2021, there was no customer complaint.

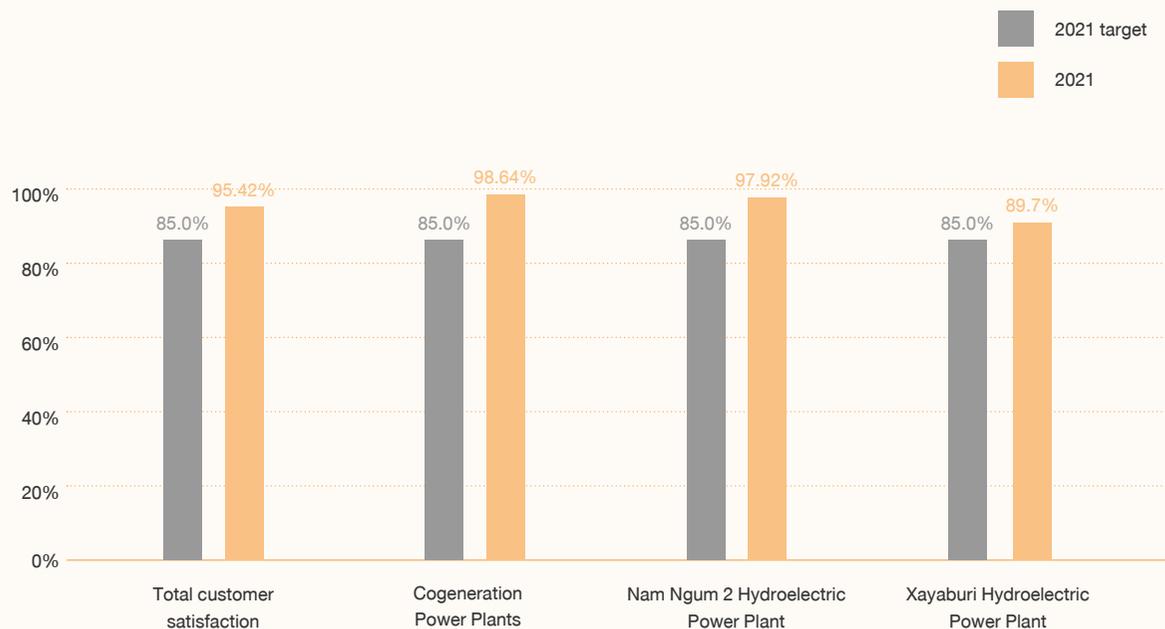


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In 2021, there was no customer complaint

While COVID-19 made it impossible to carry out customer relations activities as usual, CKPower continued to foster relations with its customers using a new-normal approach by conducting satisfaction surveys through e-mail and phone. The survey results were then evaluated and analyzed to develop and improve CKPower's services to meet the expectations of its stakeholders more efficiently.

Results of Customer Satisfaction Surveys



Remark: Data collection for XPCL began in 2021.



SECTION

3

SOCIAL

HUMAN RIGHTS

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

Human rights are an issue of concern across the globe, and many countries have introduced trade instruments to prevent or minimize violations of human rights in the supply chain of private businesses. Recognizing that every individual is entitled to human rights, CKPower operates its business with respect for human rights across the value chain and strives to prevent violations against the rights of its stakeholders and any relevant vulnerable parties, which in turn serves to reduce reputational risks and potential impact on the financial standing of the Company as well as helps to elevate the Thailand's human rights practices to internationally accepted standards.

STRATEGIES FOR SUCCESS

Human Rights Policy and Human Rights Due Diligence

CKPower has established a human rights policy to declare its intent to uphold human rights in its business operations in accordance with the United Nations Framework and Guiding Principles on

| UNGP | UDHP | ILO | HRDD | HRRRA |
|---------------------------|---|--------------------------------------|----------------------------|------------------------------|
| Business and Human Rights | The Universal Declaration of Human Rights | The International Labor Organization | Human Rights Due Diligence | Human Rights Risk Assessment |

More information on Human Rights Policy can be found here [OR CLICK HERE](#)



across the value chain, encompassing CKPower and its subsidiaries, suppliers, related businesses (such as joint ventures), rights holders, and vulnerable groups.

CKPower has provided dedicated communication and complaint channels for human rights violations or impact against rights holders and vulnerable groups as well as put in place suitable and fair measures for mitigation, rectification, and remediation.



Human Rights Due Diligence



TARGETS AND PERFORMANCE INDICATORS

2021

100%



of CKPower's businesses underwent human rights due diligence and established measures for mitigation, rectification, and remediation.



No human rights violation across the value chain

2022-2024 (LONG-TERM THREE-YEAR TARGETS)



Continuous absence of human rights violation across the value chain



Annual review of relevant human right risk issues across the value chain



Human rights risk assessment

every **3** years

IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION

Elevating human rights practices in business operations

In 2021, CKPower raised human rights awareness through training on respect for human rights for relevant executives and employees. In addition, a Human Rights Risk Assessment (HRRA) was conducted for rights holders and vulnerable groups across the value chain in almost 100% of the businesses of CKPower and its subsidiaries under the Human Rights Due Diligence process carried out by a third party.

CKPower also planned to conduct human rights assessment every three years and reviewed relevant human rights risk issues across the value chain annually so as to ensure the effectiveness and currency of its plans and measures for mitigation, rectification, and remediation

Promotion of Human Rights Practices among Suppliers

CKPower has incorporated human rights issues into its Supplier Code of Conduct and communicated to its suppliers human rights practices for conducting business with CKPower. In addition, the Company has planned to review human rights risk issues relevant to suppliers' business operations annually through yearly performance evaluation to ensure that human rights are respected in their business operations.

Responding to Human Rights Complaints

CKPower has put in place communication and complaint channels dedicated for human rights issues as well as other channels, such as the whistleblower on its website. It has also prescribed mitigation, rectification, and remediation for those impacted by human rights violations resulting from its business operations, the investigation committee responsible for establishing rectification and remedial action for the affected party in relation to the overall damage, reporting to the Managing Director or the Board of Director for acknowledgment, and submitting the outcome of the remedial action review to the Internal Audit Division to be communicated to the complainant or the affected party.

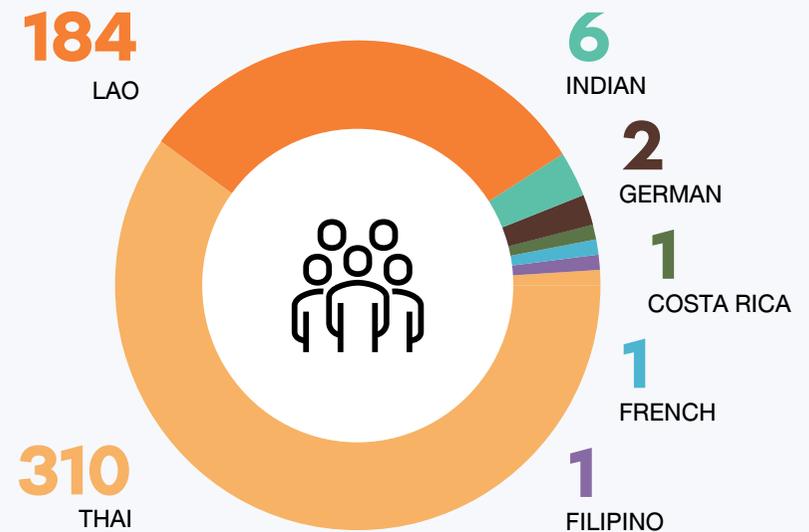
In 2021, CKPower received no complaint or report on human rights issues against the Company, its subsidiaries, suppliers, and related businesses, and as such did not carry out any remedial action.

Channels for Human Rights Complaints

- 01**  **A sealed letter addressed to:**
CK Power Public Company Limited
No. 587 Viriyathavorn Building, 19th Floor,
Sutthisan Winitchai Road, Ratchadaphisek Sub-district,
Din Daeng District, Bangkok 10400
- 02**  **E-mail**
- Compliance@ckpower.co.th
- Directors@ckpower.co.th
- Ir@ckpower.co.th
- 03**  **Website**
Whistleblower channel on
www.ckpower.co.th

2021 HIGHLIGHTS

International Workforce and Nationality Diversity



CKPower prioritizes strict compliance to human rights practices, respects the rights of all stakeholder groups equitably on the basis of mutual respect without discrimination, and embrace diversity in relation to race, national origin, religion, gender, color, language, ethnicity, socioeconomic status, or any other factors among all stakeholders in every locality it operates in. In 2021, CKPower's workforce consisted of employees of seven nationalities, namely Thai, Lao, Indian, German, Costa Rican, French, and Filipino, and of various religious beliefs, including Buddhism, Christianity, Hinduism, and Islam.

TRAINING ON HUMAN RIGHTS PRINCIPLES AND TOOLS FOR HUMAN RIGHTS DUE DILIGENCE

CKPower raised human rights awareness through a training program entitled Human Rights Principles and Tools for Human Rights Due Diligence for relevant executives and employees to foster an understanding of the connection between business operations and respects for human rights and the Company's business guidelines for preventing human rights violations against all stakeholders across its value chain. The pilot training program in 2021 was attended by 44 participants, or 8.7% of all relevant personnel, amounting to a total of 242 training hours. CKPower has plans to expand the training to employees at all levels across the organization in 2022.



