



FOR SUSTAINABLE FUTURE

Sustainability Report 2022
UAC Global Public Company Limited



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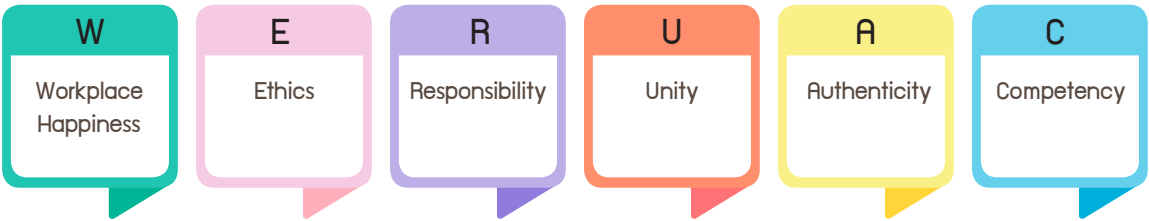
Vision

The Company determines to be an environmental friendly operator of clean energy, petrochemicals and utilities and it shall maintain its national leadership and to be accepted at international level.

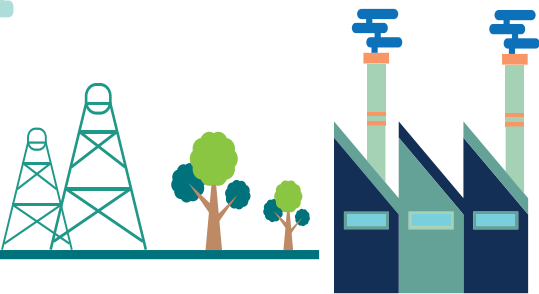
Mission

- To determine to engage business in clean and environmental friendly energy, petrochemicals and utilities beneficially to the country, environment and society.
- To be responsible to shareholders by adding values to business continually and creating stable returns to the shareholders in the long term.
- To operate business by adhering to corporate governance principles by treating business partners fairly, transparently and anti-corruption.
- To determine to become a happy organization by taking into consideration the fair working environment and compensation and promotion of career path of the employees.

Corporate Value



Pride Awards 2022



Thailand Sustainability Investment (THSI) 2022 (the seventh consecutive year) as reflection of the business operation with Environmental, Social, and Governance (ESG) Responsibility (THSI Rating: A)



Sustainability Disclosure Recognition 2022 Honor Award from Thaipat Institute for the scond consecutive year as reflection of the business operation through the Sustainable and Reliable Development Report according to the Framework of Global Reporting Initiative (GRI) Reporting.



UAC had been assessed on Corporate Governance Report of Listed Companies 2022 (CGR) by Thai Institute of Directors (IOD) at **Excellent** Level as the fifth consecutive year.



The quality assessment result for holding Annual General Meeting of Shareholders earned 100 scores (Excellence Level) from the Quality Assessment Project for Holding Annual General Meeting of Shareholders 2023 organized by Thai Investors Association.



Message from the Chief Executive Officer and President



Dear All Stakeholders,

In year 2022 is the year that the Company's business operations were very challenging and greatly adaptive from the global economy, energy price inflation, geopolitical conflict and the COVID-19 pandemic situation. The Company had carefully followed up and evaluated all these situations. Th strategic plans and business operations are adjusted in accordance with the situation, we also focus on maintaining financial liquidity and reduced the risk of exchange rate fluctuation and flexible adaptation in many crises. The results was satisfied, and the company is committed to develop the organization for sustainable growth in accordance with ESG (Environment, Governance, Social).

Regarding the organizational management, the Company has reduced unessential expenses, circumspect operations in various areas, altered the internal work process for working flexibility and non-interruption of business operations, and adopted the digital technology in working to support the employees at the time of teleworking, for instance, online conference and approval to improve more working efficiency and effectiveness based on the goal of commitment to excellence.

In respect to safety, the occupational health, and environment, environment and safety is continuously and yearly defined as one of the key KPIs of the organization, and zero accident is defined as the accidental safety goal. In addition, the Company has promoted team building activity for happy workplace and focused on creation of knowledge and understanding to the employees at all levels particularly in the matter of risk management and sustainable development to be part of all employees' requirement to mutually create and develop the organizational sustainability for sustainable growth.



In 2022, the Company is proud of being considered and selected in the Thailand Sustainability Investment (THSI) from the Stock Exchange of Thailand for the seventh consecutive years and awarded the Honorary Certificate for Sustainability Disclosure Recognition in disclosure of sustainability information or the secondth sonsecutive year from Thaipat Institute to reflect the commitment on the sustainability operation that came from all management and all parties in good consistent support the company.

In 2023, the Company will continue to expand its business and investment in accordance with the vision and the strategy. We remain keeping our growth and also aim to investment more in renewable energy business, petroleum energy. And we will continuously develop more knowledge and skill to our employee for their work happiness and striving for our excellence in order to achieve the UAC goals.

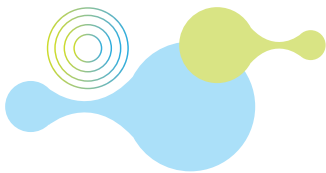
Finally, on behalf of UAC group, I would like to thank to the shareholders, customers, suppliers, and stakeholders of all parties in good consistent support on the company. We will continue our business growth and aiming to be a sustainable organization in order to create good returns for shareholders, creating value for stakeholders. By doing that way, we also pay attention to sustainable business innovation and society which is our main core accordingly.



Mr. Chatchaphol Prasopchoke
Chief Executive Officer and President

“UAC, we foreseen the significance of sustainability in business operations both in community level to global level and commit the development as part of the stable and sustainable growth by being the alliance with the community, society, and environment.”

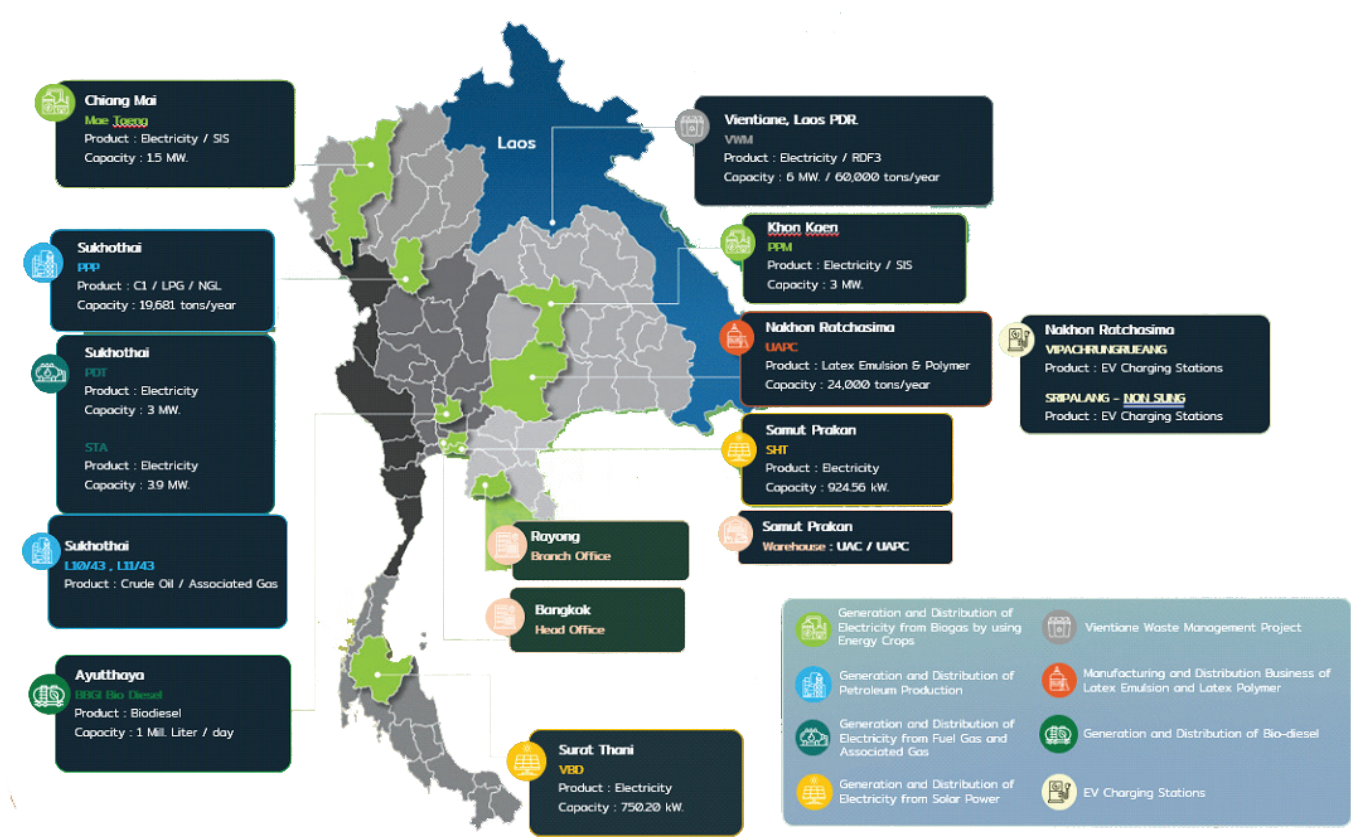
About UAC



Our Business:	UAC Global Public Company Limited (Disclosure 102-1)
Symbol:	UAC
Industrial Group:	INDUSTRIAL
Business Activities:	The Company operates the business of investment in the renewable and alternative energy industry and import and sale of chemicals, and equipment used in the natural gas exploration and production industry, oil refinery and petrochemical industry, lubricating oil plant, polymer and plastics industrial factory, chemical supplies industrial factory, apparel industry, paint and paper industry, power plant and utility system construction industry. Its subsidiaries operate the manufacturing and sale business of emulsion polymer chemicals, and its joint venture operates the manufacturing and sale business of biodiesel and operates the designing and consultancy business for the solar power project (Disclosure 102-2).
Authorized Capital:	367,183,099.50 million Baht Paid-Up Capital: 333,803,099.50 million Baht
Head Office:	1, TP&T Tower, 19th Floor, Soi Vibhavadirangsit 19, Vibhavadirangsit Road, Chatuchak, Chatucak, Bangkok 10900 (Disclosure 102-3)
Number of Full-Time Employees:	240 persons (as of 31 December 2022) (Disclosure 102-7)
Membership of associations:	The Federation of Thai Industries in Renewable Energy and Alternative Energy Industrial Group, and Chemical Industrial Group, Thai Chamber of Commerce, Thai National Shippers’ Council, Thai Biogas Trade Association, Chiang Mai Chamber of Commerce, Thailand Management Association (TMA), Investor Club Association, Thai-Italian Chamber of Commerce, Thai Listed Companies Association (TLCA), and Thai Institute of Directors (IOD) (Disclosure 102-13)

