Sustainability Report 2020

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RESILIENCE

TO SUSTAINABILITY

MITR PHOL

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MITR

RESILIENCE

TO SUSTAINABILITY



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Message from Chairman of Mitr Phol Group



Sustainability Report 2020 **b** Mitr Phol Group

The year 2020 witnessed significant challenges to Mitr Phol Group. The Coronavirus 2019 (Covid-19) pandemic has resulted in changes of working and living way under the 'New Normal' style, accelerating the digital transformation. Consumers are now more aware of their health and well-being. The drought crisis cut down a great number of sugar cane crops however Mitr Phol has encompassed those changes as they could pose an unwanted impact to the business operations.

To cope with such a challenge, Mitr Phol Group has implemented business optimization, including a strategy that leans toward digitalization, or risk management that promptly responds to an unexpected events, to allow to carry on the business operation. Mitr Phol has applied innovations and researches to create new products and businesses, for instance, Mitr Phol Lite Sugar - the choice for consumers who prefer healthy food, biodegradable and environmentallyfriendly packaging for those who concerns environmental care. Furthermore, as a part of organizational optimization, Mitr Phol Group has applied digital technology into its management, for instance, "Plook Mitr Platform," e-commerce management where agricultural products and equipment (such as harvester components), or fertilizers has been put to the online platform for sales which facilitating farmers and customers online. Payments are made via various channels, i.e., wire transfer, credit-debit cards, COD, and credit line for Mitr Phol Farmers. Mitr Phol Farmers. In addition, Mitr Phol has developed the application 'One Agri' to enhance the online communication between Mitr Phol and contracted farmers.

As for organizational optimization, the primary milestone is to prepare our employees to embrace the changes. The Company arranges online learning courses for its employees to leverage and improve their knowledge and skills to keep up-to-date with the current situation and provide training for employee's Newskill-Upskill. Meanwhile, the Company raises awareness among employees toward the corporate culture "MITR Beyond." Lastly, amid the Covid-19 pandemic, the Company has taken care of employees' health by imposing the Work from the Home measure, applying for COVID 19 insurance, providing surgical masks, and cleaning alcohol for them.

For the surrounding communities where the factories are situated, the Company has arranged "Mitr Pan Sook" (Happiness Sharing Cabinet) and survival bag to provide necessary commodities products to be used in household for those affected during the Covid-19 crisis. In addition (seeing the opportunity), after the community market near Mitr Phu Khiao Sugar Factory in Chaiyaphum province was ceased, the Company contributed the support to communities by creating Line Official Account under the name "Khao Pak Pla" (Rice Vegetables, Fish) for members of Plook Por Suk Project to run online market selling agricultural products.

During the Covid-19 situation, the Company carries on its strong commitment to supporting our society by establishing the "Mitr Phol – Ban Pu Fund to Relieve Thai from Covid-19," giving out necessary medical, health equipment, and apparatus to prevent and control the spread of Covid-19 in Thailand. At present, the Company continues to provide medical equipment and apparatus, including cleaning alcohol, to hospitals, public health agencies, and organizations. Further to our social contribution, to fulfill Mitr Phol's target to see Thai children and youth reach proper education, the Company has joined hands with state sectors and alliances establishing Connect ED project, Partnership School, and bilateral projects for consecutive years to carry on the sustainable education scheme. More importantly, the Company addresses the significance of sustainable resource use, which covers water and energy management to ensure the highest utilization. Our work procedures are optimized to achieve the goal of minimizing the greenhouse gas effect. Mitr Phol also launched a campaign that promoted cutting fresh sugarcane without burning and accept to buy fresh sugarcane leaves from farmers as a part of environmental care for our society.

On behalf of Mitr Phol Group, I would like to express my sincere gratitude for your continued trust and support in our business. Mitr Phol is apprised for any adjustment and contrive for potential changes, adhering to the direction toward sustainability in coupling with transparent management and good corporate governance. All these contribute to building up our mutual prosperity, growth, and sustainability.

Buntoeng Vongkusolkit Chairman of the Mitr Phol Group



About Mitr Phol (102-1)

Vision (102-16)

To be the world-class sugar and bio-based leader by combining our fully integrated agribusiness model with innovative technology and management talent to create value for better life for all.

Philosophy (102-16)



STRIVE FOR LEADERSHIP



BELIEVE IN THE VALUE OF HUMAN DIGNITY



STAND TALL IN FAIRNESS



RESPONSIBLE FOR SOCIETY







Strategic Direction (102-15)

CT.