The pilot training program in 2021 was attended by **44** participants

8.7%
of all relevant personnel

amounting to a total of **242** training hours

EMPLOYEE INTERVIEWS

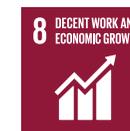
Giving opportunities and creating jobs for communities surrounding 2 Nam Ngum 2 Hydroelectric Power Plant



MR. AUDONE SISUK
Technician - Facility Management,
Nam Ngum 2 Hydroelectric Power Plant

"I would like to thank CKPower for giving me an opportunity to work at Nam Ngum 2 Hydroelectric Power Plant. During my time here, I have learned so many skills, such as construction and welding, and received all the benefits on equal par with Thai employees, enabling me to earn a stable income to support my family."

HUMAN CAPITAL MANAGEMENT



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

Employees are vital resources in taking a business to its targets and to sustainability. As employees who are both ethical and competent are crucial factors that drive a business towards its set goals efficiently under the current complex and ever-shifting circumstances, a company without an effective human resources management plans runs the risk of impairing its business opportunities and competitiveness. As such, CKPower has continuously placed great emphasis on human capital management and development through various development programs as well as created internal and external training programs suitable for employees at all levels.

Value is also placed on the wellbeing of its employees as their satisfaction and engagement are not only significantly reflected in their efficiency but can also reduce recruitment expenses and enable CKPower to plan employee development efficiently and continuously. Throughout 2021, CKPower continued to take care of its employees through career advancement opportunities, succession plans, employee welfare, and various programs that enhanced employee satisfaction.

STRATEGIES FOR SUCCESS

CKPower has established and implemented a human capital management policy to maximize the operational efficiency of its employees. The policy requires each unit to set targets and develop competencies through performance assessment of its executives and employees against the key performance indicators (KPIs) as well as conduct needs analysis in relation to individuals development plans, which are formulated in consideration to essential skillsets, knowledge, and competencies. CKPower encourages personnel development through projects and training programs with clearly defined and assessable objectives and benefits for employees and the Company.

The human capital management policy also prescribes employee care and regular performance assessment, the outcome from which is used to inform career advancement and succession planning as well as the formulation of competency development plans and the determination of suitable remuneration. CKPower also conducts employee satisfaction surveys and utilizes the survey results to improve the management system to maximize efficiency, meet the needs of the employees, and further develop projects that enhance employee care.



More information on Personnel Management Policy can be found here [OR CLICK HERE](#)



More information on Human Capital Management can be found here [OR CLICK HERE](#)



More information on Human Resource Performance can be found here [OR CLICK HERE](#)

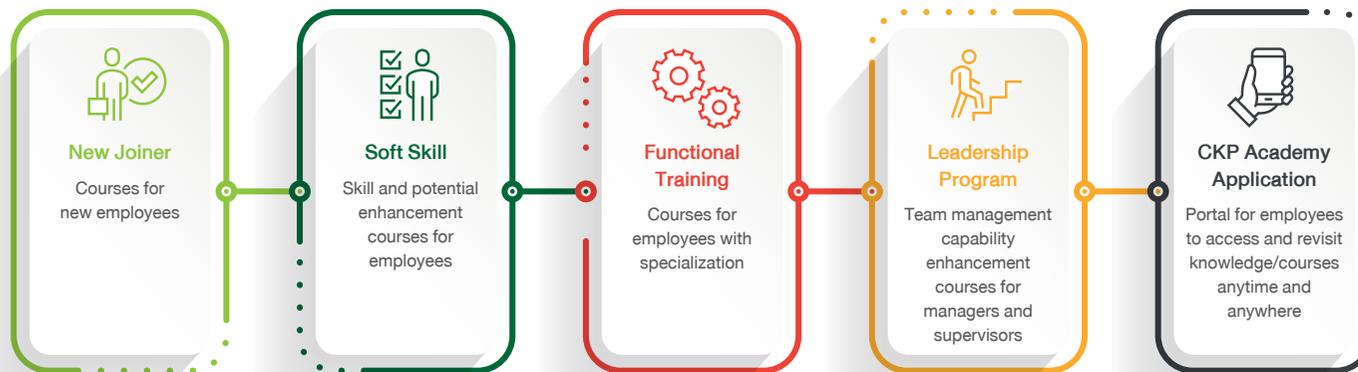
PERSONNEL DEVELOPMENT PLAN

CKPower has prescribed and planned personnel development across the organization based on competency gaps in conjunction with its policies and trends in business expansion. The personnel training plan for employees at each level is reviewed annually. Each employee has their own individual development plan formulated in accordance with their required competencies, which consist of position-related and leadership competencies and vary according to the nature of responsibilities. CKPower has also established training roadmaps

and training plans for employees at all levels, focusing on promoting advancement and developing competency through operational skill and knowleanenrichment through domestic and international courses so as to equip employees with necessary skills for operations, give them opportunities for career advancement, and enable them to pass on their knowledge and experience to operations-level employees. To ensure suitability for employee groups and positions, courses are divided into categories as follows:

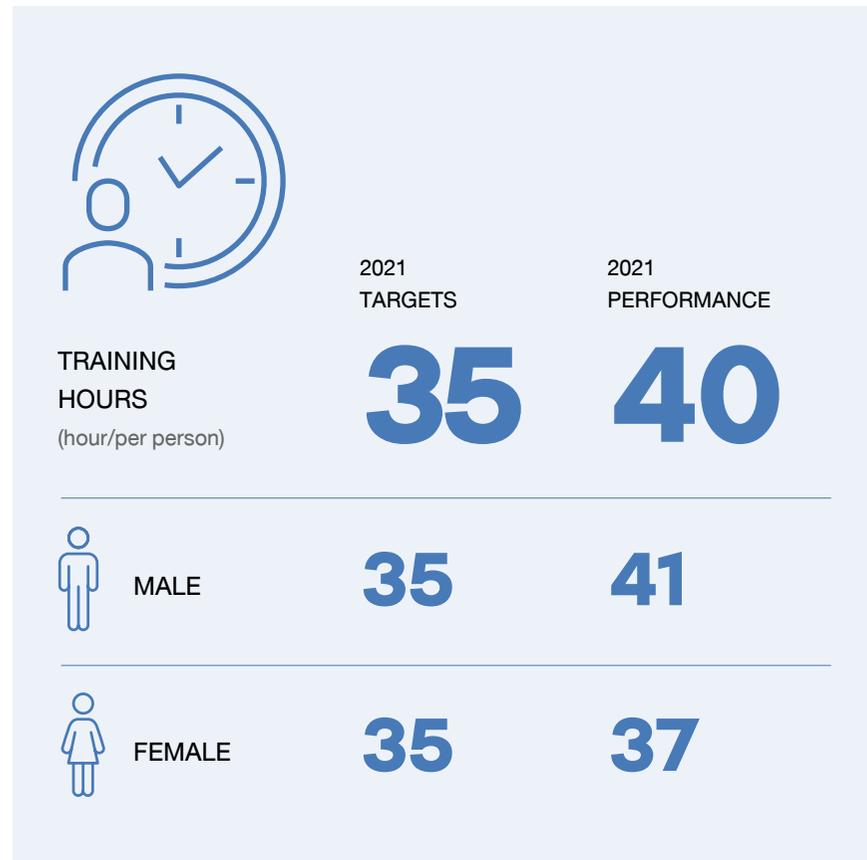


CKPower has also put in place a process for monitoring the knowledge development of the employees who have attended training and seminars to measure their operational efficiency. Employees who have taken part in an external training program are required to summarize the training, so that the knowledge gained can be used to improve operations, with the supervisor tasked with monitoring post-training performance. Such employees are also responsible for sharing the knowledge gained and uploading documents from the training onto the shared drive of their line of work.



TARGETS AND PERFORMANCE INDICATORS

In 2021, CKPower prescribed and monitored performance related to potential development and employee care in order to improve measures that would lead to greater efficiency in developing and taking care of employees as follows.



IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION

Key Personnel Development and Employee Care Initiatives

Throughout 2021, CKPower carried out various initiatives to develop and take care of its employees across various dimensions. The outcomes of such projects, whether obtained through quantitative data collection and participant interviews, would be used to improve future projects. Key projects of 2021 are Healthy BMI, YourNextU, and Train the Trainer.

TRAIN THE TRAINER PROGRAM

Recognizing the importance of enhancing communication and presentation skills for greater efficiency and conciseness, CKPower organized the Story telling and Presentation as Pro for Engineer Young Generation Courses to develop presentation skills, enable the participants to present technical data in an engaging, accessible manner, and provide language tips that make it easier for listeners to understand and make the transfer of insights to employees in other units more effective. Workshops were also held to enable the participants to apply the skills to work in real life.

Healthy BMI Program

Obesity is the cause of many diseases, such as diabetes, high blood pressure, and heart diseases, which can be harmful to employees. CKPower thus organized the Healthy BMI Program to promote correct exercise and diet as part of its employee care. Following the implementation of this program in 2021, it was found that the employees who had participated in the program demonstrated greater efficiency and a lower level of stress than those who had not. In addition to a 98.75% increase in employee satisfaction among the participants, their number of sick days dwindled while the resignation rate reduced from 4.5% in 2020 to 3% in 2021.

EMPLOYEE INTERVIEW



**MS. THANYASIRI
PHETPHICHAJ**

Senior supervisor -SSC Admin,
Bangpa-in Cogeneration Power Plant

“When I exercise regularly, I feel more energetic and less listless.”
As a result of this finding, CKPower is considering turning the Health BMI Program into a long-term project at the Company.