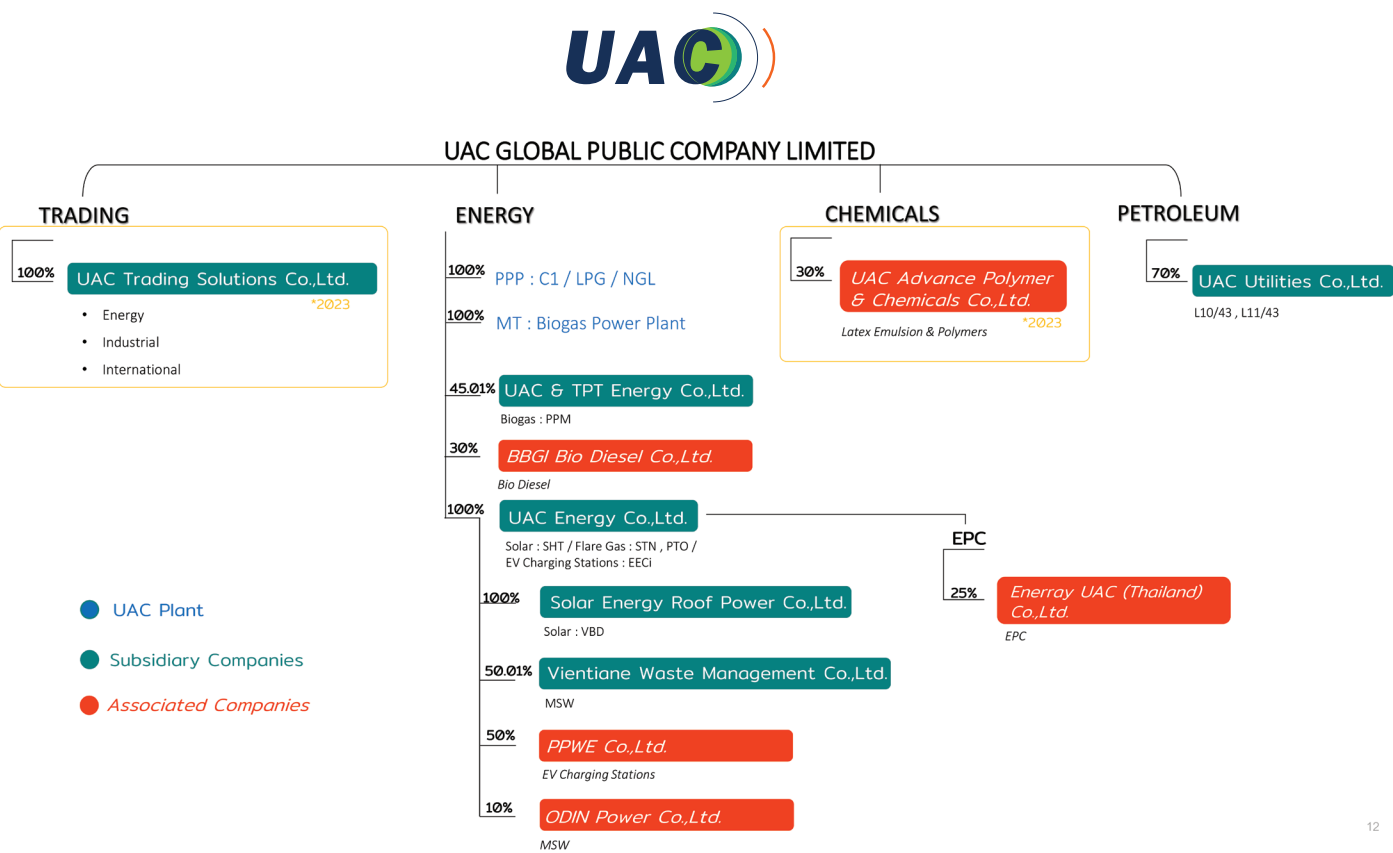


BUSINESS OVERVIEW

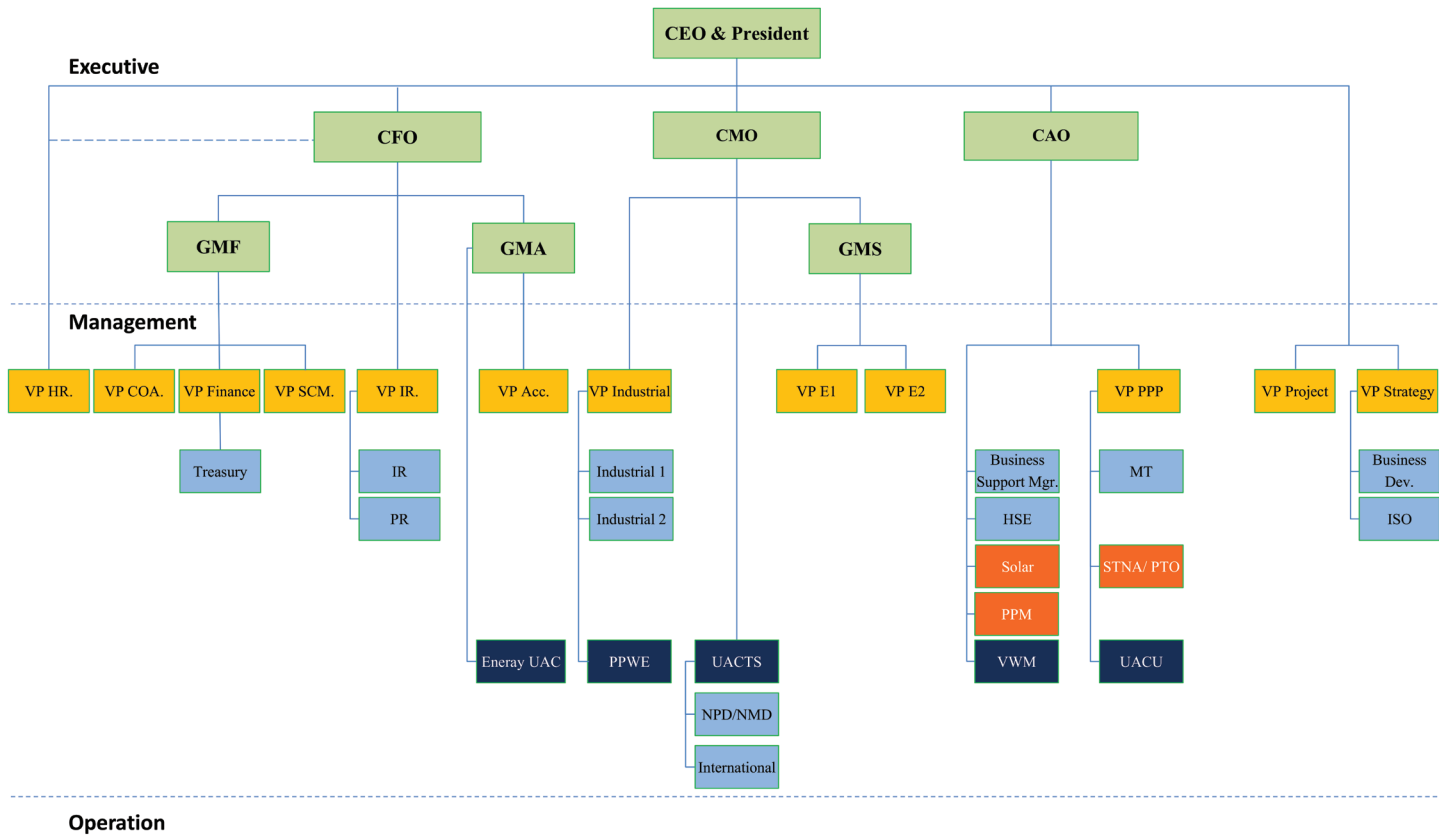


CHIANGMAI MAETANG Product: Electricity/SIS Capacity: 1.5 MW	SUKHOTHAI PPP Product: C1/LPG/NGL Capacity: 19,600 Ton/Year	SUKHOTHAI PRA DU THAO -A Product: Electricity: 3 MW SAO THIAN -A Product: Electricity: 3.9 MW
SUKHOTHAI L10/43, L11/43 Capacity: 3 MW	AYUTTHAYA BBGI BIO DIESEL Product: Bio Diesel Capacity: 1,000,000 Litre/Day	VIENTIANE, LAOS,PDR. Product: Electricity/RDF3 Capacity: 60,000 Ton/Year
KHON KAEN PHU PHA MAN Product: Electricity Capacity: 3 MW	NAKHON RATCHASIMA UAPC Product: Latex & Emulsion Capacity: 24,000 Ton/Year	SAMUT PRAKARN SAHATHAI Product: Electricity Capacity: 924.56 KW.
SURAT THANI VONGBUNDIT Product: Electricity Capacity: 750.20 KW	NAKHON RATCHASIMA VIPACHRUNGRUANG Product: EV Charging Station SRIPALANG NONSUN Product: EV Charging Station	BANGKOK HEAD OFFICE RAYONG RAYONG BRANCH

Business Structure (Disclosure 102-5)



Management Structure (Disclosure 102-18)



UAC Value Chain (Disclosure 102-9)

The Company committed to the development for supporting renewable economy, environmental restoration, and stakeholder, social, and community responsibility. The Company had been grown from import and distribution business of chemicals and equipment in the energy and petroleum group, and industrial group, and had expanded the type of business to invest in alternative energy and renewable energy. At present, the Company had had the power plants in Thailand with total approximate production capacity of 10 Megawatt.

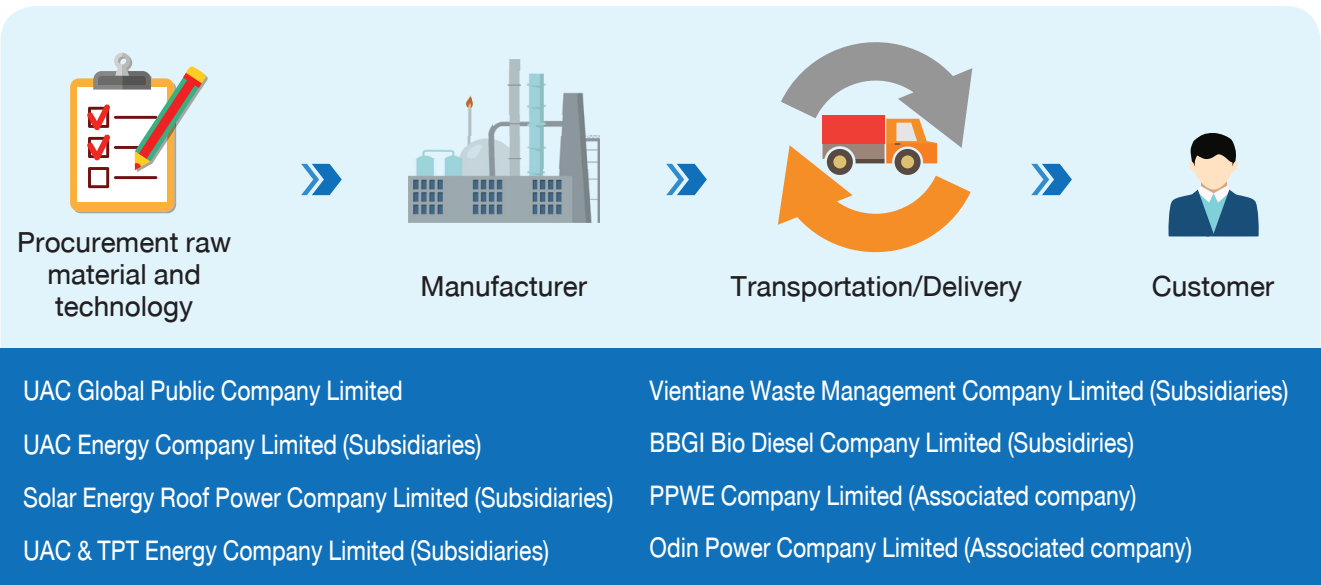
Trading Business

Import and sale of chemicals used in the business group of natural gas exploration and production, oil refinery and upstream petrochemical industry, the business group of liquid chemicals, power plant and utilities, whereas most customers were the domestic customers for ninety (90) %.



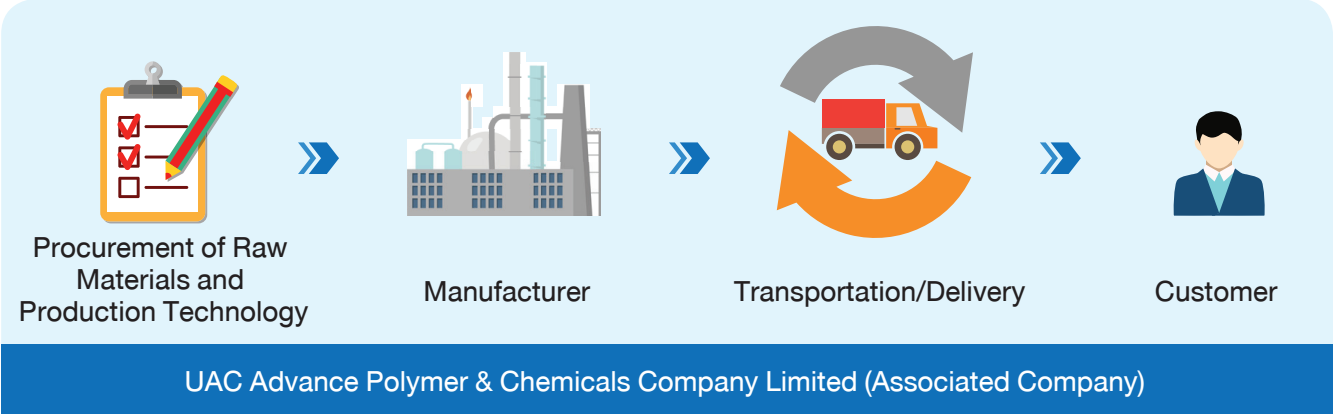
Energy Business

Investing in the renewal energy and alternative energy business as the manufacturer and seller of clean energy to the customers. The customer group are The Metropolitan Electricity Authority (MEA), and The Provincial Electricity Authority (PEA).



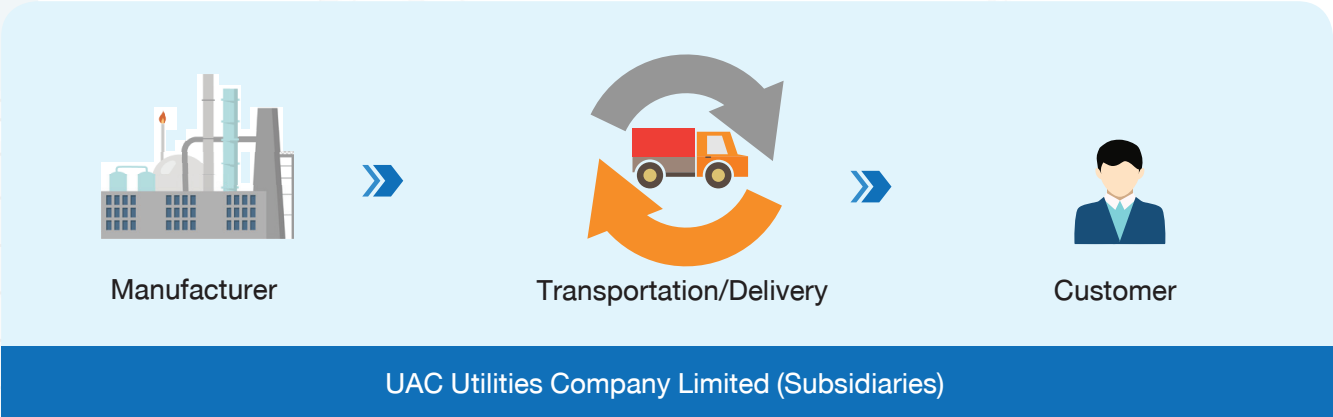
Chemical Business

Manufacturing and sale of emulsion polymer used in the industries, such as paint and coating industry, printing ink and printing industry, glue and adhesive tape industry, textile and apparel industry, and construction material industry. Most customers were the domestic customers.




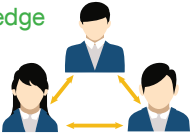

Petroleum Business




Operating businesses in exploration and drilling for crude oil and natural gas.



2022 Summary of Key Performance

Corporate Governance

<p>Assessment Result</p> <p>of Corporate Governance Report of Listed Companies (CGR)</p> <p>by Thai Institute of Directors (IOD)</p> <p>Excellent Level</p> 	<p>Quality Assessment Result</p> <p>for Holding Annual General Meeting</p> <p>of Shareholders (AGM Checklist) by</p> <p>Thai Investors Association</p> <p>100 scores</p>
<p>The management and employees' acceptance on the policy and</p> <p>test of anti-corruption knowledge</p>  <p>100%</p> 	<p>Number of corruption-caused events</p> <p>0 Time</p> 

Economic growth (Product)			
<p>Revenue from Sale of Goods and Services</p> <p>1,670.87 million Baht</p> 	<p>Net Profit</p> <p>78.86 million Baht</p> 	<p>EBITDA</p> <p>241.15 million Baht</p> 	
	<p>Customer Complaints</p> <p>0 Time</p> 	<p>Dividend per Share</p> <p>Year 2022</p> <p>0.12 Baht per Share</p> 	
<p>Procurement of Local Raw Materials (Energy Crop)</p> <p>16.76 million Baht</p> 	<p>Procurement of Local (Thailand) Products and Services</p> <p>29.22 million Baht</p> 		

Environmental Governance and Operational Excellence (Process)

Reduction of Greenhouse Gas Emission
Associated Gas Raw Materials Consumption

PPP contribution to reduction of
CO₂ Emission derived from
flaring associated gas for

33,806 tons per year

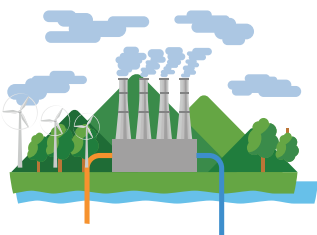
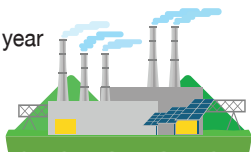
(Equivalence to planting
558,984 10-year aged trees)



Energy Crop Raw Materials Consumption

Mae Taeng Plant contribution to
reduction of CO₂ Emission from energy
crop consumption of

7,271 tons per year



CARE THE BEAR of SET PROJECT

In 2022, the Company organized the E-AGM, AGM and sent the
invitation in the form of Sealer, which reduced CO₂ Emissions.

2,518.29 kilograms of carbon dioxide.

This is equivalent to the CO₂
absorption of 280 trees per year (10 year aged Trees).

UAC xSCGP reXycle PROJECT

Join the SCGP ReXycle project of SCG Packaging Plc as Circular Economy, in **2023**,
the company can send recycled papers **1,050** Kg which is equivalence to planting **18** trees
reduction of CO₂ Emission **714** Kg, water reduction **27,300** litres, fuel reduction **1,470** litres,
and energy reduction **4,200** kW.

CARE THE WILD PROJECT

The company supported to plant trees to increase more green areas together with the Association of Listed
Companies in the Market for Alternative Investment (MAI) through the CARE THE WILD and “ PLANT &
PROTECT” project. That was considered as a collaboration platform to raise funds for truly plant forests and
a sustainable source of food for the community by reforestation at Baan Aoy, Baan Boonrueng, Baanvieng
subdistrict, Rongkwang district in Prae province.



1 rai is equivalence to **200** plants which help to absorb greenhouse gases **1,800** kilograms of
carbon dioxide per year.

Value Creation and Social Care (People)

Accident up to Leave

(Loss-Time Injury

Frequency Rate: LTIFR

Employees = 0 time

Contractors = 0 time



Customers

Satisfaction

91%



Organization

Engagement

Satisfaction Survey

88%



Employee's

Working Satisfaction

Survey

86%



Accident due to Gas and Chemical Leakage

0 time



Accident from Product Transportation

0 time



Number of Average Employee In house /public training Hours

42 hours/person/year

Average Employee Training Expense

15,776 Baht/person/year



UAC and Sustainability (Disclosure 102-16)

The Company committed on the sustainable development as the significant part of the Company’s overall strategies together with environmental and social care under the risk management, obligation and opportunity in economy, environment, and society. In addition, the creation of understanding, and expectation of all groups of stakeholders were important for our success, and reflected the guideline for determining the substantial issues predicting and enabling to relevantly respond in order to bring about the mutual sustainable growth and development.

Sustainable Management Structure

The Company emphasized on the sustainable development in accordance with the guideline of Sustainable Development Goals (SDGs) of the Planet, and considered the organizational sustainability assessment criteria including economic, social, environmental dimensions, and expectation of the stakeholders of all sectors for extensive and versatile improvement of work process and business operation. The Company established the sustainable development policy that had been disclosed and publicized in the website (the additional detail of the sustainable development policy could be studied at the Company’s website www.uac.co.th) as well as the guideline of the sustainable operation according to the organizational sustainable management structure in three levels as

Policy Level (Disclosure 102-19)

The Executive Committee established the directions, policies, strategies of the Company’s business operation and sustainability in accordance with the guideline of SDGs and assessed the organizational sustainability and requirement of the stakeholder expectation.

Management Level (Disclosure 102-20)

Sustainability Working Groups and Administrative Department operated in accordance with the policies and targets established from the policy and evaluate and report the operating progress in the sustainable development.

Project Level (Disclosure 102-22)

Sustainability Working Group in each area consisted of Good Corporate Governance, Environment and Safety, Human Rights and Labor, Innovation and Technological Development, Consumer and Customer, and Participation in Community and Social Development.