98.75%

increase in employee satisfaction
among the participants



their number of sick days dwindled
while the resignation rate reduced from

4.5% → **3%**



YourNextU Development Program

Under competency development requirements, CKPower engaged the Southeast Asia Center (SEAC) to organize a leadership and communication course for executives to enhance 21st century leadership and communication skills and accommodate the new normal brought on by the COVID-19 pandemic. The key topics covered in this program encompassed emotional intelligence for leaders, storytelling, and proposal writing. The course included both instructions and opinion exchanges and conducted via a virtual system. The goal set by CKPower was to enable the attendees to apply the knowledge gained to their work and disseminate it to their co-workers. A survey following the competency development program revealed that teams with a member who had attended the program showed greater operational efficiency than teams without and demonstrated an outward mindset, which involves being open and attuned to the ideas and needs of others. In addition, they worked more collaboratively to achieve the goals and results intended, which helped them to work more systematically. They also were more willing to propose and develop new ideas, which fostered a collaborative spirit and enhanced operational efficiency.



EMPLOYEE INTERVIEW



MR. KRITANAN KWANDHAM

Sr. Manager - Insurance and Safety

“I already had ideas and work plans, but they were all over the place. YourNextU Program has refreshed my perspective, enabled me to structure my ideas, and enhanced by capabilities to expand on my existing knowledge by myself, put it into practice, and share it with junior members in my team.”



CKP ACADEMY APPLICATION

To deliver online learning to employees, CKPower has developed CKP Application as a source of knowledge where users can develop a new mindset and learn about new trends. The application includes the following functionalities:



Training Catalog

An archive of soft skill courses and programs that employees can revisit any time after completion, including core programs, courses of CKPower's core values for new employees in an e-learning format, e-learning Kaizen, which features engaging storytelling and presentation techniques, and knowledge sharing from all units that offer training programs.



E-learning

An orientation on Kaizen principles or the corporate culture for new employees.



Food For Thought

A source of news, new trends, and easy-to-understand work techniques, updated on a weekly basis.



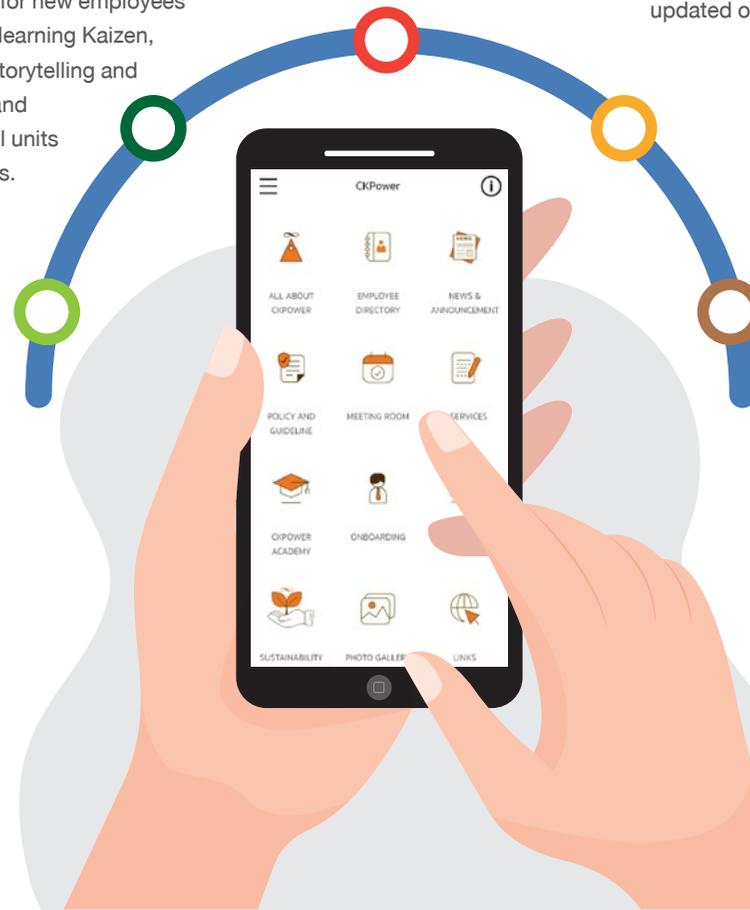
Training Roadmap

A roadmap of training that shows a clear development path for each position.



Internship Program

A knowledge archive for student interns at CKPower, where they can learn about engineering and gain hands-on experience through actual practice in preparation for work in the future as well as have work ethics and social responsibility instilled in them.



OCCUPATIONAL HEALTH AND SAFETY

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

CKPower recognizes the significance of occupational health and safety, which is a critical concern in business operations. Suitable and effective safety management can not only directly reduce impacts on the health and way of life of the operators and their families but also minimize impacts on business operations, such as production disruptions, which can in turn affect other stakeholders across the value chain. Thus, CKPower is committed to ensuring the occupational health and safety of all employees and stakeholders working with the Company and its subsidiaries, from contractors, suppliers, customers, all the way to communities. The Company also strives to foster a strong and sustainable safety culture in order to advance itself towards the goal of becoming an “accident- and injury-free organization.”

In addition, with regard to the COVID-19 pandemic, which had substantial impact on the Company earlier, CKPower has been monitoring the situation closely and made adjustments so that it can continue its operations while ensuring the safety of all stakeholders.

STRATEGIES FOR SUCCESS

CKPower has established an occupational health and safety policy to serve as guidance for safe operations for employees and contractors. The scope of the guidelines under the occupational health and safety policy encompasses CKPower and its subsidiaries.

Code of Business Conduct with Regard to Occupational Health, Safety, and Environment



More information on Occupational Health and Safety Policy can be found here [OR CLICK HERE](#)



More information on Occupational Health and Safety Performance can be found here [OR CLICK HERE](#)



In addition, the Company has assigned the safety unit of each site to set quantitative goals for occupational safety and environment development, which in turn dictate relevant measures that contribute to the achievement of such goals, such as obtaining certification for employee wellbeing and safety standards, conducting assessments of risks related to wellbeing and occupational safety in workplace during operations for employees and contractors, and keeping workplace safety-related records. At present, CKPower has designated workplace safety officers to monitor, audit, and improve workplace environment and safety and ensure compliance with the

ISO 45001:2018

occupational health and
safety management system standard

Simultaneously, CKPower and its subsidiaries seek to foster awareness of the corporate safety culture among internal and external stakeholders across all activities of its employees, contractors, and key suppliers through activities, projects, and training programs in order to achieve the goal of becoming an “accident- and injury-free organization.” CKPower has prescribed measures requiring new employees to undergo health examination before commencing work and offers annual health checkups for its employees to ensure that they are healthy and ready to perform their duties with efficiency. Occupational safety and health training programs are also organized for contractors.

TARGETS AND PERFORMANCE INDICATORS

Fostering a Safety Culture

In 2021, CKPower initiated safety culture fostering activities under the WE CARE Project in order to cultivate values and awareness of corporate safety, which impact the determination to advance health and safety management policies to produce tangible results. Under this project, employees across the organization were encouraged to communicate and pass on a positive safety culture on the basis of mutual understanding and trust, which in turn promoted employees' involvement in offering advice, looking out for the safety of their co-workers, and following safety guidelines. The WE CARE Project also encouraged employees to communicate with each other through WE CARE Conversation Form and provides training so that they can correctly use the form, which can also be used to offer advice, comments, and share information related to safety to co-workers from January 2022 onwards.



IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION

In 2021, CKPower organized 119 training sessions on occupational health and safety, attended by 1,500 employees and contractors in total, consisting of 500 employees, or 33% of the participants, and 1,000 contractors, or 67% of the participants.

119

training sessions

on occupational health
and safety



1,000

contractors



500

employees

Targets and Performance Indicators

2021 TARGETS

- 0 Employee fatalities
- 0 Supplier fatalities
- Loss Time Injury Frequency Rate (LTIFR)
 - 0 Case/1,000,000 hours worked (Employees)
 - 0 Case/1,000,000 hours worked (Contractors)
 - 0 Recorded workplace accidents involving employees and contractors (number of incidents)

PERFORMANCE

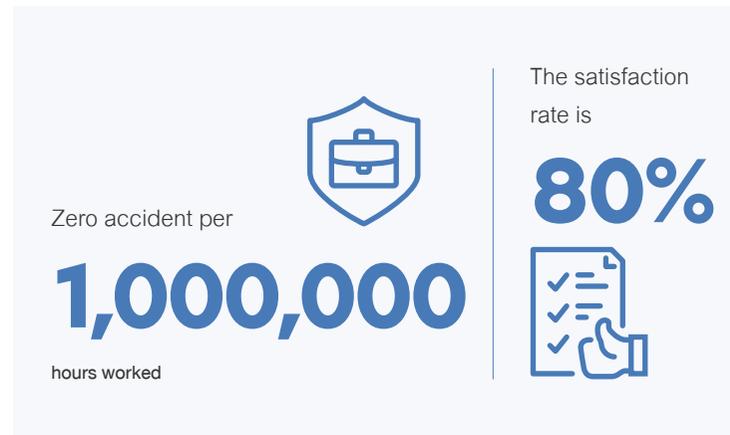
- 0 Employee fatalities
- 0 Supplier fatalities
- Loss Time Injury Frequency Rate (LTIFR)
 - 0 Case/1,000,000 hours worked (Employees)
 - 0 Case/1,000,000 hours worked (Contractors)
 - 0 Recorded workplace accidents involving employees and contractors (number of incidents)

2021 HIGHLIGHTS

Safety Day

The Safety Day Program raises awareness of workplace safety among employees, fosters a corporate safety culture, and prompts employees to recognize the significance of safe performance of duties under the WE CARE safety culture, which has enabled CKPower to achieve zero accident per 1,000,000 hours worked.