Sustainability Strategies

Strategies	Commitment of the Company	SDGs
<p>Economic Growth (Product)</p> <ul style="list-style-type: none"> - Sustained Growth - Eco-Friendly - INNOVATION - Risk Management & BCP 	<ul style="list-style-type: none"> • To supply and search for the modern technologies to fulfill the business driving target of the customers and supplier. • To promote and develop new innovations that will currently promote the customers and supplier’s business growth. • Pioneer the guideline or business opportunity in products and services for mutual creation of growth. • Good governance and anti-corruption • Risk management and business continuity management 	<div>7 AFFORDABLE AND CLEAN ENERGY</div> <div>8 DECENT WORK AND ECONOMIC GROWTH</div> <div>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</div>
<p>Environmental Governance and Operational Excellence (Process)</p> <ul style="list-style-type: none"> - Safety & Operation excellence - Environment & Quality Management system - Carbon Footprint 	<ul style="list-style-type: none"> • Aim to be the operational excellence. • Promote the corporate culture in safety. • Aim at the environmental management under the standards. • Aim at the greenhouse gas reduction management. 	<div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div> <div>13 CLIMATE ACTION</div>
<p>Employee and Social Care (People)</p> <ul style="list-style-type: none"> - Employee potential development - Happy workplace - Social & Community Development 	<ul style="list-style-type: none"> • Focus on the employee potential development for professional working and having the strategist concept of being a strategic thinker and a change administrator to take the rapid occurred risks or changes (Strategist) • Aim at creation of Successor in all levels of works. • Advance towards being Happy Workplace. 	<div>3 GOOD HEALTH AND WELL-BEING</div> <div>4 QUALITY EDUCATION</div>

Stakeholders Engagement (Disclosure 102-46)

The Company established and publicized the Stakeholders Engagement Policy and Regulation on the website (the additional detail of the Stakeholders Engagement Policy and Regulation can be studied at the Company's website www.uac.co.th). The stakeholders were grouped into 8 main groups covering all both internal and external dimensions. The operations with all parties of stakeholders were consistent with the business operations. The Company yearly reviewed the impact on the process throughout supply chain to identify the significant stakeholder impact issues thorough the internal processes, such as community impact assessment, environmental impact assessment, occupational hazard identification, delivery of the representative to regularly attended the meeting with the communities and getting complaints and suggestions from many channels.

Stakeholders Engagement Process (Disclosure 102-42)

1. Specify the stakeholders group and classify by considering from three criteria as follows.

- Which stakeholders group is involved to the Company's business operations.
- Whether the Company creates sustainability impact toward the any group of stakeholders.
- Whether the stakeholders group have influence on the company.

2. The important procedure for operation with stakeholders

- Specify responsible division for the stakeholders group.
- Determine a systematically method to survey the need and expectation of stakeholders and the operating of frequency of the survey.
- Gather the needs and expectation of shareholders.

3. Analysis and select the important issues

- Consider the importance of the stakeholders requirement and expectation issues based on the contexts relating to the risk impact, likelihood, and conformity with the organizational policies and goals, both of the importance on the stakeholders and the importance on the organization.

4. Implementation

- Propose the analysis result to the Executive Committee to define the sustainability working direction.



Stakeholders Engagement and Performance

Stakeholders Group (Disclosure 102-40)	Need and Expectation (Disclosure 102-44)	Company Response	Engagement Approaches (Disclosure 102-43)
Shareholders 	1. Sustainable business growth 2. Good corporate governance 3. Efficient risk management	<ul style="list-style-type: none"> Efficient management, trust building and appropriate return payment Transparent and verifiable business operations, and adherence to the Principle of Good Governance Transparent, complete and continuous disclosure of information Disclosure of the complete financial information Compliance with the covenants under rules and laws 	<ul style="list-style-type: none"> Disclosure of information via Annual Report (One report) Disclosure of information via Sustainability Report (SD report) Notification of news via Stock Exchange of Thailand Shareholders’ Meeting Opportunity Day Activity
Employee 	1.Career security and progress 2.Continuous potential development	<ul style="list-style-type: none"> Appropriately consider the promotion and transfer. Organize the equal and fair performance assessment system Organize the training programs that are corresponding to the necessity and catch up with the change 	<ul style="list-style-type: none"> Employee Engagement Survey Email/Yammer online media Suggestions or complaints Yearly Team Building Activities
Customers 	1.Good and quality products and services 2.Delivery of goods and services according to the delivery standard 3.Product and service responsibility 4.Security of the customer’s confidential information	<ul style="list-style-type: none"> Good services with quality and responsibility Good product delivery with quality and punctuality Develop the information safety management system in accordance with the international standards Provide the correct and reliable information and experiences of product usage 	<ul style="list-style-type: none"> Seeing or meeting with the customer Customer satisfaction survey (once a year) Complaints and suggestions for improvement
Business Partners 	1.Transparent and fair business operations 2.Creation of sustainable mutual growth	<ul style="list-style-type: none"> Business operation with transparency, integrity, and justice 	<ul style="list-style-type: none"> Holding the joint meetings Information, knowledge, and technology sharing

<p>Suppliers</p> 	<ol style="list-style-type: none"> 1.Transparent and fair business operation 2.Management and duly payment 3.Confidentiality of suppliers 	<ul style="list-style-type: none"> ● Fair competition ● Payment full and on time ● Confidentiality of suppliers 	<ul style="list-style-type: none"> ● Annual Report/Sustainable Development Report ● Evaluation, suggestions or complaints ● Jointly organizing the trainings/holding the meetings
<p>Creditor and Financial Institution</p> 	<ol style="list-style-type: none"> 1.Proper financial information management 2.Full and duly payment 	<ul style="list-style-type: none"> ● Efficiency of financial management data ● Complete and duly repayment of debts, and care of the collateral quality 	<ul style="list-style-type: none"> ● Annual Report/Sustainability Report ● Online media/Email
<p>Government Sector Agencies</p> 	<ol style="list-style-type: none"> 1.Law compliance and promotion of good corporate governance 	<ul style="list-style-type: none"> ● Compliance with laws and rules and regulations to bring about trust 	<ul style="list-style-type: none"> ● Organize activities in cooperation with government level and local level. ● Online media/Email
<p>Community and Society</p> 	<ol style="list-style-type: none"> 1. Emphasis on safety and environment impact on the community 2. Efficient manage complaints 3. Support and develop of the activities in the community 	<ul style="list-style-type: none"> ● Systematically coordinate and collaborate with the community for fulfilling the community needs. ● Create job, career, and income to the communities. 	<ul style="list-style-type: none"> ● Sustainability Report (Website) ● Suggestions/Complaints ● Organizing the activities in collaboration with the community network

Sustainability key Issues

The Company identified, analyzed, and assessed the material issues that may affect long-term sustainability. The said materiality included both internal and external stakeholders through the survey and impacted assessment process. This assessment contributed to the ability to identify the key impacts on economy, environment, society, and good corporate governance by assessing the significance at high, medium, and low level.

Materiality Matrix (Disclosure 102 - 47)



Key criteria used for considering the priority of stakeholder’s significance.

Stakeholders

- Impact level
- Significance of the future issues of Stakeholders
- Level of expectation on the Company’s management

Organization

- Likelihood of creating the issue impact
- Level of impact severity
- Level of business risk
- Significance and likelihood of future issues and goal
- Consistency with the organization policy and goal

2022 Key Sustainability Issues

Economic Growth (Product)	Environment Governance & Operational Excellents (Process)	Value Creation and Social Care (People)
1.Sustainable growth of the business	8.Environmental safety and impact	10. Career security and Career Path
2. Good corporate governance	9.Greenhouse gas reduction management	11. Continuous potential employee development
3.Efficient risk management		12. Promote and develop sustainable activities in the communities.
4.Product and service responsibility		
5.Security of the customer’s confidential information		
6. Fair business operation		
7. Mutual development of supplier potential and growth		
<div> <div> 7 AFFORDABLE AND CLEAN ENERGY </div> <div> 8 DECENT WORK AND ECONOMIC GROWTH </div> <div> 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE </div> </div>	<div> <div> 12 RESPONSIBLE CONSUMPTION AND PRODUCTION </div> <div> 13 CLIMATE ACTION </div> </div>	<div> <div> 3 GOOD HEALTH AND WELL-BEING </div> <div> 4 QUALITY EDUCATION </div> </div>



Sustainability Performance

Economic Growth (Product)

Net Profit

78.86 million Baht

Dividend per Share
For 2022

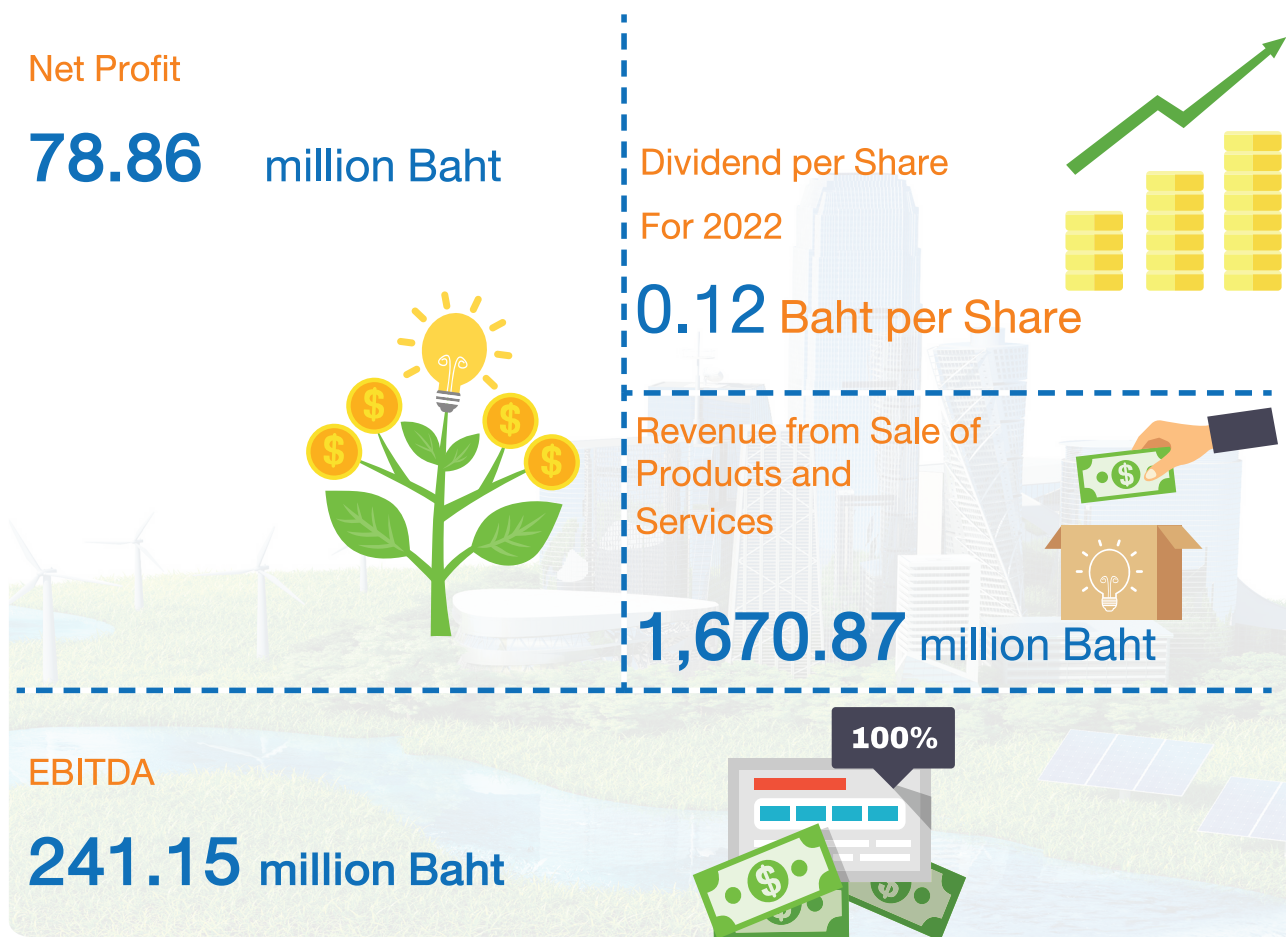
0.12 Baht per Share

Revenue from Sale of
Products and
Services

1,670.87 million Baht

EBITDA

241.15 million Baht



Revenues and Expenses (Disclosure 201-1)

In 2022, UAC Group's main revenue from sale of products and services was increased 204.61 million Baht, or about 13.95% when compared with the same period of the previous year due to the increase of revenue in Trading Business group, manufacturing of energy and petroleum and manufacturing – chemical business groups. The profit in part of the parent company was decreased by 167.95 million Baht or 68.05% when compared with the same period of the previous year. It was as the result of additional cost and the decreased profit sharing from the associated company.

Selling and administrative expenses increased by 42.16 million baht or 19.97 percent comparing to the same period last year. It was mainly due to expenses of large companies. As for financial expenses, an increase of 2.83 million baht or 5.81 percent comparing to the same period last year from long-term loan liabilities. and corporate income tax expense equal to 9.24 million baht.

Innovation and Investment

UAC Group has always given importance to the promotion and development of corporate innovation in collaboration with business partners in research, innovation, and technology development to add value to products and services. This would encourage businesses to achieve their goals and grow together according to the sustainable development framework in terms of economy, social and environment. It also used Kaizen small group activities to promote and develop innovation within the organization so that all employees could brainstorm ideas and presented new ideas which was beneficial to the UAC group. It has been done for the third consecutive year about the development and new project investment continually by focusing on Energy efficiency, circular economy, and green Energy & products such as:

- Investing in the RDF3 fuel plant project from municipal waste under Vientiane Waste Management Co., Ltd. (VWM), located in Vientiane. Lao People's Democratic Republic (Lao PDR) to be sold to SCG Group's cement plant in Khammouane subdistrict to be used as a fuel to replace coal with a capacity of 120 tons per day. Expected to start commercial operation within the second quarter of 2023.



- Investing in installing a charging station for electric vehicles under UAC Energy Co., Ltd., 1 station, totaling 5 dispensing points, in cooperation with the Electricity Generating Authority of Thailand (EGAT) by using COSTEL brand electric chargers. and the EleX by EGAT brand located in the parking area Eastern Economic Corridor of Innovation (EECI) headquarters building inside Wang Chan Valley Wang Chan District, Rayong Province.
- Investing in the installation of electric charging stations for electric vehicles under the brand SUPER FAST under a joint venture company. “PPWE” (PPWE), 2 stations, including 6 dispensing nozzles, located in Caltex gas stations in the area of Non-Sung District Nakhon Ratchasima Province which manages the station by EGAT's "BackEN" system and the station users could be easily used through the application "EleXA".



Corporate Governance and Anti-Corruption

Good Corporate Governance

The Company always gave precedence to the good corporate governance, which was regarded as the foundation of business operation for transparency and verifiability to be trusted by all related parties, resulting in the sustainable growth. Therefore, the Company had established the good corporate governance policy, and distributed the practice toward the Company’s directors, management, and employees at all levels. The Board of Directors set up the sub-committees, such as, Audit Committee, Executive Committee, Risk Management Committee, Nomination and Remuneration Committee, and Corporate Governance Committee, to perform the duties in considering, supervising, monitoring, and reporting the performance in different areas to the Board of Directors to ensure that the Company’s operations were in line with the Corporate Governance Code.




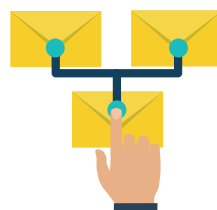
Board of Directors

The Board of Directors consisted of total 7 directors who were 4 independent directors over half of total directors in accordance with the Corporate Governance Code, and 1 female and 1 executive director. The Corporate Governance Committee consisted of total 3 committee members who were 2 independent directors and 1 executive director. The Corporate Governance Committee had duty to establish the corporate governance policy to be standard and consistent with the rules, regulations, and practices prescribed by the Office of the Securities and Exchange Commission (SEC), Stock Exchange of Thailand, Thai Institute of Directors (IOD), and other relevant laws, and schedule to hold the meeting for at least once a year in order to regularly monitor the consideration, review, and update result of the corporate governance policy, and publicize “Corporate Governance Policy” (corporate-governance-policy-th.pdf (uac.co.th)), and “Corporate Governance Report” (corporate-governance-report-th.pdf (uac.co.th)) on the Company’s website.

For the efficient corporate governance of the Board of Directors, the Company had determined to yearly assess the performance of the Board of Directors and Sub-Committees both in type of the individual Board/Committee and individual person basis. In 2022, three types of the Board/Sub-Committee assessment results were as follows.



Operating Results for 2022

<p>Assessment result of Good Corporate Governance by SET and IOD</p> <p>at 93% in excellent level</p> 	<p>Test result of post-code of conduct training</p> <p>Average scores of 17.44 scores (20 full scores)</p> 
	<p>Quality Assessment result of holding the Annual General Meeting of Shareholders by Thai Investors Association</p> <p>at 100%</p> 

Business Code of Conduct

The Company estimated the key principle of practice on business ethics, which was deemed as key basis in reinforcement and upgraded of good corporate governance as the crucial foundation of security and sustainable growth, and as the thing that supports the organization’s ability to attain the defined goal under two key basic concepts as follows.