As part of the program, CKPower has also held a safety motto and song contest and conducted an opinion survey on Safety Day. The satisfaction rate is 80%, indicating that the employees are aware of the importance of operational safety.



MR. PHATSONE SENGNAVONG
Manager - Operation,
Xayaburi Hydroelectric
Power Plant

As a participant in this program, Phatsone Sengnavong reported higher cautiousness among his co-workers when performing lockout-tagout, saying, "I feel that many of my co-workers pay more attention to workplace safety, especially within my area of responsibility, which is machinery operation. We have improved the details of the lockout-tagout procedure to enhance safety and provide further assurance that prior to an operation, a machine or a system in need of maintenance has been cut off from a power source and that the operation can be carried out safely."

Safety Toolbox Meeting

Safety Toolbox Meetings are held on a monthly basis to enhance knowledge of safe work practices, risks associated with each procedure in the power plants, as well as dangers that can lead to incidents, accidents, work-related illnesses, and seasonal illnesses, along with appropriate prevention. Participants can exchange opinions and hold discussions to formulate best safety practices. They are also to complete questionnaires on what they have learned during the Safety Toolbox Meeting of that month, such as knowledge about working at heights and safety-related laws, and apply them to their work.



MR. SAYAN ONPHOTH
Supervisor - Safety,
Xayaburi Hydroelectric Power Plant

As a participant in the project, Sayan Onphoth said, "The monthly Safety Toolbox Meeting educates employees about safer work practices and equips my fellow employees and new hires with knowledge of how to performance their duties more safely."



Safety Helmet Campaign

CKPower is aware of the importance of safe commutes and, as some employees commute by motorcycle, recognizes that helmets can significantly reduce the severity of injuries or losses in the event of an accident. A survey on motorcycle helmet use among employees and contractors revealed that 34.80% of the personnel did not wear a helmet while riding a motorcycle. The Occupational Safety, Health, and Environment Committee, thus, launched the Safety Helmet Campaign to develop safe behaviors among motorcyclists and minimize the severity of road accidents. As part of the campaign, training sessions were held to build road safety awareness and warning signs were made. After four months of implementation, the campaign successfully accomplished its goal, with 100% of CKPower's employees and contractors wearing a helmet when riding a motorcycle.

Project Performance



100% of CKPower's employees and contractors wearing a helmet when riding a motorcycle



MR. THEERAPONG PERMSAMAK

Regular contractor at
Bangpa-in Cogeneration Power Plant

"The Motorcycle Helmet Campaign, which was initiated by the Occupational Safety, Health, and Environment Committee, is an excellent project that promotes safety and motorcycle helmet use, which can prevent road accidents for the motorcyclists themselves and the general public. The committee has been promoting the campaign, which keeps my fellow employees conscious about safety. I would like for this campaign to continue and to be further publicized so that everyone knows about it.

SOCIAL AND COMMUNITY CARE



STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

Communities and society are key stakeholders that CKPower prioritizes and strives to foster positive relations and co-create value with as it believes that sustainable business practices must entail the participation of communities and society, especially those surrounding CKPower's power plants, in order to build confidence and trust among them.

In addition, projects/activities for society and communities also indirectly raise brand awareness for CKPower and its subsidiaries among the general public, add significant business value, as well as foster employee engagement.



More information on Community Development and Participation Policy can be found here [OR CLICK HERE](#)



More information on Social and Environmental Guidelines can be found here [OR CLICK HERE](#)

STRATEGIES FOR SUCCESS

CKPower has put in place a community engagement and development policy as well as social and environmental guidelines to serve as guidance for its business operations alongside social and community engagement. The Sustainability Working Group is responsible for implementing the policy and guidelines to produce concrete results, continuously monitoring the implementation, and tracking the progress of social management in an appropriate, transparent, and efficient manner, as well as reporting the performance on a quarterly basis for continuous improvement and sustainable co-existence with communities.

For community engagement, CKPower seeks to leverage its capabilities to support and promote exchange of knowledge and experience between the Company, employees, and communities as well as create value to enhance the quality of life in communities within an operational framework that covers the five following aspects:



To create value and enhance the quality of life in communities in accordance with their way of life and needs, CKPower has fostered collaboration between communities and employees right from the beginning by surveying the sites as well as their opinions, concerns, and needs and identifying issues that impact them before initiating each project / activity, so that it can truly meet their needs and expectations. The projects are monitored continuously and jointly improved upon by CKPower, employees, communities, and society.

IMPLEMENTATION, MONITORING AND EVALUATION

PERFORMANCE AND VALUE CREATION

In working with communities and society, CKPower strives to leverage its capabilities in accordance with their needs to “collaboratively generate ideas, take action, and advance development for better quality of life in communities and society,” with employees serving as a vital force that drives collaboration and elevates the quality of life for local people in communities throughout the process, from understanding community needs to implementing the projects/activities and monitoring outcomes in 2021.

TARGETS AND PERFORMANCE INDICATORS



No Complaints from communities surrounding power plants

The satisfaction survey in communities rate



Social Contribution Activities

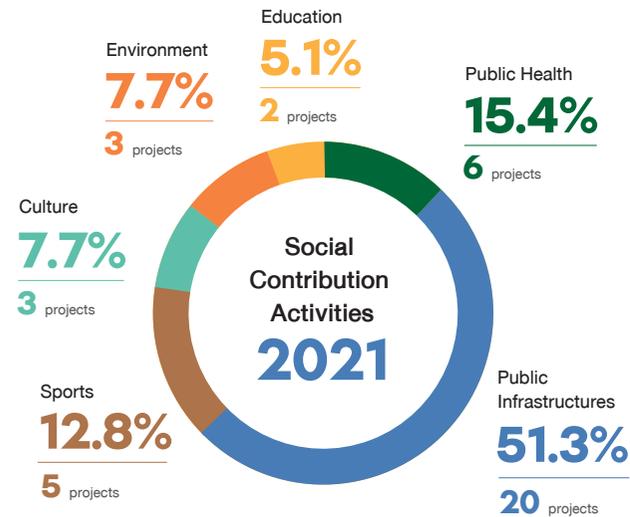
CKPower carried out a total of

39 social contribution activities/projects

worth in total

15 THB million

as detailed below.



Number of hours of volunteer work (hours)

257

2021 Community Satisfaction Survey

CKPower conducted a satisfaction survey in communities around its power plants towards their operations and the social contribution projects/activities in 2021. The satisfaction rate was 80%, which met the 8% target of the Company. There were also no complaints from communities and society.



No complaints from communities and society

80%

2021 HIGHLIGHTS

COVID-19 Relief Activities

CKPower collaborated with government agencies to provide relief to the general public through a series of activities. These included a donation of money to hospitals and the Ministry of Public Health, a contribution of treatment equipment for COVID-19 patients and meal boxes for healthcare professionals, as well as a donation of alcohol gel and face masks to communities surrounding its power plants in Thailand and Lao PDR.



Occupational Health and Safety Activities

CKPower's employees and local residents of Ban Nam Pad Community worked together to repair the road surface of a bridge spanning the Nam Pad River, which facilitated commutes for local people and contributed to a more pleasant environment around CKPower's power plant as well as better air quality thanks to reduced dust. The activity also served to strengthen the relations between CKPower's employees and local residents and reduce road hazards. In 2021, no road accidents were reported in Ban Nam Pad Community.