1. Development and creation of kindness basis of the organizational personnel
2. Development and creation of good environment that is the availability of good, transparent, and explicable system and supervision, and generation of fairness to all related parties.

Thus, the Company deemed appropriate to establish Business Code of Conduct and Employee Code of Conduct for adopting and publicizing to the directors, management, and employees as the practical guideline to declare the intention of transparent and moral business operation, and took responsibility on stakeholders, concerned on society and environment. This Code of Conduct reflected the value and practice of all employees that should conduct oneself and operate in accordance with the defined Framework of Code of Conduct without any exceptions. In 2021, the Company communicated inside the organization in various forms, and organized online trainings for all employees, as well as conduct post-training tests. The test result for measuring the knowledge and understanding on Business Code of Conduct, and Employee Code of Conduct had average scores at 17.44 scores from 20 full scores.

Anti-Corruption

The Company realized and emphasized on anti-corruption by determining internal process for transparency of treatment both to the internal and external stakeholders, and verifiability, and prescribing and promulgating “Anti-Corruption Policy” and “Fraud protection policy” within the organization, and publicizing to all organizational levels from the directors, management, and employees in order to ensure that everyone was aware of the significance of the moral, transparent, and accountable business operation, and prevent corruption with all business activities of the UAC Group.

The Board of Directors entrusted the Audit Committee consisting of total 3 committee members who were determined to be 3 independent directors to perform the duty to review the internal control system and internal audit system to have adequate, appropriate, and efficient control process and system. The Audit Committee independently and carefully performed its duties pursuant to the scope of the entrusted authority that was consistent with the requirements of the Stock Exchange of Thailand and the Corporate Governance Code. The Audit Committee had hired El Business Advisory Co., Ltd. to perform the duty as the auditor of internal control system of the Company to audit once a quarter, and directly report to the Audit Committee. In 2022, total of 4 Audit Committee’s Meetings were held to report the internal control system audit result, monitoring and assessment result.

Communication and Anti-Corruption Support Activities

- Publicized the anti-corruption policy and the fraud protection policy for all organizational employees for acknowledgement by email, and post within the area of the Company and the plant, as well as publicize on the Company’s website.

Anti-Corruption Policy : [anti-corruption-policy-th.pdf \(uac.co.th\)](#)

Fraud Protection Policy : [fraud-protection-policy-th.pdf \(uac.co.th\)](#)



- Organized the employee trainings in various channels, for instance, new employee orientation before working commencement, management and employee meeting activity, management meeting, etc. to properly realize, understand, and observe.
- Participated as the member of PACT (Partnership Against Corruption for Thailand) Network in order counter fraud for Thailand, being organized by Thaipat Institute, and supported by the Office of the Securities and Exchange Commission (SEC); and deliver the representative to yearly participate in the “Anti-Corruption Day” Activity. However, in 2022, the said activity organizing was suspended due to the COVID-19 pandemic situation.
- Provided the channels of complaint or whistleblowing or suggestion to the Board of Directors through the Chairman of the Audit Committee about breach of laws, correctness of financial reporting, internal control system or breach of code of conduct by both internal and external stakeholders. In 2022, the Company did not receive whistle blowing, and complaints both from internal and external stakeholders at all, and directly reported to the Audit Committee and the Board of Directors for acknowledgement.

For Complaint or Whistleblowing Channels are as follows.

Telephone: 0-2936-1701
Website: www.uac.co.th
Letter: The Chairman of the Audit Committee
UAC Global Public Company Limited
1, TP&T Tower, 19th Floor, Soi Vibhavadirangsit 19,
Vibhavadirangsit Road, Chatuchak, Bangkok 10900
Email: chairman_auditcom@uac.co.th



Tax Strategy

The Company had a strong tax governance policy led by the Chief Financial and Accounting Officer, and responsible by the Board of Directors to perform the duty to monitor and controlled the work relating to tax and tax risk. The Audit Committee reviewed the Company's tax strategy, risk, internal control, and governance relating to tax agency. The Company established the tax policy and publicized on the Company's website (www.uac.co.th)

Risk & Crisis Management

The Company applied the risk management framework in accordance with the principle of COSO ERM in the organization to increase the risk management efficiency corresponding to the corporate vision, mission, and strategies for preventing and mitigating the risk impacts that might cause the organizational failure to achieve the goal-based objectives (Disclosure 102-11), and for creating the trust of the stakeholders of all parties. The Company could operate the business under the current continuous and rapidly changed situations, whereas the management and employees at all organizational levels participated in operations in accordance with the standard risk management system together with the corporate strategic and policy planning under the continuous governance by the Risk Management Committee to mutually achieve the business goals. There were reports to the Risk Management Committee four times a year about the summary of risk management performance and risk information and those would be submitted to the Board of Directors as well.

In 2022, according to the COVID-19 pandemic condition and situation since last year, the Company had monitored and followed up the overall impacts for controlling the risk management in the acceptable level and prepared the supporting plan for the said contingent impacts. In overview, UAC Group could well manage the risks. The Company had set and classified the risk management framework into the following: 1) Enterprise Risk Management, 2) Investment Project Risk Management, and 3) Business Continuity Management.

1. Enterprise Risk Management

In 2022, the company assessed the key risks as follows.

Risk Issue	Risk Abatement Management Guideline
Income growth	<ul style="list-style-type: none">• Set KPI goals and distributed to achieve the target each year.• New investments.• Put more operation efficiency.
Unbalance of port income	<ul style="list-style-type: none">• More investment as in KPI.• More new investments.• Put more Operation efficiency.
The success of new investment	<ul style="list-style-type: none">• More investment as in KPI.• Set up Investment Committee.• Set up Venture Capital (VC) working group.
The success of M&A	<ul style="list-style-type: none">• More investment as in KPI.• Set up investment Committee.• Set up Venture Capital (VC) working group.
The success of project in abroad	<ul style="list-style-type: none">• More investment as in KPI .• Set up Investment Committee.• Set up Venture Capital (VC) working group.
The success of projects that have already been invested	<ul style="list-style-type: none">• Feasibility study with existed plant comparison/benchmark.• Invest in projects with reliable information and skill.

Economic Risk

Risk Issue	Risk Abatement Management Guideline
Global economic recession risk	<ul style="list-style-type: none">Continuously and closely manage the change and monitor the global economic situation and government sector policies.Postpone and reduce the unessential expenses.Review the investment policy and goal to be suitable and consistent with the current situation.
Exchange rate fluctuation risk	<ul style="list-style-type: none">Enter Currency Forward Contract.Closely monitor the trend and situation of money market.Establish the practice for preventing the foreign exchange fluctuation.

Operational Risk

Risk Issue	Risk Abatement Management Guideline
Raw material inadequacy risk	<ul style="list-style-type: none">Supply other the alternative raw materials as substitute.Enter into the long-term purchase-sale contract with the deliverer.
Critical machinery operation failure risk	<ul style="list-style-type: none">Maintain the machineries on the determined plan.Supply and stock the Critical Spare Parts in order to reduce waiting period.Operate and control machineries in accordance with the SOP Principle.

Environmental Risk

Risk Issue	Risk Abatement Management Guideline
Risk from global warming, for instance, drought, storm, flood, fire, and earthquake	<ul style="list-style-type: none">Business Continuity Plan supports the business operation that may be interrupted.Make All Risks Insurance and Business Interruption (BI) Insurance.

Social Risk

Risk Issue	Risk Abatement Management Guideline
Community Complaints Risk	<ul style="list-style-type: none">Comply with the EIA measure and environmental management standard system.Prepare meeting plan, develop and promote the continuous community promotion and development activities.

Compliance Risk

Risk Issue	Risk Abatement Management Guideline
The risk of non-compliance with the law	<ul style="list-style-type: none">Follow up with the law and related rules.Evaluate and review the law at least once a year

Emerging Risk

Risk Issue	Risk Abatement Management Guideline
Continuous COVID-19 pandemic risk	<ul style="list-style-type: none">Assess the impact and formulate the risk prevention and abatement measures to control the pandemic.Regularly rehearse the business continuity management plan to cope with the unexpected situation.
Cyber threat risk	<ul style="list-style-type: none">Apply the necessary technology in work process.IT Unit performs the duty to follow up, plan, monitor, and supply the hedging instrument for cyber threat risk.Build awareness and penetratively recognize the cyber threat for the employees.
Human resource management risk for future growth support	<ul style="list-style-type: none">Determine the direction of human resource development to be consistent with the business strategies.Enhance skills and opportunity of career progress by learning and exchanging among the employees in the group.Enhance the employee engagement.

2. Investment Project Risk Management

The Company determined that all investment projects should clearly and systematically analyze the risks in each period of project implementation as follows.

- Feasibility Phase Risk
- Construction Phase Risk
- Operation Phase Risk including operational, financial and tax risks pursuant to the policy of the invested country, and exchange rate risks.
- Natural Disaster Risk

However, the Risk Management Working Group analyzed and assessed the risk and determines that all investment projects should be approved by the Risk Management Committee.

3. Business Continuity Management (BCM)

The Company prepared the Business Continuity Management (BCM) Manual to be used as the guideline for managing to support the critical events that might affect the Company's business operations. The Company systematically operated , organized the trainings in management, manager, and supervisory levels to have knowledge and understood the said matter, and encouraged the awareness on participation in carrying out the said matter.

In 2022, from COVID 19 situation, the Company had been prepared to cope with the pandemic through the rehearsal of emergency plan to be prepared for the contingent situations, adjustment of crisis management plan to be appropriated and consistent with the current situation, and adoption of the pandemic disease control measure, social distancing as determined by the government sector. In addition, the Company had assessed the situation and prepared the operating guidelines in various areas.

Safety : The Company promoted the compliance with the plan and practice on pandemic control situation by highly emphasizing on the safety of the employees, customers, and related parties, preparedness of information technology system for working from home, alternation of the days to come to work at the office as necessary, preparation of alcohol-based hand gel at every crucial point in the office and plant, preparation of masks and rubber gloves, including hourly cleaning of gateway, preparation of vaccines for the employees in case of inadequacy of vaccines.

Marketing: The Company adjusted the sale and marketing plan based on the situation and encouraged the salesperson to apply the online meeting technology and following up the works with the customers.

Finance: The Company was ready to handle and audit the liquidity on a regular basis and reduced expenses and investment funds.

Continuous Business Operation : According to the assessment of the COVID-19 pandemic situation impact, the Company had adjusted the production , marketing plans, and reduced expenses and investment funds to be suitable for the situation and set up the Venture Capital (VC) Working Group for the employee brainstorming to invent and extend the new business to support the change of business.

4. Promotion and Creation of Enterprise Risk Management Culture

The Company aimed at regularly reinforcing the risk management culture to be arisen in enterprise-wide at all levels. Therefore, the Company had prepared the risk management culture creation guidelines and adhered for observance in enterprise wide. The said guidelines consist of:

1. Risk governance
2. Risk management structure
3. Risk management
4. Risk communication
5. Publicity of risk management knowledge

In 2022, from the COVID-19 pandemic situation, the Company organized the in-house trainings on the risk management with online system, through the employee accessed for online study and then did the test after training programs. The employees had to pass the defined score criteria only. If the employees fail, they had to access to study and did the test until passing in accordance with the rules.

Change Management

The company committed and gave priority to the change management in comply with company vision and internally and externally changes. And it would be flexible for modern organization. Be prepared for changes in which the results of operations were as follows.

Performance in year 2022

Operational Excellence	UAC
<ul style="list-style-type: none">• Promoted digital transformation to adjust the work process and targeted to be KPIs in each department to reduce the process and to have efficient fasten work.	<ul style="list-style-type: none">• From the Covid -19 situation, the Company allowed staff to work from home and being being Hybrid working that was how challenging of organization and employee.• Changed cultural mindset and working style and encouraged staff to do the cross function.• Promoted and created a culture of innovation concepts and ways to improve work processes. Including developing a digital system to support various functions.• Encouraged teamwork and professionalism through activities and annual operational plans.

Supply Chain Management

The supply chain management is deemed as part of the sustainable business operation strategy, contributing to the efficiency of quality, rapid, and timely supply of products or services in the Company's operations, use of the transparent and fair supplier risk management and procurement, support the adoption of the principle of good governance, anti-corruption, labour care, and environmental and social safety. The company's supply chain management was divided into 2 main areas as follows:

1. The efficiency of Supply Chain Management
2. Sustainable Supply Chain Management by taking social sustainable development Environment and Governance (Environment, Social and Governance or ESG) to be guideline of integrated working process.

Strategies for 2022

- Promoted the knowledge and understanding, develop the procurement process of the Company Group to advance toward the excellent procurement in accordance with the international principle.
- Improved work process by adopting the technology in the process for maximum benefits of the Company both in respect to quality and reduction of cost and expenses.
- Developed the potential of suppliers with compliance with Supplier Code of Conduct, and sustainable development.

Operations for 2022

1. Efficient Supply Chain Management

1.1 Strategic Procurement Process Development

- **Procurement of alternative countries**

The Company considered low-cost country sourcing of the goods in type of equipment and spare parts used in the plants, but the quality and standard of goods were maintained to open the opportunity on competition and reduction of sourcing cost of goods.

- **Adjustment of internal working process**

The Purchasing Unit in collaboration with the related Internal Unit improved working for more efficient and planned the usage of spare parts to be consistent with the actual usage quantity to reduce the inventory quantity. Moreover, the spare parts advance ordering in the plant was help for reducing the fluctuation cost in price, It was Included cooperating with the accounting department to reduce copy papers to set up account debt from the original number of several sets, only 3 left were left: Bill of Loading, Invoice, and Packing List document.

● Digital Transformation

The Purchasing unit had applied the technology in work process to be consistent with the current situation, for instance, meeting via Microsoft teams, use of Electronic Signature in signing Purchase Orders and Contract, preparation of Online Request Form to reduce the paper consumption and increased working convenience to be workable from anywhere and enhanced more rapid service efficiency.

Operating Result for 2022

- Saving up to 6% of the budget for materials and services procurement in 2022.
- Purchasing materials and services that met the proper Spec and quality 99%.
- User satisfaction surveying results of purchasing were up to 89% in 2022.

1.2 Developing partner relations by organizing seminars with partners.

The company organized a seminar to be a good partnership annually by inviting business partners to share knowledge and their expertise to staff. It was very good feedback for their participation. The results of operations were as follows:

In summary, there were totally two seminars with business partners in 2022 as following:

No.	Courses	Operators
1	Freezone warehouse management costing and customs clearance	Business partners / HR online platform
2	Cyber Threat Awareness	Business partners / IT / HR online platform

In 2023, the company plans to continually building good relationships with partners by exchanging and transferring knowledge for sustainable growth together.

2. Sustainable Supply Chain

The Company emphasized and attempted to focus on operating the sustainable development of supplier group of the Company by applying the Sustainable Supply Chain Management Framework of the UN Global Compact as the operating guideline with the suppliers as follows.

2.1 Establishing sustainable practices for Principle, Supplier or Suppliers of Conduct were prepared by formulating the supplies and service procurement policy for sustainable business development that adheres to the principle of environmental and social operations together with governing and encouraging all suppliers to comply with the said guideline.

2.2 Criteria for analyzing and grouping the key suppliers.

- o **Critical Tier 1 Suppliers criteria is as follow.**
 - High expenses and high risk.
 - Raw materials suppliers, goods, and services for main’s business process.
 - Being the single supplier or few suppliers in the market.
 - Being the suppliers that can search for the rare goods and services.
- o **Non-Critical Suppliers criteria is as follow.**
 - Being medium or low volume trading partners and moderate or low risk.
 - Being the goods or services that are generally available in marketplace.
 - Being the goods or services that are replaceable.

Type of Suppliers	Number of Suppliers	Proportion of Total Purchase (%)
Main Key Suppliers of the Company (Critical Tier 1 Suppliers) / (Tier 1 Suppliers)	103	85.59%
Secondary Key Suppliers (Non-Critical Suppliers)	168	14.41%

“ The company had followed up on the results of the implementation of sustainable practices of business partners / business ethics of business partners. In 2022, there were no complaints and no violations of the business ethics from the group of suppliers”.