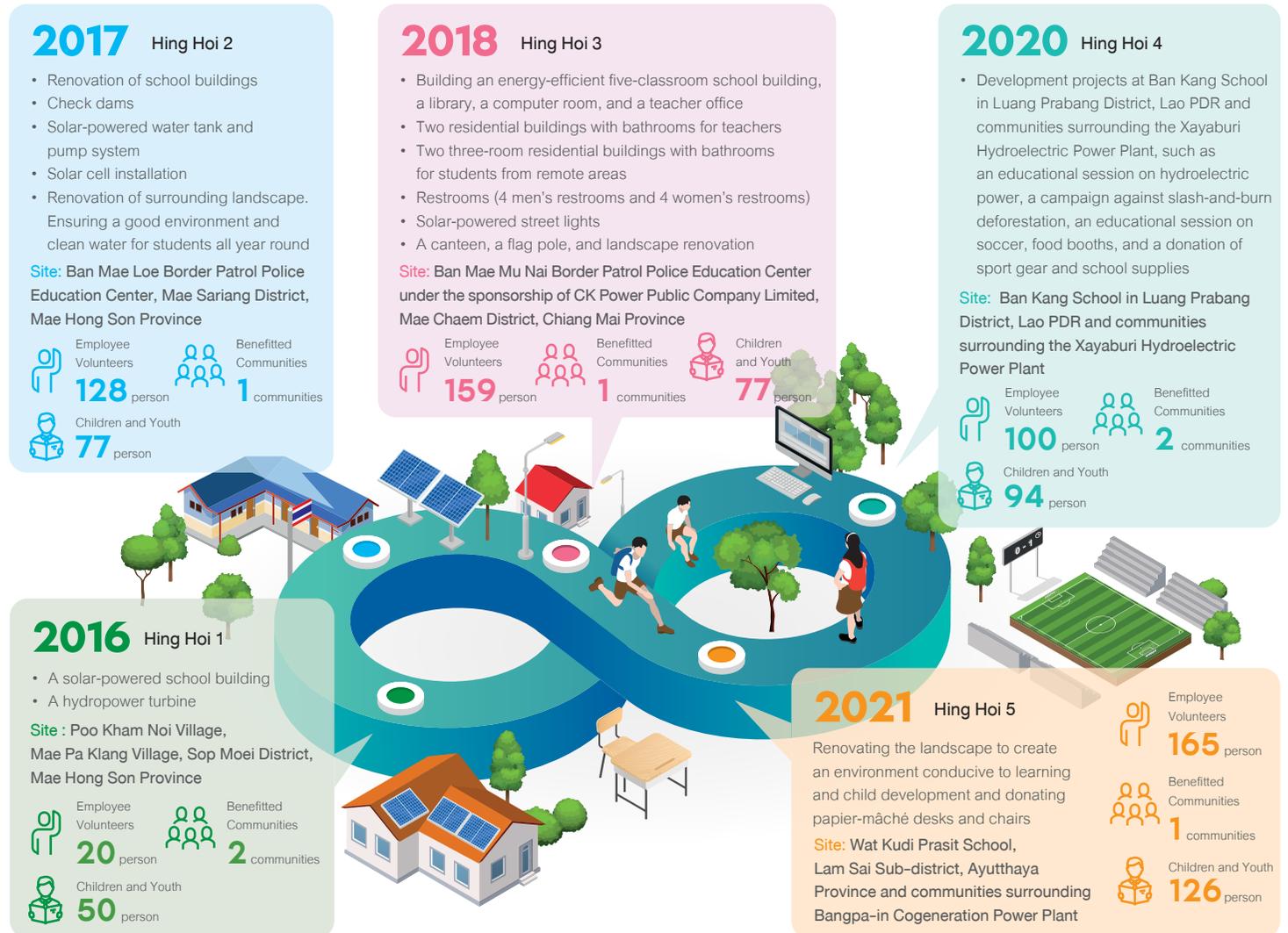
Social Contribution activities around power plant in the Lao PDR.

The company sent water trucks along with volunteers to the affected communities, located around 45 kilometers to the west of the Xayaburi Hydroelectric Power Plant in the Lao PDR, to clean the streets and surrounding areas as well as to deliver necessities, which were received by representatives of the administrative office of Xayaboury Province for distribution to the flood-stricken households.



HING HOI PROJECT

CKPower initiated the Hing Hoi Project in 2015, which began with surveys of the site as well as the opinions, concerns, and needs of the community and eventually grew into a collaboration between the Company and communities. Born out of the vision of the top executives to leverage the knowledge and expertise in electrical engineering of its employees, the project seeks to address the issue of power shortage by promoting the installation of solar power systems and hydro turbines to generate electricity for school buildings and local libraries in communities in the vicinity of CKPower's power plants and remote areas. Through the Hing Hoi Project, CKPower has been able to use its engineering innovation to address the problem of power shortfalls, which not only demonstrates the capabilities of its energy production businesses but also helps cultivate social consciousness and responsibility among its employees.





MR. DECHA CHANTAWEE
Plant Manager at Bangpa-in Cogeneration Power Plant

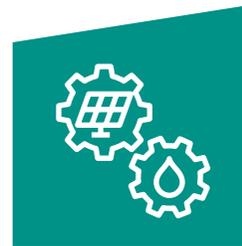
“The Hing Hoi Project Year 5 provided what the school was missing with regard to the environment. What we were most proud of was that our employees participated in this project more and understood the significance of their involvement in developing the communities and society around the power plant.”



MRS. MONTHA RAKTAM
Director of Wat Kudi Prasit School, Ayutthaya

“It is fortunate for the school that CKPower has carried out a CSR activity here. All the parents really appreciate this project not only because of the beautification but also because the improved environment promotes development for the students and stimulates them to learn and exercise, so that they get to develop their brains in every dimension.”

SOCIAL VALUE UNTIL 2021



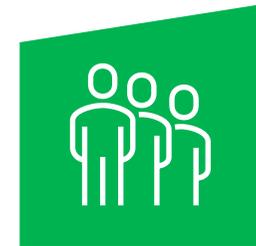
27

Public infrastructures



1,016

given access to necessities to children and youths



572

of employee volunteers



7

communities engagement



1,016

of partnering networks



572

learning centers, giving knowledges about renewable energy



SECTION

4

ENVIRONMENT

ENVIRONMENTAL MANAGEMENT

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

One of the pressing environmental problems Thailand needs to address is the degradation of its natural resources, which results from consumption in the name of development, compromises the country's ability to maintain sustainable production, services, and way of life, as well as threatens biodiversity. In terms of water resources, the risk of water shortages has been growing every year as the existing supply can no longer meet the demand of all sectors. In addition, due to lack of proper management, an increasing number of environmental problems have emerged alongside economic growth, which in turn negatively impact the quality of life and economic growth itself.¹

Therefore, all sectors must actively contribute to the protection of natural resources and the environment. In particular, the power production industry, which drives its business through the consumption of natural resources, must have efficient resource management guidelines and reduce emissions by placing emphasis on eco-friendly management systems, engineering knowledge development, advanced technology utilization, and personnel performance in order to strike a balance between its growth and the sustainable conservation of natural resources and the environment.

¹ The Twelfth National Economic and Social Development Plan (2017 - 2021). Bangkok: Office of the National Economic and Social Development Board (NESDB); Office of the Prime Minister. n.d.

STRATEGIES FOR SUCCESS

CKPower is committed to eco-friendly business practices and resource efficiency maximization. To this end, it has put in place an environmental impact prevention and control system to maintain ecological balance and advance its business alongside the sustainable conservation of natural resources and the environment.

CKPower's Environmental Management Guidelines



01 Focus on investment in clean and renewable energy projects



02 Manage resources to maximize benefits without causing environmental impacts



03 Develop knowledge, innovation, and technology to monitor environmental quality in compliance with legal requirements in pursuit of international standards



04 Co-develop resource management know-how with stakeholders for sustainable development and conservation in communities



More information on Environmental Policy can be found here
[OR CLICK HERE](#)



More information on Social and Environmental Guidelines can be found here
[OR CLICK HERE](#)



More information on Environmental Performance can be found here
[OR CLICK HERE](#)



Water Management

Water is a critical resource for CKPower's business operations as hydroelectric power accounts for over 80% of its power generation. As such, CKPower has established a process for monitoring the water situation in the reservoirs and promoting water conservation in collaboration with communities and agencies of Lao PDR to minimize potential impacts from water shortages and maintain an adequate supply of water for the consumption of all parties from upstream to downstream. In addition, CKPower has developed innovations and initiatives that enhance power production efficiency and reduce loss of water, such as the main inlet valve (MIV) adjustment projects.

In addition, as a massive volume of water is required in the electricity generation of the cogeneration power plants, CKPower places emphasis on water management to maximize efficiency in order to decrease risk of water shortages. At BIC, water consumption in the production system is reduced by creating a closed system to enable water circulation.



Waste Management

Recognizing direct and indirect environmental and social impacts of its waste management, CKPower strives to reduce waste at the source and has thus established refuse and waste management protocols to serve as guidance for the control and management of waste generated in its production or service activities and ensure that each type of waste is managed correctly and appropriately in compliance with relevant regulations. In 2021, CKPower carried out various waste management projects, such as campaigns that promoted the use of tote bags and advocated against the use of plastic bags in convenience stores and of Styrofoam boxes project as well as the PET recycling project.



Emission Control

Over 80% of the power that CKPower produces is generated from different sources of renewable energy, such as hydropower and solar power, which does not involve the burning of fossil fuels or emit air pollutants, while natural gas is used as a fuel at the cogeneration power plants.

CKPower monitors and measures the air quality at its power plants through Continuous Emission Monitor systems (CEMs), which are installed at the ventilation shafts, and show results in real time, as well as consistently monitors and inspects potential impacts on the communities and environment around its plants in accordance with legal requirements and reports the results in according with environmental impact assessment (EIA) standards every year. In 2021, the air quality at the power plants was better and below regulatory requirement across all categories

TARGETS AND PERFORMANCE INDICATORS

- 01**



The quality of the discharged water complies with the standards required by the law.
- 02**



Non-hazardous and hazardous waste complies with the standards required by the law.
- 03**



The air quality at the ventilation shafts complies with the standards required by the law.
- 04**

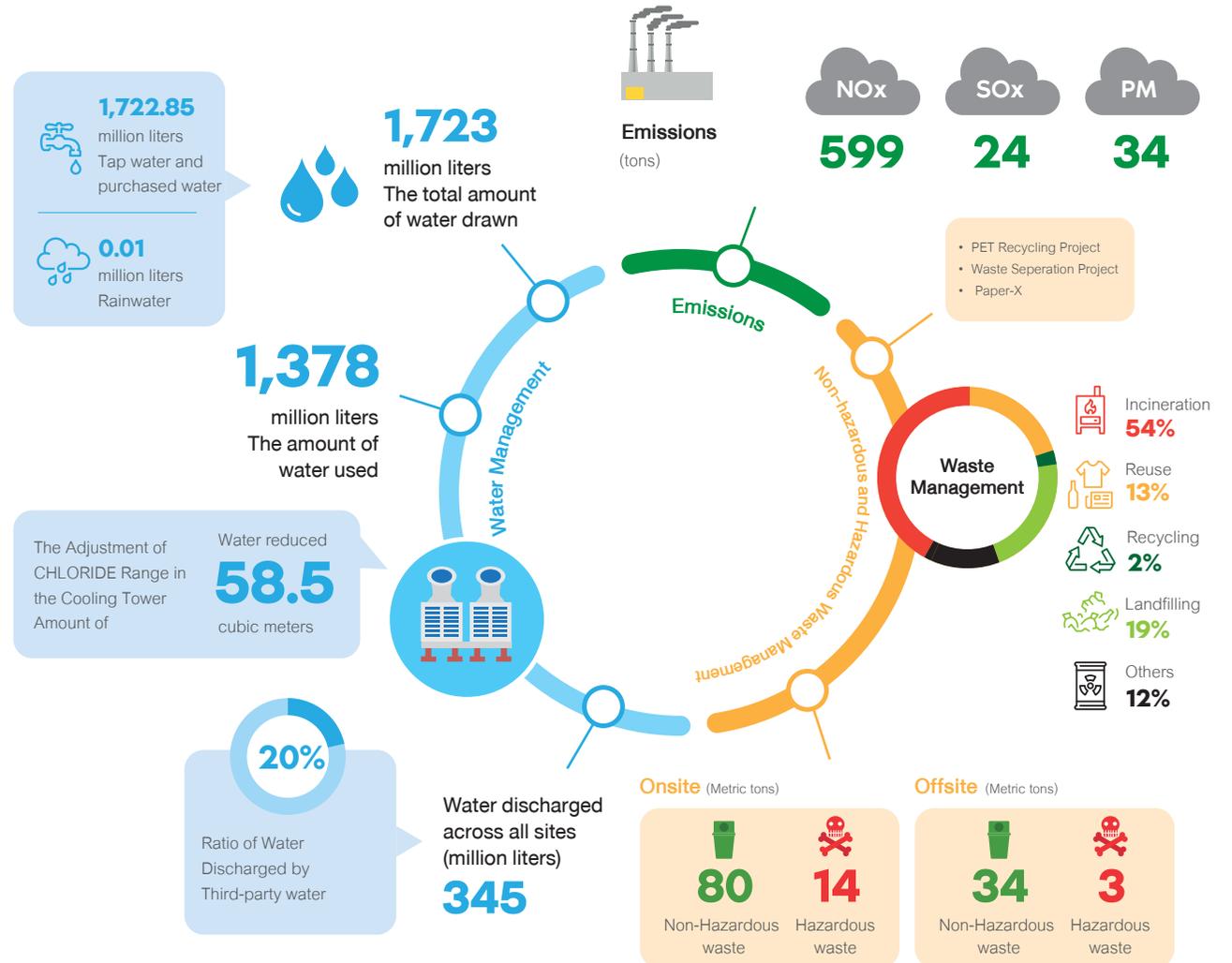


Clean and renewable energy accounts for **95%** Of the total energy consumed in power generation in 2024.

IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION

CKPower strictly complies with environmental policies, laws, and regulations while also advancing technology development and taking care of the quality of life of the residents in communities around its power plants. A summary of its performance is as follows.



2021 HIGHLIGHTS

The Adjustment of Chloride Range in the Cooling Tower

The project increases water efficiency and decreases water loss through effluent reuse. The project reduced the amount of effluent generated by the cooling tower and the water added to the cooling systems by 58,500 cubic meters per year or about 58.5 million liters and saved over THB 1.5 million in costs.



Waste Reduction Program

Recognizing the significance of waste reduction at the source and resource maximization according to the 7R's (Reduce, Reuse, Refill, Return, Repair/Repurpose, Replace, and Recycle), CKPower initiated this project by stopping giving out plastic bags in convenience stores in its power plants and encouraging employees to use tote bags instead as well as replacing Styrofoam boxes in the canteens with paper containers. From the beginning of the project in April to December 2021, CKPower successfully reduced 16,800 plastic bags and 5,460 Styrofoam boxes.



EMPLOYEE INTERVIEW



MS. NATTAKAN SONTHONG

Manager - Local Administrator,
Xayaburi Hydroelectric Power Plant

“The tote bag campaign for reducing the use of plastic bags in convenience stores at the Xayaburi Hydroelectric Power Plant has raised awareness among employees of the significance of waste reduction, especially plastic waste, which is hard to decompose. This project has helped the use of decrease single-use plastics in the organization, and I would like the Company to scale this up into an annual project at all power plants.”

2021 HIGHLIGHTS

PET Recycling Project

To promote waste sorting, create jobs and generate income for the residents of Chak Daeng Temple Community, and restore value to used PET bottles, CKPower launched this program and successfully collected 120 kilograms of PET bottles, equivalent to 5,400 bottles, which were transformed into 6,600 face masks and generated THB 133,000 in revenue for the Chak Daeng Temple Community.



EMPLOYEE INTERVIEW



**MS. WILAIWAN
SIRIKUTJATUPORN**
Senior Specialist – Purchasing

“The Victory in a Bottle Program takes used bottles and creates value for society and communities out of them. Most importantly, this program has fostered collaboration between donors and donees to make a positive contribution to society and the environment.”

ENERGY MANAGEMENT AND CLIMATE CHANGE

STRATEGIES, POLICIES, AND ACTION PLANS

BUSINESS FACTORS

Climate change has become a major global concern due to the greater frequencies and intensifying severity of natural disasters together with the steady rise of global temperatures. This has led the participating nations at the 26th United Nations Climate Change Conference (COP 26) to set a goal of keeping an increase in global temperatures under 1.5 degrees Celsius. In response, CKPower strives to promote clean electricity technology through its hydroelectric and solar power plants, which can replace fossil fuel-based power production and reduce direct impacts of Greenhouse Gas (GHG) emissions, which are a primary cause of climate change. Furthermore, with stricter emission regulations hiking up demand for clean energy, CKPower, as a producer committed to produce and supply clean energy, has made preparations for such a rise in the future through efficient resource management and continuous development and improvement of internal energy consumption, which can sustainably reduce energy costs and Greenhouse gas emissions due to lower energy use.

STRATEGIES FOR SUCCESS

As a clean energy electricity producer who strives to drive the country towards the net-zero goal, CKPower seeks to play a supporting role through its delivery of clean electricity at the domestic level. In addition, it has equipped itself against climate change, which has direct impacts on its business operations, by prescribing annual climate change risk assessment and establishing climate change strategies in accordance with international standards and the guidelines of the Task Force on Climate-Related Financial Disclosures (TCFD), the results of which are used in risk and opportunity analysis in order to formulate climate change strategies and action plans and establish operational goals and guidelines. In 2021, CKPower established climate change strategies to serve as guidance for stable business operations in line with global changes, set a goal to reduce the use of finite resources, and continued its initiatives to maximize resource efficiency in its office buildings and production processes, in order to cut GHG emissions, reduce risks due to volatility in power production, and advance towards achieving net-zero GHG emissions by 2050.



More information on Climate Action Policy can be found here [OR CLICK HERE](#)



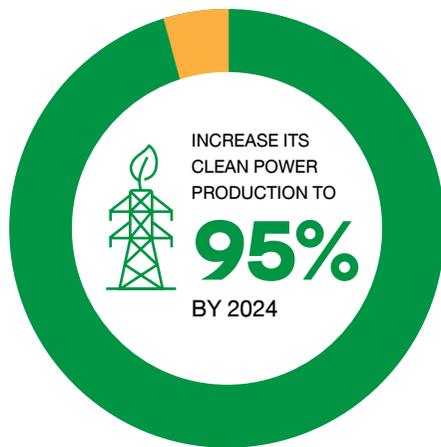
More information on Energy Conservation Policy can be found here [OR CLICK HERE](#)



More information on Environmental Performance can be found here [OR CLICK HERE](#)

TARGETS AND PERFORMANCE INDICATORS

CKPower has aimed to increase its clean power production to 95% by 2024 and has established a response plan against the intensifying climate change that is oriented towards various forms of renewable energy, such as hydropower, solar power, and wind power, which help reduce the emissions and impacts of greenhouse gases. The Company also seeks to cultivate awareness of energy efficiency and conservation by introducing an energy conservation policy and involving its internal units in encouraging employees to consistently develop innovations that improve power generation efficiency. As a result of these initiatives, CKPower has been able to reduce power production costs per unit and utilize resources efficiently. The Company has also set short- and long-term goals for greenhouse gas emission reduction.