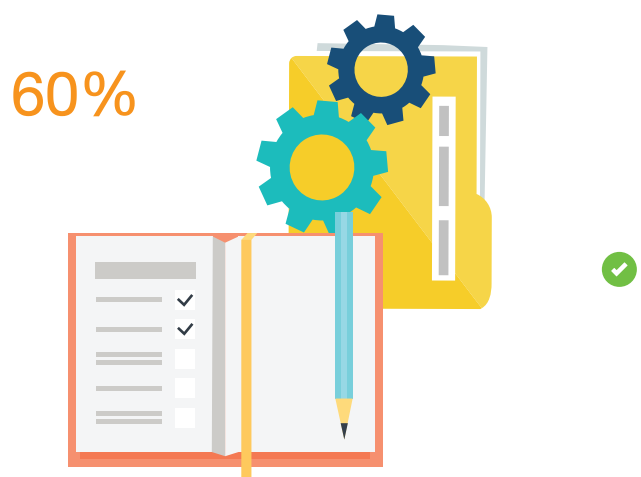
2.3 Suppliers Risk Assessment

After analyzing trading partners, the Company has encouraged the suppliers to comply with the sustainable practices and we followed up on such actions. The analysis process and risk reduction measures were shown as follows:

Supply Chain Risk Analysis Process

- **Supplier Risk Management**
 - Identify the economic impact.
 - Identify the environmental impact.
 - Identify the social impact.
- **Risk Mitigation Measures**
 - Supplier Site visit Planning
 - Internal Audit
 - Correction and Prevention of Recurrence
 - Improvement of Goods and Service Quality

Number of Key suppliers participating in the 2022 ESG Assessment



In 2023, the company aims to encourage those suppliers (Critical Tier 1 Suppliers) to participate 100% ESG assessment. Besides this, the company also promoted local procurement, especially purchasing raw materials that were energy crops from farmers which we bought continuously and nonlimit as raw materials for the production in the power plant.

Performance for 2022

Procurement	Value (Baht)
Purchasing goods and services (Local)	29.22 million
Purchasing energy raw material (Local)	16.76 million

Cybersecurity Management

The Company promoted the application of information technology system as the crucial instrument that responded the business operations and expectation of the stakeholders and had the modern and efficient standards used for execution and emphasized on the safety system in conformity to the international standards to ensure the support of the UAC Group’s business expansion.

Data Security Management in accordance with the International Standards

The Company had established and carried out in accordance with the policy and practice for the security of information technology system under the extensive supervision from:

- o Risk assessment of the information technology system, and preparation of risk abatement management plan, counter system and emergency contingency plan in case of Server’s failure to operate, provision of availability test, data backup system, and rehearsal of emergency contingency plan and business continuity management plan on a regular basis.
- o Resource management on the properties of information technology system under control of the property and equipment usage and maintenance to be perfect and available, and prevention of unauthorized access of the properties or data.
- o In data confidentiality management, the Company establishes a security measure by controlling the access of data and usage of the information system of the Company based on the necessity and significance, or secret level of data, entry of the written agreement of confidentiality, and non-disclosure of the Company’s data to the external agencies.
- o Prevention of cyber threat against the information system both from undesirable intrusion through network system and program that will cause damage to the Company’s data, and detection, prevention, and retrieval, as well as creation of awareness to the users on a continuous and regular basis.
- o Organizational communication for creating the awareness and enhancing the efficiency of information technology system usage, whereas IT Unit prepares E Newsletter focusing on the contents relating to the information system, and regularly communicates to create the awareness to the organizational users.
- o Organizing the in-house trainings in the topic relating to cyber threat and the topic of program usage for the organizational users, whereas IT Unit shall yearly carry out and determine for at least 2-3 programs per year and asses the knowledge and understanding test after training.

Personal Data Management

The Company emphasizesd on the personal data management, where the manual, policy, and practice for the personal data protection had been prepared as the guidelines for storage, usage and disclosure, and/or execution with the personal data for the Company Groupand the affiliated companies, and promulgated the document since 2020, as well as the policy guideline for using cookie on website.

In 2023, the Company had set compliance with the Personal Data Protection Act (PDPA) was one of the key indicators that every organization must implement and monitor.



Environmental Governance and Operation Excellence (Process)

Environmental Governance

The Company committed on the environmentally friendly business operation by strictly complying with the requirements of the related environmental laws and regulations and complying with the requirements of the environmental management system (ISO 14001:2015) in friendly co-existence with the communities around the plant and mutual sustainable development. The operating successes in 2021 were as follows.

- Petroleum Production Plant (PPP), Sukhothai, passed the 2022 operating audit in accordance with the requirements of the environmental management system (ISO 14001: 2015) from the Management System Certification Institute (MASCI) on 21-22 September 2022.
- Petroleum Production Plant (PPP), Sukhothai, hired MET Company Limited to prepare the result report of the compliance with the preventive and corrective measure for environmental impact and monitoring measure for environmental impact during January-December 2021, and measurement of the environmental quality as required by law. It was found that PPP had complied with the preventive and corrective measure for environmental impacts and monitoring and inspecting measure for the environmental impacts (Source: Report of MET Company Limited).
- Biogas power plant, Mae Taeng (MT) hire MET company limited to prepare a report on the implementation of preventive measures, edit and monitor the environmental impact. That was according to the Code of Practice (Code of Practice: CoP). The implementation during the January - December 2022 found that preventive measures were followed, managed and monitor on the environmental impact (Source: MET Company Limited's report.)
- Petroleum Production Plant (PPP), Sukhothai Province, arranged risk assessment for all activities that affected employee health in accordance with ISO 45001:2008 safety and occupational health standards and arranged an Environmental Aspect.) and establish a control plan according to the environmental management system standard ISO 14001:2005.

Climate Change

Greenhouse Gas Management

The Company continuously focused and tried to manage greenhouse gas emissions from various activities. However, there has not yet been done by an external verifier (Third Party), but the Company plans to have it as well.

The company operated the business under the vision and guidelines for conducting business with responsibility and sustainable environmental management. The goal was to reduce greenhouse gas emissions and manage the environment in a balanced way. It was under SDG Goals 13, Climate Action, urgently measures the climate change and its impacts, and 17, Partnerships for the Goals, to build strong partnership and global cooperation for sustainable development.

In year 2022, the company supported to plant trees to increase more green areas together with the Association of Listed Companies in the Market for Alternative Investment (MAI) through the CARE THE WILD and “ PLANT & PROTECT” project. That was considered as a collaboration platform to raise funds for truly plant forests and a sustainable source of food for the community by reforestation at Baan Aoy, Baan Boonrueng, Baanvieng subdistrict Rongkwang district in Prae province.

The amount of 1 rai was equal to 200 tons, which would help absorb greenhouse gases for 1,800 kilograms of carbon dioxide per year. Futhermore, the company continued to collect data and calculate the organization's greenhouse gas emissions. Summarized as follows:

**Table 1.1 Comparative Table showing Greenhouse Gas Emission Volume
(Electric power consumption) for 2022 – 2021 (Head Office)**

Place	Unit	Total consumption volume (Kilowatt-Hour)			CO ₂ emission (kg co ₂)		
		2022	2021	Change (%)	2022	2021	Change (%)
19 th fl	Kilowatt-Hour	105,547.00	96,502.00	+ 8.56%	52,762.95	48,241.35	+8.56%
20 th fl	Kilowatt-Hour	73,248.00	57,080.00	+ 22.07%	36,616.68	28,534.29	+22.07%
Total		178,795	153,582.00	+ 30.63%	93,379.63	76,775.64	+30.63%

Remark : Referring to the calculation formula : Greenhouse Gas Management Organization (Public Organization)

**Table 1.2 Comparative Table showing Greenhouse Gas Emission Volume
(Paper Consumption) for 2022 – 2021 (Head Office)**

Type of Paper	Unit	Total Consumption Volume (Ream)			CO ₂ Emission Volume (kg co ₂)		
		2022	2021	Change (%)	2022	2021	Change (%)
A 4 (80 Gram), 2.49 kg.	Ream	500	500	0%	2,616.99	2,617.10	-0.11%
A 3 (80 Gram), 5.0 kg.	Ream	0	5	-100%	0	52.55	-100%
F 14 (80 Gram), 3.08 kg.	Ream	0	5	-100%	0	52.55	-100%
Total		500	510		2,616.99	2,702.02	-0.11%

Remark: Referring to the calculation formula: Greenhouse Gas Management Organization (Public Organization)

Table 1.3 Comparative Table showing Greenhouse Gas Emission Volume (Air Travel) in 2022 (Head Office)

Type	CO ₂ emission (kg co ₂)
Domestic travel	16,612.88
International travel	16,203.28
Total	32,816.16

Remark: Referring to the calculation formula: Greenhouse Gas Management Organization (Public Organization)

Table 1.4 Reduced Flare Gas and CO₂ Emissions from useless burning (Sukhothai Province)

Plant	Reduced Flare Gas Emissions from useless burning (MMBTU)	Reduced CO ₂ Emission (Ton CO ₂)	Number of 10-year-old trees required to absorb CO ₂ (Tree)
PPP Plant	571,186.33	33,805.95	558,984
Power plant STN-A	210,286.44	12,445.91	205,794
Power plant PTO-A	108,919.29	6,446.44	106,592
Total	890,392.06	52,698.30	871,370.00

Remark: The calculation was referred to IPCC Reference Approach for Estimating CO₂Emission from Fossil Fuel Combustion United States Environmental Protection Agency

Biogas power plant from energy crops at Chiang Mai province promoted the cultivation of energy crops used in the electricity production process, such as Napier grass. One-time plantation could be harvested for 6-8 years. It could help reducing CO₂ emissions for soil preparation, cuttings, and planting. The purchase of corn after harvesting could be reduced CO₂ emissions as summarized in the table below.

Table 1.5 Shows the amount of CO₂ emissions reduced by cultivation and burning processes. (Mae Tang Plant)

Raw Material	Amount (Ton)	Reduced CO ₂ Emission (Ton CO ₂)
Napier grass	18,187.60	513.80
Corn	9,055.00	7,271.00
Total	27,242.60	7,784.80

Remark: Reference from Burapha Science Journal calculations (2015)

Resource Consumption

Raw Materials

1. Associated Gas at Petroleum Production Plant, Sukhothai

The Company had well improved and developed the production process and supervised and maintained the alignment of associated gas transmission pipeline from the source of oil production of PTTEP to Petroleum Production Plant or PPP, contributing to the reduction of environmental impact from flaring associated gas to atmosphere. Due to an increase in the quantity of associated gas delivered by PTTEP to PPP in 2022, it had also resulted in an increase in the quantity of associated gas raw material consumption used in the PPP process in the same way.

Raw Materials	2022	2021	2020
Associated gas (MMSCF)	403.71	350.45	295.84

Petroleum Production Plant or PPP, Sukhothai, was shut down for yearly maintenance (Turnaround) on 14 February-3 March 2022.

2.Raw Material (Energy Crop), Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai

The Company had continuously purchased an unlimited quantity of raw materials in type of energy crop and agricultural crop from the agriculturists, such as Napier grasses and corns, to be used to produce biogas for electricity generation to be the sustainable income of the agriculturalists, contributing to the Company’s availability of raw materials to be fed into production process and ability to continuously generate electricity. The purchase of raw materials for energy crops in 2022 was decreased comparing to the past two years as farmers suffer from floods causing damage to their crops and unable to replant them in a timely basis.

Raw Material	2022	2021	2020
	Tons	Tons	Tons
Energy Crop	27,242	30,208	29,124



Energy Consumption

1. Electric Energy

Throughout the past period, the Company committed to campaign the energy saving and energy consumption reduction. A measure for reducing the energy consumption at head office and plant was continuously carried out as follows.

- Energy Conservative Project
- Petroleum Production Plant (PPP), Sukhothai, uses surplus natural gas from delivering to Sao Thien Power Plant for generating the electric energy to be used inside the plant.
- Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai, recycles electric energy generated by the plant to be used in the plant’s activities.
- Turn off lighting electricity at nighttime in the unused areas.
- Control temperature of the air-conditioners at 25 C.
- Install Inverter – Deethanizer Reflux Pump size of 15 KW.

Summary of Comparative Table for Electric Energy Consumption (3 Years) (Unit : Baht)

Electric Consumption	2022	2021	2020	Change (%) From 2021
Head Office (H/O)	1,004,091.30	771,746.40	1,000,914.30	+23%
Mae Taeng Plant	719,537.21	401,383.41	88,545.00	+44%
PPP	4,368,136.05	5,073,135.41	3,557,272.00	-16%
Total	6,091,764.56	6,246,265.22	4,646,731.30	-2.53%

From the following summary of data, in 2022,

- Head Office: the electricity consumption increased when compared to 2021. It was due to most of employee were back to work in the office as normal.
- Mae Tang Plant, the eletricity consumption increased when compared with 2021 due to electric generator shut down for maintenance for long period, resulting in more consumption of the external electricity in the Company’s activities.
- Petroleum Production Plant (PPP)’s electricity consumption rate was decreased when compared with 2021. It was because the plant could generate the power on their own that was effect to lower consumption.

2. Thermal Energy

The Company had used Diesel oil and benzene in internal undertakings and employee shuttles who traveled for working at Petroleum Production Plant, Sukhothai, and Mae Taeng Plant, Chiang Mai, as per the following summary.

Summary of Comparative Table for Fuel Consumption (Chiangmai Province)

Description	2022	2021	2020	Change (%) from 2021
Diesel (Liter)	18,538	31,760	29,156	-42%
Gasohol (Liter)	2,271	3,305	1,365	-31%
Total (Liter)	20,809	35,066	30,522	-41%

Waste and Unused Material Management

1. Waste water from Production Process

• Petroleum Production Plant (PPP), Sukhothai

PPP had not discharged wastewater from production process outward the outside of PPP due to PPP's installation of Corrugated Plate Interceptor (CPI) System for treatment of wastewater derived from production process. Wastewater was derived from sorting process of water contaminated with raw materials in very few quantities, and then delivered to Produced Water Separator and CPI System for separating oil from water. The water which was passed through CPI System delivered for collecting at Wastewater Pond inside the area of PPP without discharge down to the public water resource or outward the outside of PPP. However, in the case of high quantity of wastewater, PPP carried out to request for permission to deliver for disposal pursuant to the law of SorKor. 1, SorKor.2, and SorKor. 3, and hire a company authorized by Department of Industrial Works to further take them for disposal by a proper method in accordance with the Environmental Management System Standard (ISO 14001:2015) of which PPP has been accredited.

• Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai

The Plant separated fermented water and grass residue (SIS) by Vertical Screw Separator. The fermented water which was partially came out was taken back into the production process, and the remaining was used for agricultural benefit, for instance, field crops, horticultural crops, because the fermented water contained mineral nutrients consisting of organics essential for various species of plants. In part of grass residues (SIS), they were dried to expel moisture and further used to produce soil conditioners (SIS).

• Burapha - A Petroleum Production, Sukhothai

There was no water drainage. from the production process (Produced water) to public water sources or outside the production base. All water from the production would be compressed and sent back to by the Water Injection Pump system. In case that the water cannot be returned, the plant would dispose by employing a legally licensed waste transporter and disposer.

2. Waste Sorting

- **Petroleum Production Plant (PPP), Sukhothai**

PPP’s waste sorting system was in line with the requirements and standards. Wastes were classified into three types and disposed by PPP as follows:

1. General wet wastes were collected and delivered for disposal at Krai Nok SAO.
2. Recyclable wastes (non-hazardous) were collected to request for permission to deliver for disposal pursuant to the laws of SorKor.1, SorKor.2, and SorKor.3, and hired a company authorized by Department of Industrial Works to further take them for disposal by a proper method.
3. Hazardous wastes were collected to request for permission to deliver for disposal pursuant to the laws of SorKor.1, SorKor.2, and SorKor. 3, and hired a company authorized by Department of Industrial Works to further take them for disposal by a proper method.

- **Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai**

Waste sorting was managed before delivering for disposal into 4 types consisting of:

1. Garbages were delivered to the waste disposal area of Mae Taeng Municipality.
2. General wastes were delivered to the waste disposal area of Mae Taeng Municipality.
3. Recyclable wastes were collected for sale to the purchaser of junks.
4. Hazardous and polluted wastes were disposed by hiring a company authorized by Department of Industrial Works to further take them for disposal.