SHORT-TERM GOAL (1-2 YEARS)

Increase clean energy-based power production to

95% 

by 2024 through increased investment in the hydroelectric power plant in Lao PDR

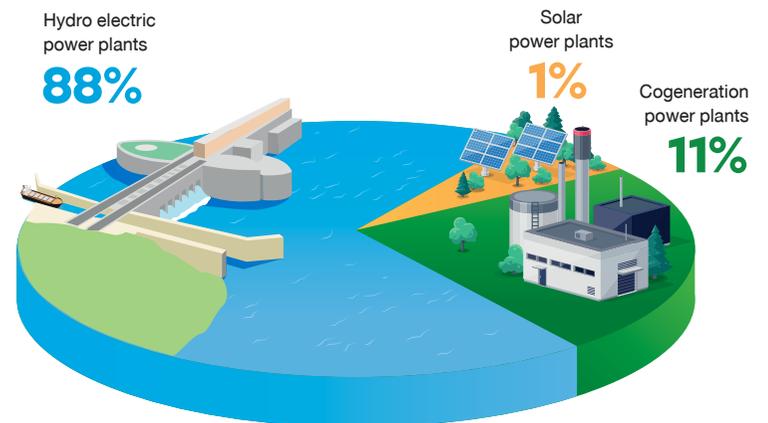
LONG-TERM GOAL

Achieve net-zero GHG emissions by 2050 

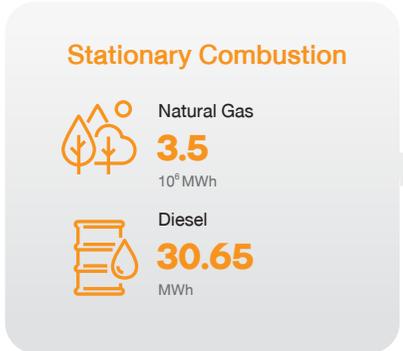
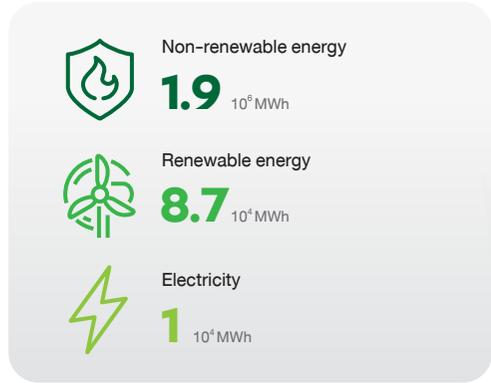
IMPLEMENTATION, MONITORING, AND EVALUATION

PERFORMANCE AND VALUE CREATION

In 2021, clean electricity accounted for 89% of CKPower's investment, divided into 88% in hydroelectric power plants and 1% in solar power plants, while the remaining 11% of the investment was in cogeneration power plants (calculated from the installed capacity). CKPower undertook a total of seven energy conservation projects, focusing on reducing the overall energy loss of its power plants and maximizing energy efficiency, while also cultivating consciousness among employees to reduce energy use across the production process in accordance with the ISO 50001:2018 energy management standard. As a result of the continuous implementation of these initiatives and the unity of the personnel, CKPower successfully reduced internal energy consumption and achieved its goals, which ultimately decreased GHG emissions.



Energy Consumption within Organization



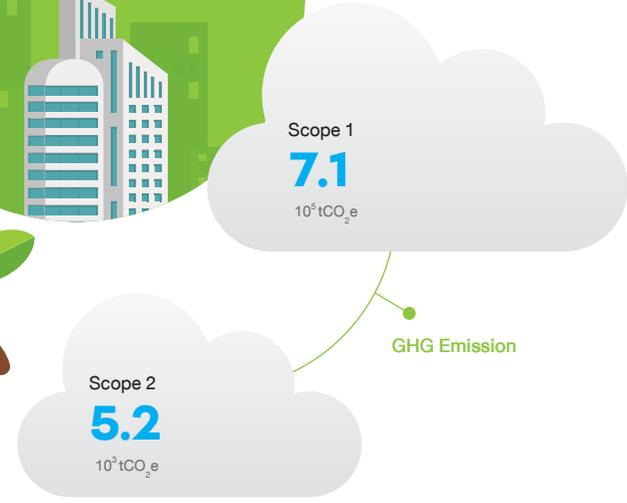
Non-renewable Energy Consumed

7 ENERGY CONSERVATION PROJECTS

- 1.) Steam Turbine Load Adjustment Project
- 2.) Air Dryer Deactivation Project
- 3.) Cooling Fan Deactivation Project During 00:00-06:00 A.M
- 4.) Cooling Tower Optimization Project
- 5.) Lower Gas Pressure Better Heat Rate Project
- 6.) Adjustment and Control of the Chloride Range in the Cooling Water of BIC1 Project

7.) OFFICE ENERGY CONSERVATION PROJECT

Greenhouse Gas Emission



GHG Emission

CKPower's assessment was based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and the guidelines of the Thailand Greenhouse Gas Management Organization (TGO) and audited by an independent external auditor, EY Office Company Limited. The audit report can be found in the Assurance Statement of the Company.

Remark: The data does not include the energy use of the Shared Service Center.

2021 HIGHLIGHTS

Lower Gas Pressure – Better Heat Rate Project

In 2021, Bangpa-in Cogeneration Power Plant enhanced the efficiency of its power production system through inspection, analysis, and optimization of the flow pressure inside each part of the pipe system in the production process to reduce the electricity consumption of the gas compressor, which is used to pressurize the system. Through this project, CKPower successfully saved 466,400 kWh, equivalent of 192 tons of carbon dioxide equivalents of greenhouse gas emissions per year, and THB 963,000 in expenses.



Cooling Tower Optimization Project

In 2021, Bangpa-in Cogeneration Power Plant improved the efficiency of the cooling system by analyzing its capacity to dissipate heat during different times of the day in order to optimize the settings of the equipment in the power plant and reduce the energy consumption rate for the equipment within the cooling system. The project cut down power consumption by 98,400 kWh, equivalent to 40.7 tons of carbon dioxide equivalents per year, and saved THB 203,000 in expenses for the Company.



INNOVATOR INTERVIEW



MR. BADIN SUTHAT
Engineering Supervisor - C&I,
Bangpa-in Cogeneration
Power Plant

“The Company has always been supportive and open and given employees opportunities to develop innovation that improves and enhances power production efficiency. I am proud to have contributed to the development of this project and is ready to take part in innovating in future projects.”

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| | 2-17 | Collective knowledge of the highest governance body | 29 | | | - |
| | 2-18 | Evaluation of the performance of the highest governance body | | 150 | | - |
| | 2-19 | Remuneration policies | | | Website: https://www.ckpower.co.th/storage/content/corporate-governance/corporate-policy-document-download/charters/nomination-remuneration-committee-charter-en.pdf | - |

| MATERIALITY | GRI STANDARDS | DISCLOSURES | PAGE/LINK/COMMENT | | | EXTERNAL VERIFICATION |
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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| | 2-20 | Process to determine remuneration | | 134-135, 138 | | - |
| STRATEGY, POLICIES AND PRACTICES | | | | | | |
| | 2-22 | Statement on sustainable development strategy | 8 | | | - |
| | 2-23 | Policy commitments | 60 | | | - |
| | 2-24 | Embedding policy commitments | 61 | | | - |
| | 2-25 | Processes to remediate negative impacts | 62 | | | - |
| | 2-26 | Mechanisms for seeking advice and raising concerns | 57, 62 | | | - |
| | 2-28 | Membership associations | 15 | | | - |
| STAKEHOLDER ENGAGEMENT | | | | | | |
| | 2-29 | Approach to stakeholder engagement | 10-13 | | | - |
| | 2-30 | Collective bargaining agreements | | | Website: https://www.ckpower.co.th/en/sustainability/stakeholder-engagement/human-capital-management | - |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-1 | Process to determine material topics | 9 | | Website: https://www.ckpower.co.th/en/sustainability/sustainability-management-process/materiality | - |
| | 3-2 | List of material topics | 9 | | Website: https://www.ckpower.co.th/en/sustainability/sustainability-management-process/materiality | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| CORPORATE GOVERNANCE, RISK MANAGEMENT, AND COMPLIANCE | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 28, 32 | | | - |
| GRI 205: ANTI-CORRUPTION 2016 | | | | | | |
| | 205-2 | Communication and training about anti-corruption policies and procedures | 30 | | | - |
| | 205-3 | Confirmed incidents of corruption and actions taken | | | Website: https://www.ckpower.co.th/en/sustainability/sustainability-management-process/corporate-governance-risk-management-corporate-compliance | - |
| GRI 206: ANTI-COMPETITIVE BEHAVIOR 2016 | | | | | | |
| | 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | | | Website: https://www.ckpower.co.th/en/sustainability/sustainability-management-process/corporate-governance-risk-management-corporate-compliance | - |
| SYSTEM RELIABILITY AND AVAILABILITY | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 51 | | | - |

| MATERIALITY | GRI STANDARDS | DISCLOSURES | PAGE/LINK/COMMENT | | | EXTERNAL VERIFICATION |
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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| CUSTOMER RELATIONSHIP MANAGEMENT AND RESPONSIBILITY TOWARDS CUSTOMERS | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 56 | | | - |
| INNOVATION MANAGEMENT | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 44 | | | - |
| SUPPLY CHAIN MANAGEMENT | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 38 | | | - |
| GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT | | | | | | |
| | 308-1 | New suppliers that were screened using environmental criteria | 41 | | | - |
| | 308-2 | Negative environmental impacts in the supply chain and actions taken | 41 | | | - |
| GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016 | | | | | | |
| | 414-1 | New suppliers that were screened using social criteria | 41 | | | - |
| | 414-2 | Negative social impacts in the supply chain and actions taken | 41 | | | - |
| RESPECT FOR HUMAN RIGHTS | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 60 | | | - |