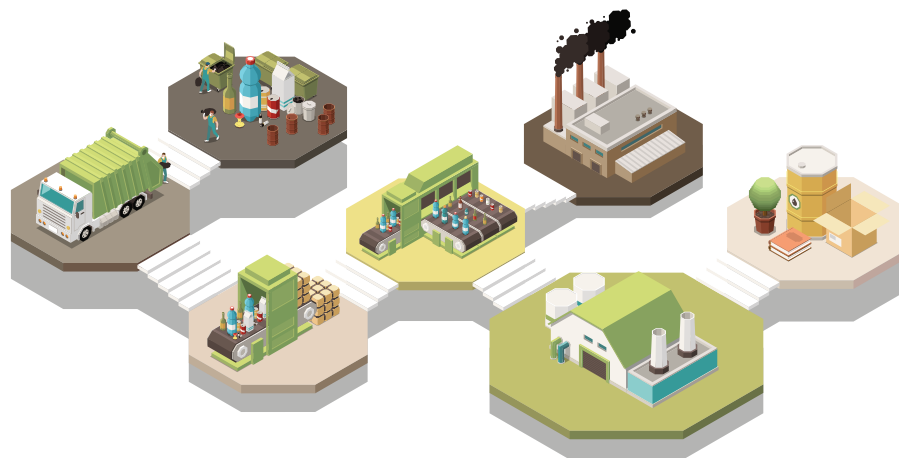
3. Used Engine Oils and Batteries

- **Patroleum Production Plant (PPP), Sukhothai**

PPP collected the used engine oils and batteries to request for permission to deliver for disposal pursuant to the laws of SorKor.1, SorKor.2, and SorKor.3, and hire a company authorized by Department of Industrial Works to take them for disposal by a proper method.

- **Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai**

The plant collected the used engine oils and batteries for sale to a waste processor who was granted for a license from Department of Industrial Works.



Operational Excellence

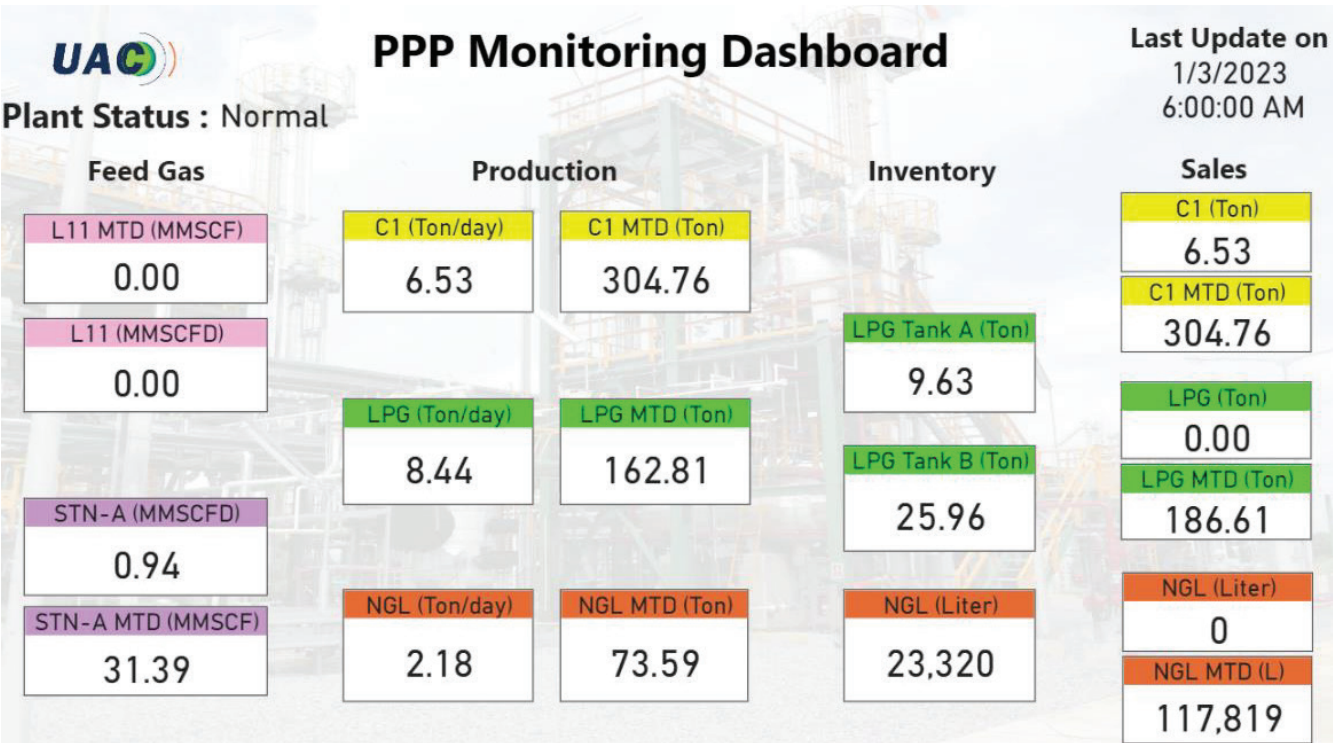
The company promoted and supported to increase productivity to employees (Productivity). It was included 5S activities and Kaizen Suggestion in the form of Small Group continuously to reduce costs and wastage in the work process and increase efficiency as well as work safety. Therefore, KPIs had been set for Small Group activities under the concept of ESG in order to develop a sustainable organization that led to an organization of quality management in whole organization (Total Quality Management, TQM). The employees had accepted and participated in these activities seriously and the performance of such indicators (KPIs) was satisfactory accordingly.

Additionally, the company also seriously responded to customer satisfaction by adopting various standard systems. It was started from receiving raw materials until products or services were delivered to customers and requiring employees to participate in thinking and developing in every process. Since 2018, the company had implemented the Kaizen system and 5S. planning and learnt the TQM system starting from doing Small Group Activities that was extended from Kaizen.

In 2022, the company was improved the process under the concept of Process Innovation, which used the Power app program to help in accounting departments for expense reimbursement, personnel departments for annual performance evaluations. and expanded to other sectors in the following year.

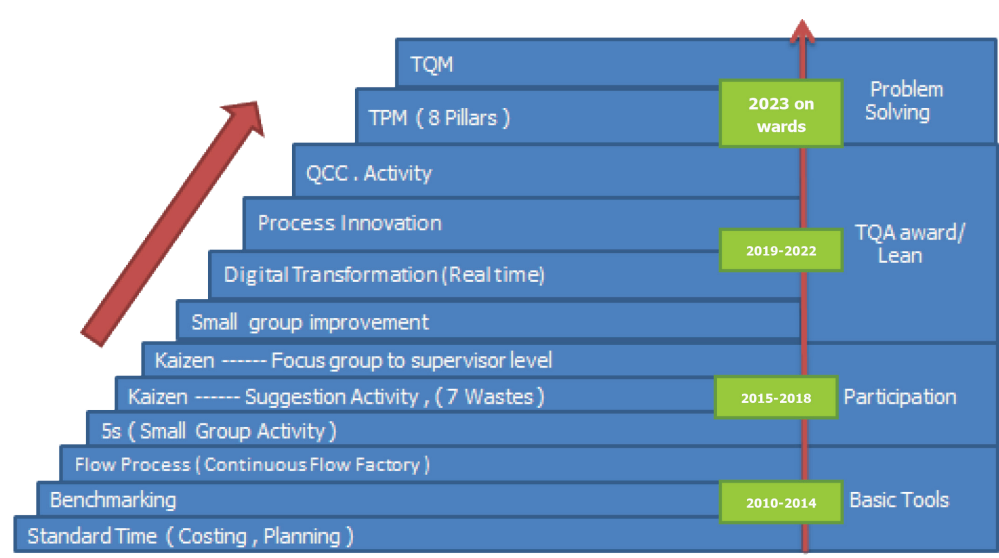
As for Digital Transformation (Real Time), there were Monitoring Operation Process data displayed on the dashboard from the factory. and showed results to the head office. The screen would display (Details as shown in the below picture) In addition, the company was studying the implementation of the ERP system for application in the work process as well.

Monitoring Operation Process Dashboard



Achieve Operational Excellence

Productivity Improvement Road Map



Operating Results

5S activities

In 2022, the Company continuously carried out 5S activities and defined to be Individual KPI of the employee for the employee awareness and organizational change. In this year, the Company has aimed at the matters of S-Seiketsu, and S-Shisuke with more than 85% for the operating target of the enterprise-wide.

Target and result of 5S activities for 2022

KPI	Target	Result	Remark
5S Area Audit Score	> 85 %	88.20 %	More than 1.04 %

The company also set goals for Small Group activities to make staff awareness and have change in the organization. The goal of Small Group activities was to reduce waste of time, cost, and increase operational safety. And another goal was to increase efficiency and effectiveness in work under the concept of ESG for sustainable organizational development.

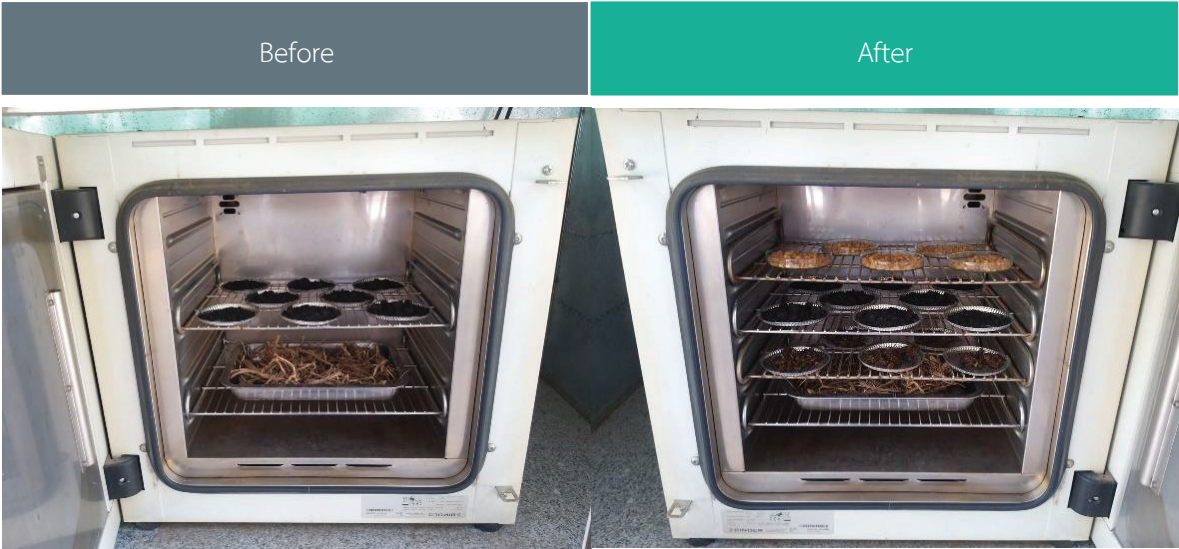
Target and result of Small Group Activities for 2022

Target	Result
25 Projects	24 Projects

In 2022, the main Small Group activities were summarized by areas as follows:

Plant Group

- **Project Development group**, the power plant from energy crops, Chiangmai province made the Hot Air Oven tray from 2 layers to 4 layers in order to save power consumption and measuring time of raw materials moisture. carbon could be decreased at 3.61 kgCO₂e (as shown below).



- **Creative Innovation group**, PPP prepared a heat shield to reduce energy.to reduce the workload of the radiator cooling fan motor because there was hot air coming back into the heat sink after doing this, the working volume of cooling fans could be reduced from 10 to 8 by reducing the use of 2.2 kW motors, which could reduce carbon emissions by 6,762 kgCO₂e.



Head Office and Warehouse

- **Accounting Department** - Paperless for cost sheet
Adjust the work process to less the document storage and expense., it would save the amount of 74000 Baht per year. And carbon emissions could be reduced by 85.5 kgCO₂e.
- **IT Department** – IT man used the POWER APP – online platform named IT REQUEST to use less of papers which could reduce the use of paper 350 sheets / year and reduce carbon emissions by 2.93 kgCO₂e.



In 2022, the Operational Excellence activities were scored by giving them token to the one who participated since year 2021. Those would get award from the management team.

Quality Management System

The company had continuously implemented quality management system activities. Summarized as follows:

No.	Quality System	Place	Accreditation Agency	Certification No.
1	ISO 9001:2015	Head Office and Warehouse	SGS-UKAS	TH09/3331
2	ISO 9001:2015	Biogas from Energy Crop for Electricity Generation (Mae Taeng Plant), Chiang Mai	SGS-NAC	TH13/7479
3	ISO 9001:2015	Petroleum Production Plant, Sukhothai	MASCI-NAC	QMS15011/1566
4	ISO 14001:2015	Petroleum Production Plant, Sukhothai	MASCI-NAC	EMS17020/457
5	ISO 45001:2018	Petroleum Production Plant, Sukhothai	MASCI	OHSMS20067/145

Value Creation and Social Care (People)

Workplace Security

From the Company's commitment on operations pursuant to the maximum operating safety, and business operation excellence and sustainability policy (Safety & Operation Excellent) leading to the determination of safety value that was "E2E" (Education, Enforcement, Emergency Plan Response) for promoting to be the organization with Zero Accident at Work. The obvious operating success in 2022 is as follows.

- Petroleum Production Plant (PPP), Sukhothai, passed the operating certification in conformity to the requirements of the occupational health and safety management system (ISO 45001:2018) from Management System Certification Institute (MASCI) and it is effective from 21-22 October 2022

From the operating success in last year of PPP, Sukhothai, the Company had applied the body of knowledge acquired from PPP to cover all operating areas both in the country and abroad, and the operations in conformity to all of 14 complete elements of the production process safety management system standards. In 2022, the Company had already carried out for 9 topics as follows.

1. Contractor Safety Management (CSM)
2. Hot Work Permits and Non-Routine Permits
3. Emergency Planning and Response
4. Management of Change
5. Employee Participation
6. Incident Investigation
7. Requirement Compliance Audit
8. Mechanical Integrity
9. Employee participation

In part of other 5 elements that have not yet been carried out, the Company has continued to establish the plan and goal to be complete.

Transfer to Practice

In the knowledge transfer and the employee skill development relating to the safety at work, the Company uses various forms of the action channels as follows.

- Declaration of the quality, security, safety, occupational health, environment, and social responsibility (QSHE) policy
- Targeting safety and Zero accident as joint Corporate KPIs.
- Permitting the employee sharing on safety in every Monthly Management's Meeting, and the plant sharing on safety in the meeting before daily work commencement by sharing alternation
- Employee training on safety at work, fire prevention and suppression, and first-aid
- Safety training for the contractors and visitors before each entry into the plant's area
- Health insurance and accident insurance for the employees
- Medical examination before employment/yearly medical examination by taking into consideration to be conforming to the occupational health and safety law, and existing risks.

Creation of Participation

- Safety at work training activity for the employees and contractors



• Rehearsal of Event Suppression pursuant to the Emergency Response Plan

The Company understands the efficient and safe production is an important factor that creates the stakeholder trust on the Company’s production process. Therefore, the Company strictly manages safety of the employees, contractors, and communities around the plants, with the preventive guideline for accident or serious accident due to production, for instance, arranging the rehearsal of the preparedness to suppress the emergency of Petroleum Production Plant, Sukhothai, and Biogas from Energy Crop for Electricity Generation at Mae Taeng District, Chiang Mai, at the scene, and EMC/HO Help Center in accordance with the law of Department of Labour Protection and Welfare by simulating the emergency event. The rehearsal is in line with the procedure and manual for emergency response plan and fire prevention and suppression plan.



Occupational Health and Safety

The Company emphasizes on health and occupational health of the employees with the expectation that the employees come to work and go back home with safety. To achieve the target, the Company executed the following.

- Petroleum Production Plant (PPP), Sukhothai, assesses the risks of all work activities affecting the employee health pursuant to the ISO 45001:2018 safety and occupational health system.
- Petroleum Production Plant (PPP), Sukhothai, assesses the nature of the environmental problems, and establishes the control plan pursuant to ISO 14001:2015 environmental system standard.
- The Company’s KPI of safety is yearly defined with Zero Accident target.

Operating Results for 2022

- Employee Injury from Occupational Accident up to Referral Stage for Medical Treatment = 0
- Accident Caused by Gas and Chemical Leakage = 0
- Injury Frequency Rate (IFR) = 0
- Injury Severity Rate (ISR) = 0
- Total Injury Frequency Rate (TIFR) = 0
- Loss-Time Injury Frequency Rate (LTIFR) = 0

From the Company’s commitment on the operations in accordance with the maximum operation safety, and excellence and sustainability of business operation, led to the determination of safety value that was “E2E” (Education, Enforcement, Emergency Plan Response) for promoting to be the organization with Zero Occupational Accident.

• Yearly medical examination activity for the employees (Head Office)



Creation of Good Customer Relationship and Customer Responsibility

The Company gave precedence to the fulfillment of customer demand with its full effort, and theresponsibility on all procedures both before and after delivery of products and services, causing the customer trust on the Company through the continuous receipt of purchase orders.

The Company established the customer complaint management process in case where the problem of the Company’s product and service usage was detected in accordance with the ISO 9001:2015 Quality Management System. If the customer complaint was arisen, the customer could inform the complaints, the Company raisedthe said issue into the audit process by inviting all related parties to attend the meeting for mutual discussionon the solution method and preventive process, and after that, replying to the customer were informed tof the management and preventive guideline for non-recurrence of problem.

Besides the responsibility on the delivery of products and services, the Company also focused and emphasized on the selection of goods, raw materials, and services from the source of production or service providers that were quality, reliable, and acceptable in each industry. It was regarded as the very important first responsibility for creation of the customer acceptance on usage of products and services with maximum confidence.

Creation of Good Customer Relationship

The Company emphasized on the product and service development planning in order to fulfill the customer needs in the changing and highly competitive market condition all the time. Thus, the management always reiterated the Sales Department about the requirement of the Company’s real accessibility of the personnel to the customer needs by offering products and services that could appropriately address the customer problems.

Due to the existence of the COVID-19 pandemic was in better situation, many companies eased the rules and could be able to work in the office as normal. It was the good opportunity to meet the customer. Somehow, the new normal meeting as Virtual meeting remained since it would be more convenience and also had webinar with supplier and principal for technical product update that was benefit to both customer and suppliers.

Development of Two-Way Communication Mechanism between the Customers and Suppliers of the Company	Development of System and Technology for Relationship Support
<div>- Continuous development of customer contact channels both by phone and online media, for instance:<ul style="list-style-type: none">• Website, Email, Line• Mobile/ WhatsApp• Microsoft Teams</div>	<div>- Development of various access channels for fulfilling the customer needs without delay</div>
<div>- Regular customer meetings</div>	<div><div>- Face to Face Meeting</div><div>- Virtual Meeting via Microsoft Teams Program (particularly in the period of the COVID-19 pandemic situation)</div></div>
<div>- Yearly satisfaction survey</div>	<div>- For development and improvement of products and services</div>

In addition, the Company also yearly conducted the customer satisfaction survey for the continuous improvement and development from the customer issues or suggestions, bringing about the fulfillment of the maximum satisfaction of the customers.

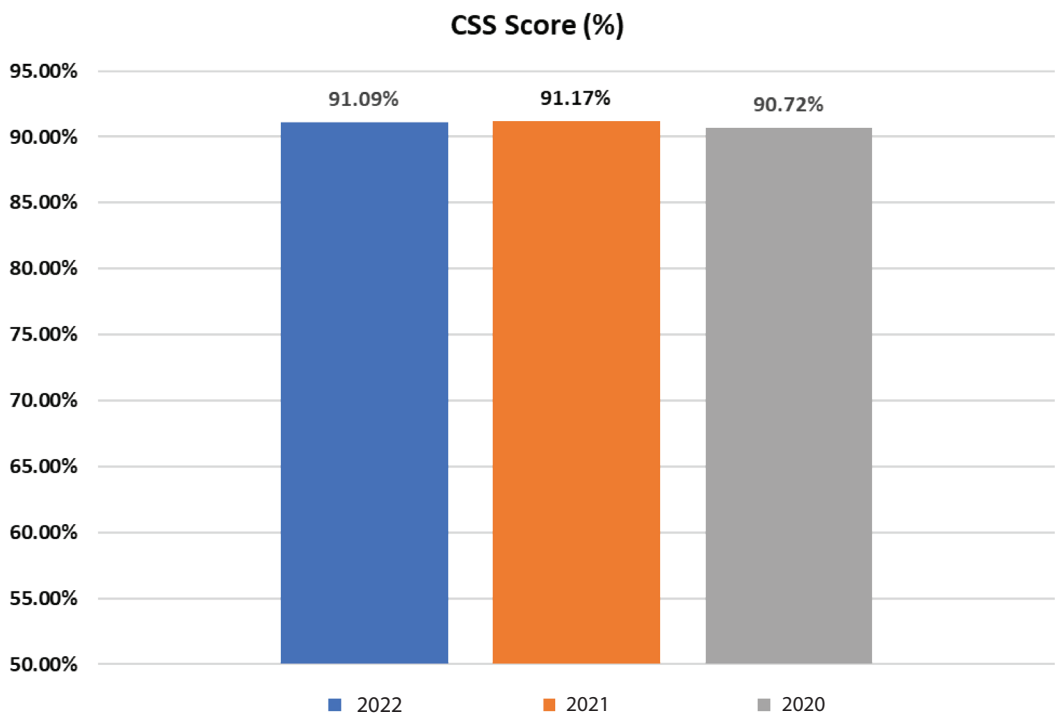
Criteria for Customer Satisfaction Assessment for 2021 are as follows.

- Quality
- Delivery
- Problem solving and prevention of recurrence.
- Services of the Company’s Sales Department and officers.



Customer Satisfaction Survey Result

Graph of Customer Satisfaction Assessment Result (3-Year Comparison)




In 2022, the satisfaction score was 91.09% higher than the set target that reflected to company development. The company had strong intention to bring suggestions from customers to further improve and developed products and services for their maximum satisfaction.

“In 2022, the company did not receive any complaints from customers.”




Products and Services Responsibility

The Company adopted the ISO 9001:2015 quality management system standard to govern the procedure and method from the procurement, ordering, inspection and acceptance, and delivery procedures by adhering to the important operating guideline.




Correction

The correctness of product, product requirement, and delivery shall be inspected in accordance with Checklist, terms and conditions of delivery, and correction of delivery documents.




Time

The punctual delivery should carried out based on the schedule and delivery standard requirements of the customer, and the next delivery shall be mutually planned.



Rapidity

The Company focuses on the rapidity of product and service delivery, customer fulfillment in case of requirement of urgent product usage, and the procedure for managing the importance and service provision to the customers.



Standardization

The Company continuously maintained the standard product and service delivery level, and listen to the suggestions for upgrading the standards and consistent with the laws, rules, and regulations of the government sector agencies.



Employee Care

The company committed to have sustainable growth in all business groups according to the Company's values by driving the organization efficiently according to the Company's Core Value (WE R UAC). it would be along with knowledge and employee competency for their career advancement and happy work by the conceptual framework, goals and operations were as follows.

Conceptual Framework of Employee Care

- Focusing on developing and built good relationship to organization (Employee Engagement)

The company encouraged the employees to have good quality of lifes. Make them work happily by operating under the business ethics and employee ethics. Employees received fair compensation and focused on creating a good image of organization to joint venture and maintain good works continuously

Manpower Planning and Recruitment

The Company had the manpower planning both internal and external that were very important to good human resouces in order to be prepared for business expansion. And the Company had a strategy and recruitment plan. by preparing an enterprise risk management plan

Recruitment Operation Guideline

1. Joining job fairs with colleges and universities in order to publish the organization. In the COVID situation, the company changed to Job Post Online on the website and on the HR page on Facebook for specific groups.
2. Coordinating with targeted universities to select applicants that reached the company qualifications.
3. Coordinate with universities that are the target group to be a special guest speaker. or organizing activities to provide the company information and job positions to students.
4. Job Search, selecting the spared candidate every week.
5. Proposed to selected candidates based on Competency, Ability/ Experience (70:30)
6. Proposed to all departments plan of new workskills for potential employees.

Operating Result

KPIs and Target	2022	2021	2020
Plan-Based Successful Employment Rate (%)	90.40%	100%	100%
New Employee Recruitment Period (Day)	Within 45 days	Within 45 days	Within 50 days
New Employee Hiring Rate (Person)	4	1	9

Employee Training and Development

The Company had continuously developed the employee learning and development programs to create working professionalism, management cognizance, as well as essential skills and competencies for enhancing the efficiency and being ready for accepting the changes. The programs were classified into the following.

1. Leadership Development Programs

- Lessons Learnt from Financial Cases: How Board should React (RFP5)
- TLCA CFO Professional Development Program no 1/ 2022
- Nano Technology Scuba Course
- Wellness & Healthcare Business Opportunity Program for Executives (WHB) Batch no 2
- TLCA CFO Professional Development Program No 2/ 2022
- Financial Reporting Cases: A Monitoring Guide for Board
- Digital CEO #5
- TLCA CFO Professional Development Program No 3/ 2022
- TLCA CFO Professional Development Program No 4/ 2022
- Governance and IT Risk Management 4.0
- TICA CFO No 5/2022 Topic of "Restructuring Business for Growth"
- Human Capital Management (HCM) Batch No 1
- Advanced Master of Management Programme (AMM) Batch no. 9
- TLCA CFO CPD No 8/2022 Topic of "ESG Bonds in Corporate Financing"
- CEO Club Opportunities and challenges in Thai finance and capital market

2. Employee Development Program

- Environmental Manager
- Supervisor of air pollution treatment system
- TLCA Executive Development Program
- The Art of Ultimate Branding
- Data analysis techniques to increase energy efficiency and reduce electricity bills in industrial plants.
- Advanced Import - Export & Customs Case Study
- Director Leadership (DLCP 4/2022)
- Corporate Finance
- Corporate Funding and Liability Management
- Microsoft 365 Security Administration
- CSR Transformation SET SE 201
- Carbon Tax
- Leadership X
- Financial Reporting Cases: A Monitoring Guide for Board
- BCD Intensive
- Financial Analysis Batch no 1/65
- Taxation for finance
- Risk Based Annual Plan for Internal Auditor: From P2P (From Principle to Practical) Batch no 2/65
- Get to know more knowledge and practical Subject: Land, buildings and equipment and borrowing costs No 2/65
- Techniques and how to do stock inventories.
- Financial Statement (Workshop) Batch No 2/65
- Microsoft Excel for audit - Basic Level No1/65
- Integrated internal audit of sales and accounts receivable system. No 1/65
- TLCA Executive Development Program (EDP2022)
- Mindfulness Organization
- Boiler safety and good practice according to legal requirements.
- Bio-Processes Scale-Up & Equipment

- Basic knowledge of Personal Data Protection Act (Business)
- Reviewint the knowledge for boiler operators.
- Exclusive site visit Sweden and Denmark
- TICA CFO No 5/2022 Topic "Restructuring Business for Growth"
- The Power of the 7 Habits
- Beyond Training: Go Beyond Your Limit
- Installation and safety checklist for scarfolding
- TFRS 16-year 2022 Interesting principles and issues
- Human Capital Management (HCM) Batch No 5
- Synergy for Management Batch No 6
- Intensive tutoring100 New AGM Checklist year 2023
- Recycle wastewater for industry Batch No 2
- IR Sharing 4/2022 topic of ‘ESG with the concept of corporate information disclosure. ’
- Crane controller, Signal controller and material handler (for crane)

Operating Results for 2022

Despite of the impact on delivery of the employee for external trainings due to the continuous COVID-19 pandemic situation occurrence for the second year, the company had also continuously organized in-house trainings in form of Online Training and delivered the employees for public trainings with the standard and famous institutions in form of On Site. The summary of the operating results in training was as follows.

KPIs	Target	Results	Remark
Hours per year of training	> 20 hours /year	23 hours /year	Considered by hours of training hours All courses averaged per year.
% Satisfaction of participants	> 85 % after training	92%	Considered from the evaluation scores after training - on average per year.

Number of course training in 2022

Type	Courses	Training (hours)	Participants (person)	per person / course
In-House trainings	19	2,872	656	35
Public trainings	80	1,935	80	80
Total Courses/ Participants	99	4,807	736	115

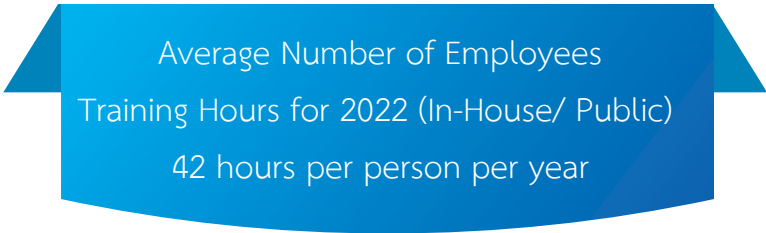
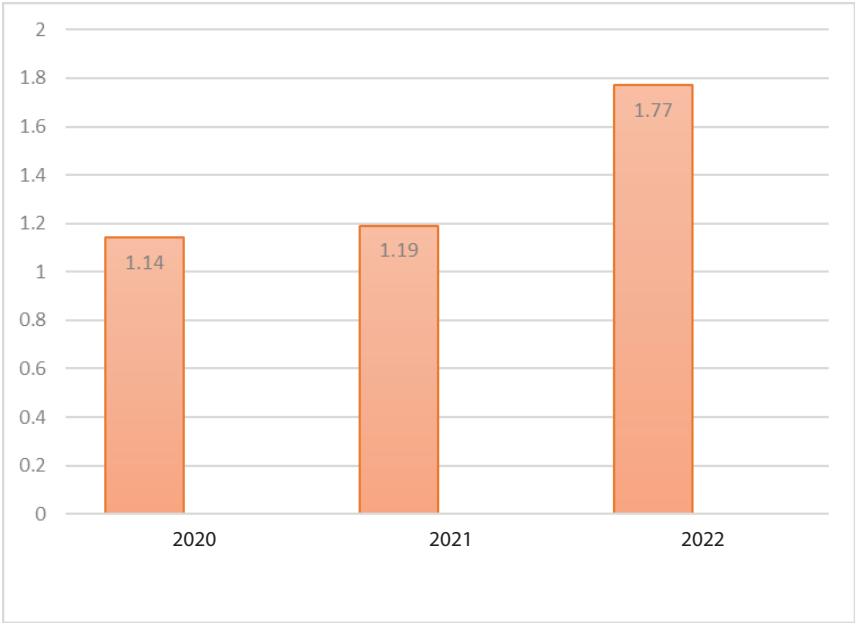


Table for Personnel Development Expenses in Comparison between 2020 - 2022

Expense (Million Baht)



Average Employee Training Expenses
for 2022
15,776 Baht/Person/Year

The company targetted the employee turnover rate not to exceed the industry average. That was no more than 10 percent.

Operating Results for 2022

Turnover Rate (%)	Market Survey (%)	Petro, Oil, Energy (%)	UAC (%)
2022	11.60%	11.80%	5.26 %
2021	19.70%	13.65%	1.74%
2020	18.50%	19.20%	5.22%



Performance Assessment and Remuneration Management

Performance Assessment

Special Criteria-Based Promotion (High Potential & Fast Track)

The Company considered the employee with the continuous good performance based on the criteria of employee promotion consideration to be consistent with Career Management together with the essential specific skills for the higher position, as well as the appropriate personality or leadership skills to be used for supporting the consideration and selection of the qualified person for promotion.

Remuneration Management

The company had the wage management policy. Remuneration would be suitable for their roles and responsibilities. It would help to motivate more efficiency work by grading their job evaluation in every job position and clear salary structure and compensation.

The appropriate remuneration management in each level was an important part of engagement creation and step toward the high-efficient organization. The Company conducted the remuneration and welfare benchmark survey between the similar industries and market overview.

Creation of Organizational Engagement

The Company yearly conducted the employee opinion survey to take the acquired opinions for improving the execution in the employee engagement creation. In 2022, from the survey result, the Company earned Overall Engagement Score. The survey result was classified into two parts as follows.

Operating Results for 2022



Technology in workplace and communication

The Company applied technologies in working under the concept of “Workflow Digitalization”, to useless papers and bring more technologies to fast work and communication There were usage of MS-Outlook, Microsoft Team, Microsoft 365, LINE and Yammer, etc.

Promotion Activities for Happiness and Organizational Engagement Creation (Happy Workplace)

The Company encouraged the happy working for both physically and mentally happiness That would become fundamental concept for Happy Workplace that there were some activities as following.