| MATERIALITY | GRI STANDARDS | DISCLOSURES | PAGE/LINK/COMMENT | | | EXTERNAL VERIFICATION |
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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| GRI 412: HUMAN RIGHTS ASSESSMENT 2016 | | | | | | |
| | 412-1 | Operations that have been subject to human rights reviews or impact assessments | 61 | | | - |
| | 412-2 | Employee training on human rights policies or procedures | 63 | | | - |
| GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016 | | | | | | |
| | 405-1 | Diversity of governance bodies and employees | 62 | | | - |
| | 405-2 | Ratio of basis salary and remuneration of women to men for each employee category | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| HUMAN CAPITAL MANAGEMENT | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 64 | | | - |
| GRI 401: EMPLOYMENT 2016 | | | | | | |
| | 401-1 | New employee hires and employee turnover | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | | | Website: https://www.ckpower.co.th/en/sustainability/stakeholder-engagement/human-capital-management | - |

| MATERIALITY | GRI STANDARDS | DISCLOSURES | PAGE/LINK/COMMENT | | | EXTERNAL VERIFICATION |
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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| | 401-3 | Parental leave | | | Website: https://www.ckpower.co.th/en/sustainability/stakeholder-engagement/human-capital-management | - |
| GRI 404: TRAINING AND EDUCATION 2016 | | | | | | |
| | 404-1 | Average hours of training per year per employee | 66 | | | - |
| | 404-2 | Programs for upgrading employee skills and transition assistance programs | 66 | | | - |
| | 404-3 | Percentage of employees receiving regular performance and career development reviews | 65 | | | - |
| GRI 406: NON-DISCRIMINATION 2016 | | | | | | |
| | 406-1 | Incidents of discrimination and corrective actions taken | | | Website: https://www.ckpower.co.th/storage/content/corporate-governance/corporate-policy-document-download/corporate-policies/human-rights-policy-en.pdf | - |
| COMMUNITY AND SOCIAL CARE | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 75 | | | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| GRI 413: LOCAL COMMUNITIES 2016 | | | | | | |
| | 413-1 | Operations with Local Community Engagement, Impact Assessments, and Development Programs | | | Website: https://www.ckpower.co.th/en/sustainability/stakeholder-engagement/community-engagement | - |
| OCCUPATIONAL HEALTH AND SAFETY IN THE WORKPLACE | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 70 | | | - |
| GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018 | | | | | | |
| | 403-1 | Occupational health and safety management system | 71 | | | - |
| | 403-3 | Occupational health services | 71 | | | - |
| | 403-4 | Worker participation, consultation, and communication on occupational health and safety | 71-74 | | | - |
| | 403-5 | Worker training on occupational health and safety | 71 | | | - |
| | 403-6 | Promotion of worker health | 71 | | | - |
| | 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 72-74 | | | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018 (TOPIC-SPECIFIC DISCLOSURES) | | | | | | |
| | 403-9 | Work-related injuries | 72 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | Yes |
| ENVIRONMENTAL MANAGEMENT | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 81 | | | - |
| GRI 303: WATER AND EFFUENTS 2018 | | | | | | |
| | 303-1 | Interactions with water as a shared resource | 82 | | | - |
| | 303-2 | Management of water discharge-related impacts | 82 | | | - |
| | 303-3 | Water withdrawal | 83 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 303-4 | Water discharge | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 303-5 | Water consumption | 83 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| GRI 306: WASTE 2020 | | | | | | |
| | 306-1 | Waste generation and significant waste-related impacts | 82 | | | - |
| | 306-2 | Management of significant waste-related impacts | 82 | | | - |
| | 306-3 | Waste generated | 83 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 306-4 | Waste diverted from disposal | 83 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| GRI 307: ENVIRONMENTAL COMPLIANCE 2016 | | | | | | |
| | 307-1 | Non-compliance with environmental laws and regulations | 82 | | | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| ENERGY MANAGEMENT AND CLIMATE CHANGE | | | | | | |
| GRI 3: MATERIAL TOPICS 2021 | | | | | | |
| | 3-3 | 3-3 Management of material topics | 86 | | | - |
| GRI 302: ENERGY 2016 | | | | | | |
| | 302-1 | Energy consumption within the organization | 88 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | Yes |
| | 302-2 | Energy consumption outside of the organization | 88 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 302-3 | Energy intensity | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 302-4 | Reduction of energy consumption | 89 | | | - |

| MATERIALITY | GRI STANDARDS | DISCLOSURES | PAGE/LINK/COMMENT | | | EXTERNAL VERIFICATION |
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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| GRI 305: EMISSIONS 2016 | | | | | | |
| | 305-1 | Direct (Scope 1) GHG emissions | 88 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | Yes |
| | 305-2 | Energy Indirect (Scope 2) GHG emissions | 88 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | Yes |
| | 305-3 | Other Indirect (Scope 3) GHG emissions | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 305-4 | GHG emissions intensity | 88 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | 305-5 | Reduction of GHG emissions | 89 | | | - |
| | 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions | 83 | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |

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| | | | SUSTAINABILITY REPORT 2021 | ANNUAL REPORT 2021 (56-1 ONE REPORT) | WEBSITE | |
| G4 SECTOR DISCLOSURE: ELECTRIC UTILITIES | | | | | | |
| ORGANIZATIONAL PROFILE | | | | | | |
| | EU1 | Installed Capacity, Broken Down by Primary Energy Source and by Regulatory Regime | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | EU2 | Net Energy Output Broken Down by Primary Energy Source and by Regulatory Regime | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| ACCESS | | | | | | |
| | EU28 | Power Outage Frequency | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | EU29 | Average Power Outage Duration | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |
| | EU30 | Average Plant Availability Factor by Energy Source and by Regulatory Regime | | | Performance data: https://www.ckpower.co.th/en/sustainability/sustainability-overview | - |



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Independent Limited Assurance Report

To the Directors of CK Power PCL

Conclusion

CK Power PCL (“CKP”) engaged EY Office Limited (“EY” or “we”) to perform a ‘limited assurance’ engagement, as defined by International Standards on Assurance Engagements, hereafter referred to as the “engagement”, on selected subject matters (the “Subject Matters”) included in CKP’s Sustainability Report for the year ended 31 December 2021 (the “Reports”).

Based on our procedures and the evidence obtained, nothing has come to our attention that causes us to believe that the Subject Matters were not prepared and presented fairly, in all material respects, in accordance with the Criteria.

Subject Matters

Our limited assurance engagement covers the following Subject Matters:

| Subject Matters | Scope | Sustainability Report’s section and page (English language version) |
|--|---|---|
| Energy consumption (MWh) | Hydropower Nam Ngum 2 Power Company Limited, Xayaburi Power Company Limited, | Section 4: Environment Page 88 |
| Direct (scope 1) greenhouse gas emissions (tCO2e) | | |
| Indirect (scope 2) greenhouse gas emissions (tCO2e) | Cogeneration Power Bangpa-in Cogeneration Limited, Solar power Bangkhenchai Company Limited. | Section 3: Society Page 72 |
| The number and rate of fatalities as a result of work-related injury | | |

Other than as described in the above table, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Sustainability Report, and accordingly, we do not express a conclusion on this information.



Criteria applied by CKP

In preparing the Subject Matters CKP applied the Global Reporting Initiative Sustainability Reporting Standards (‘GRI Standards’).

CKP’s responsibilities

CKP’s management is responsible for selecting the Criteria, and for presenting the Subject Matters in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matters, such that it is free from material misstatement, whether due to fraud or error.

EY’s responsibilities

Our responsibility is to form a conclusion on CKP’s presentation of the Subject Matters based on the evidence we have obtained.

We conducted our engagement in accordance with the International Standard for Assurance Engagements 3000 (ISAE 3000) - *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* (the “Standard”). This Standard requires that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Subject Matters are presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this engagement.



EY also applies International Standard on Quality Control 1 - *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matters and related information, and applying analytical and other appropriate procedures.

Our procedures included:

- ▶ Conducted interviews with personnel to understand the business and reporting process
- ▶ Conducted interviews with key personnel to understand the process for collecting, collating and reporting the Subject Matters during the reporting period
- ▶ Checked that the calculation criteria have been correctly applied in accordance with the methodologies outlined in the Criteria
- ▶ Undertook analytical review procedures to support the reasonableness of the data
- ▶ Identified and testing assumptions supporting calculations
- ▶ Tested, on a sample basis, underlying source information to check the accuracy of the data



We also performed such other procedures as we considered necessary in the circumstances.

Other matters

Information relating to prior reporting periods has not been subject to assurance procedures. Our report does not extend to any disclosures or assertions relating to future performance plans and/or strategies disclosed in the Sustainability Report.

The maintenance and integrity of CKP's website is the responsibility of CKP's management. Our procedures did not involve consideration of these matters and, accordingly we accept no responsibility for any changes to the Subject Matters and related disclosures, the sustainability report or to our independent limited assurance report that may have occurred since the initial date of presentation on CKP's website.

Restriction of use

This report is prepared in accordance with our engagement terms agreed with CKP, and intended solely for the Directors of CKP for the purpose of reporting the Subject Matters in the Sustainability Report and is not intended to be and should not be used by anyone other than those specified parties. To the fullest extent permitted by law, we do not accept or assume any responsibility for any reliance on this assurance report to any persons other than the Directors of CKP, or for any purpose other than that for which it was prepared.

Wilaiporn Ittiwiroon
Partner
EY Office Limited

Bangkok, Thailand
17 March 2022



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