Activities	Details
Happy Body	<ul style="list-style-type: none">- Pre Employment Medical Examination- Post-Employment Medical Examination (Yearly)- Excercising- Health Insurance, Employee Accident Insurance
Happy Relax	<ul style="list-style-type: none">-Team Building Activity-Yearly SD Day & Night Party Activity-Songkran’s Day Activity
Happy Soul	<ul style="list-style-type: none">-Mental Vaccine Activity for Provision of Buddhist Doctrine and Ethical Concept
Happy Money	<ul style="list-style-type: none">-Happy Money planning by SET-Giving financial knowledge, saving money, debt management-Provident Fund
Happy Heart	<ul style="list-style-type: none">-Basket for visiting the sick employee in case of the illness and hospitalization, and the employee who takes maternity leaveAwarding the employees who worked 15 /20 and 25 years
Happy Family	<ul style="list-style-type: none">-Wedding Ceremony Grant-Buddhist Ordination Grant-Funeral Grant-Accident Insurance (in case pass away)-Fire allowance
Happy Brain	Encouraged employee to learn more and develop themselves.
Happy Society	Encouraged employee to help the community nearby in each area with CSR activities

Return of Value Compensation to Our Community

The UAC Group gave precedence to the participation in community and social development in accordance with the guidelines of sufficiency economy and sustainable development and endeavored to grasp the needs and expectation of short-distance communities (at area level), and long-distance society (at country level) in order to appropriately build the good relationship and fulfilled the community expectation and needs. Most expectations had been the following matters.

- (1) Implementation of safety activities
- (2) Fast communication in the event of emergency
- (3) Community participation in the activities that are useful for the community and society

Performance

In 2022, the Company had participated in the community and social development in each main aspect as follows.

SET Social Impact Gym 2022 Project

The Company participated in SET Social Impact Gym 2022 under the idea of Idea to I-done. This project was to develop skill for Social Enterprise to run business with strength and efficiency. With the aim of having social business people take part in caring society, agriculture, vulnerable group community, society development, health, education and environment. It also included sustainable business and social expansion.

In 2022, the company joined as a volunteer coach for Songsuk Social Enterprise Co., Ltd. which was a social business providing consulting services and training, disseminating life coaching skills to provide society with solutions. It was reduced social impacts that had stress, suffering problems, and strengthen the society. Moreover, Songsuk Social Enterprise Co., Ltd. also taught life coaching to the Children's Council, which was an agency that brought leaders in each community. who were students to learn Life Coaching.

Guideline	Result	Output	SE Result according to SDGs Goal
Song Suk Social Enterprise Co., Ltd.			
Consultation, giving opinions, in-depth suggestions in administration and social business management.	SET Social Impact Gym 2022 from August to October 8, UAC Global Public Company Limited participated as a volunteer coach for 19.60 hours for 5 weeks and business planning consulting throughout the course, both at the SET. office and online	1. Songsuk Social Enterprise Co., Ltd. understood operational problem. and knew how to solve problems through Business Model Canvas 2. Songsuk Social Enterprise Co., Ltd. could analyze the business, strengths, weaknesses, as well as obstacles and opportunities of its own company. To improve business performance while being able to create sustainable and clear social result.	Target 3: Ensure healthy lives and well-being for all ages. Target 16: Helping peaceful and inclusive societies for sustainable development. Providing the fairness and building effective, ccountable and inclusive institutions at all levels.

Safety and Hygiene Project

Projects/Activities for 2022	Details
Dengue Fever Prevention and Control and Community Waste Management Project, Mae Taeng District, Chiang Mai Province	Biogas power plant from energy crops Chiang Mai Province Participated in the prevention and control of dengue fever and waste management with Mae Taeng Municipality.
Project to support masks, consumer goods, beverages, Chiang Mai Province	<ul style="list-style-type: none"> Mae Taeng Plant donated masks, household items, and beverages to the Community Health Center in Mae Taeng District, Chiang Mai Province.
Medical Equipment Support Program in Sukhothai Province	<ul style="list-style-type: none"> PPP donated equipment to help prevention the spread of the COVID-19, such as ATK testing kits, alcohol for Ban Prak Rak STD Hospital, Sukhothai Province. PPP donated equipment to help prevention the spread of the COVID-19, such as face masks, alcohol to the Korat Subdistrict Administrative Organization and Krai Nai Subdistrict Administrative Organization in Sukhothai Province for the patient or someone who needed.

Educational Project

Projects/Activities for 2022	Details
National Children’s Day Supporting Activity	Sponsored 15 bicycles as prizes of National Children’s Day Activity for Krai Nai SAO/Krai Nok SAO/Krai Klang SAO, and 5 bicycles to Krai Nai SAO
Computer Donation Project	PPP Plant and UAC Energies Co., Ltd (subsidiaries) donated 2 computers to Prak Rak School and 2 for Wat Rat School for using in the computer subject and searching data for their reports

Social and Quality of Life Project

Project/Activities 2022	Details
Fertilizer Knowlege	Mae Taeng Plant and the municipal met the people of Mae Ka Subdistrict to give soil improvement materials and educate people about the fertilizer.
Love water, Love Forest, Love land	Mae Taeng Plants participated in the projectof Love water, Love Forest, Love land together with Mae Taeng municipal office in Chiang Mai Province
Giving HDPE pipes to communities in Sukhothai Province	PPP donated 4 HDPE pipes, size 8 inches, to Khlong Wang Thong Temple. and Wat Khlong Takhe, amount of 10 pipes at Korat Sub-district, Kong Krailat District in Sukhothai Province
Air Con Donation to police stations in Sukhothai Province	PPP donated an air conditioner to Kong Krailat Police Station Kong Krailat District in Sukhothai Province

Culture and Tradition Conservation

Activities for 2021	Details
Royal Kathin Robe Offering Activity	Royal Kathin Robe Offering Activity in Bangkok area
Yearly Khunnam Festival Activity	The representative joined Traditional Khunnam Ceremony Activity Customs Festival in the area of Mae Taeng District, Chiang Mai

Future of Community and Social Participation Plan

The Company also emphasized on participation in caring the communities around the plants together with business operation, and continuously supports or organizes the activities for the communities to mutually develop for improving the quality of life, livelihood of the community people, and created good relationship with the communities around the plants for sustainable and friendly co-existence and creating the trust on the plant safety. In each plant area, the community development plan was yearly prepared in collaboration with the community to be consistent with the Company’s policy guidelines.





About this Report

Report Content

UAC Global Public Company Limited had prepared this Report to disclose the Company's sustainability performance (Disclosure 102-52) for 2022 as the sixth year including the economic, social, environmental, good corporate governance issues to show the performance in period during 1 January – 31 December 2022. The Company had used a reporting guideline in accordance with the GRI Sustainability Report Standard (GRI Standards) (Disclosure 120-50). In addition, the Global Sustainable Development Goals (SDGs) had been integrated with the organizational strategies and operations to show the commitment to fulfill the goals, requirements, and expectations of all groups of stakeholders.

Report Boundary (Disclosure 102-45, Disclosure 102-46, Disclosure 103-1)

This Report presented the data of performance in 2022 including the operation of all companies under the UAC Group that operate their businesses in Thailand.

Report Assurance

The essence of this Report had been reviewed by the Sustainability Working Group (Disclosure 102-32) to ensure that the reported data was completed, proper and inclusive of response to all groups of stakeholders. However, the Report and Key Performance Indicating from an external expert agency had not been audited and certified, but the Report had been certified by the Company's Executive Committee. The Company had not yet planned to submit the Report's audit and certification by an external agency.

Contact Information

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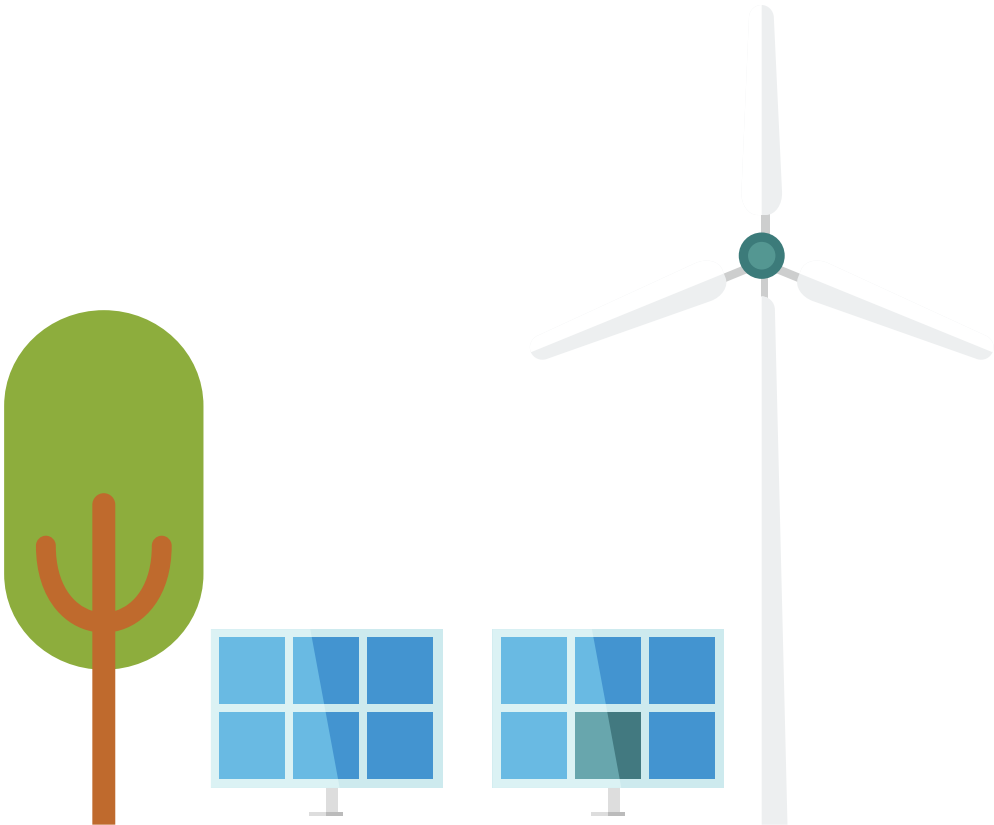
GRI Sustainability Reporting Standards (GRI Standards)

GRI Standard	Description	Page/Link/Comment
Organization Profile		
102-1	Name of the organization	6
102-2	Activities, brands, products, and services	10-11
102-3	Location of headquarters	6
102-4	Location of operations	7
102-5	Ownership and legal form	8
102-6	Markets served	10-11
102-7	Scale of the organization	6
102-8	Information on employees and other workers	6
102-9	Supply chain	10-11
102-10	Significant changes to the organization and its supply chain	-
102-11	Precautionary Principle or approach	-
102-12	External initiatives	-
102-13	Membership of associations	6
Strategy		
102-14	Statement from senior decision-maker	4-5
102-15	Key impacts, risks, and opportunities	30-32
Ethic and Integrity		
102-16	Values, principles, standards, and norms of behavior	-
102-17	Mechanisms for advice and concerns about ethics	-
Governance		
102-18	Governance structure	9
102-19	Delegating authority	9
102-20	Executive level responsibility for economic, environmental, and social topics	15
102-21	Consulting stakeholders on economic, environmental, and social topics	17-18
102-22	Composition of the highest governance body and its committees	9
102-23	Chair of the highest governance body	9
102-24	Nominating and selecting the highest governance body	26-27
102-25	Conflicts of interest	28-29
102-26	Role of highest governance body in setting purpose, values, and strategy	-
102-27	Collective knowledge of highest governance body	-
102-28	Evaluating the highest governance body's performance	26-27
102-29	Identifying and managing economic, environmental, and social impacts	30-32
102-30	Effectiveness of risk management processes	30
102-31	Review of economic, environmental, and social topics	-
102-38	Annual total compensation ratio	-
Stakeholder Engagement		
102-40	List of stakeholder groups	18-19
102-41	Collective bargaining agreements	17
102-42	Identifying and selecting stakeholders	17
102-43	Approach to stakeholder engagement	18-19
102-44	Key topics and concerns raised	18-19
Reporting Practice		
102-45	Entities included in the consolidated financial statements	-
102-46	Defining report content and topic Boundaries	68
102-47	List of material topics	20
102-48	Restatements of information	-
102-49	Changes in reporting	68

102-50	Reporting period	68
102-51	Date of most recent report	68
102-52	Reporting cycle	68
102-53	Contact point for questions regarding the report	68
102-54	Claims of reporting in accordance with the GRI Standards	68
102-55	GRI content index	69-72
102-56	External assurance	-
GRI 201: Economic Performance		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	4-5
103-3	Evaluation of the management approach	-
201-1	Direct economic value generated and distributed	12-13
201-2	Financial implications and other risks and opportunities due to climate change	-
201-4	Financial assistance received from government	-
GRI 205: Anti-Corruption		
103-1	Explanation of the material topic and its Boundary	28
103-2	The management approach and its components	28
103-3	Evaluation of the management approach	28
205-2	Communication and training about anti-corruption policies and procedures	28-29
GRI 302: Energy		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	44
103-3	Evaluation of the management approach	-
301-1	Materials used by weight or volume	44-45
301-2	Recycled input materials used	45-46
302-3	Energy intensity	44-45
302-4	Reduction of energy consumption	44-45
GRI 303: Water		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
303-1	Water withdrawal by source	-
303-2	Water sources significantly affected by withdrawal of water	-
303-3	Water recycled and reused	45
GRI 305: Emissions		
103-1	Explanation of the material topic and its Boundary	40
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
305-1	Direct (Scope 1) GHG emissions	-
305-2	Energy indirect (Scope 2) GHG emissions	41-42
305-3	Other indirect (Scope 3) GHG emissions	41-42
305-4	GHG emissions intensity	41-42
305-5	Reduction of GHG emissions	41-42
305-6	Emissions of ozone-depleting substances (ODS)	-
GRI 306: Effluents and Waste		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
306-1	Water discharge by quality and destination	45
306-2	Waste by type and disposal method	45
306-3	Significant spills	-
306-4	Transport of hazardous waste	-

306-5	Water bodies affected by water discharges and/or runoff	45
GRI 307: Environmental Compliance		
103-1	Explanation of the material topic and its Boundary	40
103-2	The management approach and its components	40
103-3	Evaluation of the management approach	-
307-1	Non-compliance with environmental laws and regulations	-
GRI 308: Supplier Environmental Assessment		
103-1	Explanation of the material topic and its Boundary	38
103-2	The management approach and its components	38
103-3	Evaluation of the management approach	-
308-1	New suppliers that were screened using environmental criteria	38
308-2	Negative environmental impacts in the supply chain and actions taken	-
GRI 401 : Employment		
103-1	Explanation of the material topic and its Boundary	57
103-2	The management approach and its components	57
103-3	Evaluation of the management approach	57
401-1	New employee hires and employee turnover	57,61
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	-
401-3	Parental leave	-
GRI 403: Occupational Health and Safety		
103-1	Explanation of the material topic and its Boundary	51
103-2	The management approach and its components	51
103-3	Evaluation of the management approach	-
403-1	Workers representation in formal joint management-worker health and safety committees	-
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	53
403-4	Health and safety topics covered in formal agreements with trade unions	-
GRI 404 : Training and Education		
103-1	Explanation of the material topic and its Boundary	58
103-2	The management approach and its components	58
103-3	Evaluation of the management approach	-
404-1	Average hours of training per year per employee	58-59
404-2	Programs for upgrading employee skills and transition assistance programs	58-59
404-3	Percentage of employees receiving regular performance and career development reviews	60-61
GRI 405 : Diversity and Equal Opportunity		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
405-1	Diversity of governance bodies and employees	-
405-2	Ratio of basic salary and remuneration of women to men	-
GRI 406 : Non-discrimination		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
406-1	Incidents of discrimination and corrective actions taken	-
GRI 412 : Human Rights Assessment		
103-1	Explanation of the material topic and its Boundary	-
103-2	The management approach and its components	-
103-3	Evaluation of the management approach	-
412-1	Operations that have been subject to human rights reviews or impact assessments	-
GRI 413 : Local Communities		

103-1	Explanation of the material topic and its Boundary	64
103-2	The management approach and its components	64
103-3	Evaluation of the management approach	-
413-1	Operations with local community engagement, impact assessments, and development programs	-
GRI 414 : Supplier Social Assessment		
103-1	Explanation of the material topic and its Boundary	38
103-2	The management approach and its components	38
103-3	Evaluation of the management approach	-
414-1	New suppliers that were screened using social criteria	37
414-2	Negative social impacts in the supply chain and actions taken	-
GRI 416: Customer Health and Safety		
103-1	Explanation of the material topic and its Boundary	54
103-2	The management approach and its components	54
103-3	Evaluation of the management approach	-
416-1	Assessment of the health and safety impacts of product and service categories	55
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-





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