Profitable Growth

Create value-added products by expanding sugar industry growth, bio-based, and food products. Ingredient

Competitiveness

Make viable competitiveness by enhancing efficiency, continual cost controlling, joining hands with world-class allies, and cooperating with customers in product developments.

Sustainability

Collaborate with stakeholders to develop communities, societies, and environment, sustainable management of natural resources adhering to the good corporate governance.

World Class Organization

Strive for excellence with digital technology. Having a corporate culture that creates innovation, knowledge exchange, teamwork-improving the ability to adjust one's self to enhance the entire organization.

Modern Farming and Farming Practices

Determined to developing and promoting modern farming with contemporary farming management, i.e., water management, sugarcane species development, precise agriculture, and sugarcane transportation system to stabilize yield and increase turnover for farmers.

Best-in-Class Manufacturing

Apply top-notch technology and innovation to produce quality products, develop a production process and logistics system to convert the entire value chain into an automated system: leverage safety and environmental standards.

General information of Mitr Phol Group (102-2)(102-4)(102-10)

Under the concept "From Waste to Value," Mitr Phol Group drives business forward by applying innovation and digitalization to improve productivity and create maximum value to the canes. We realize the value of developing waste into its highest use, initiating various businesses from sugar to biomass power, ethanol, wood substitute, fertilizer, and bio-business. At the same time, Mitr Phol integrates the sustainable management of resources and business management coupling with developing stakeholders in the value chain. Mitr Phol Group has been ranked number one sugar manufacturing in Thailand and number three of the world sugar manufacturer. Such success mirrors our growth and the advanced pace of the circular economy.



Sustainability Awards(102-12)



Sustainability Awards Silver Class 2021 being a member in S&P Global Sustainability Yearbook Member 2021

• Mitr Phol Group



Human rights Award 2020 -Outstanding Level, for Large Business Sector

by the Rights and Liberties Protection Department, Ministry of Justice

Mitr Phol Group



Award for the organization that support work of people with disabilities - Excellent Level for the year 2020

by Department of Empowerment of Persons with Disabilities, Ministry of Social Development and Human Security

• Mitr Phol Sugar Corp., Ltd.



Sugar Mill Excellence Awards 2020

by Office of the Cane and Sugar Board Ministry of Industry

Outstanding

- United Farmer and Industry Co., Ltd.
- Mitr Kalasin Sugar Co., Ltd.

Good Level

- Mitr Phol Sugar Corp., Ltd.
- Singburi Sugar Co., Ltd.
- United Farmer and Industry Co., Ltd. (Mitr Phu Wiang Branch)
- United Farmer and Industry Co., Ltd. (Mitr Phu Luang Branch)



Awarded an Honor Plague as a volunteer developer of Greenhouse Gas Reduction Project under Thai standard

by the Greenhouse Gas Management Organization (Public Organization)

- Mitr Phol Bio-Power (Phu Luang) Co., Ltd.
- Betong Green Power Co., Ltd.



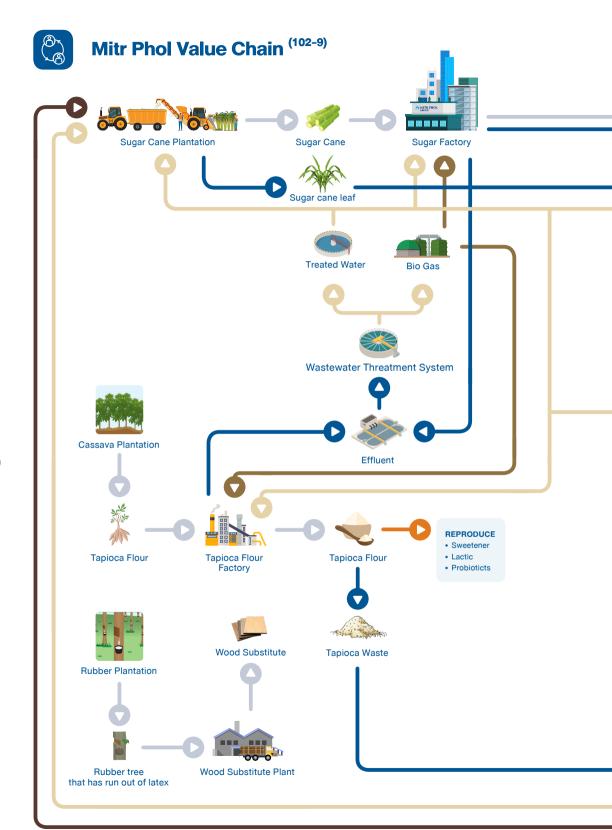
The Prime Minister's Industry Award 2020

Type: Corporate Social Responsibility

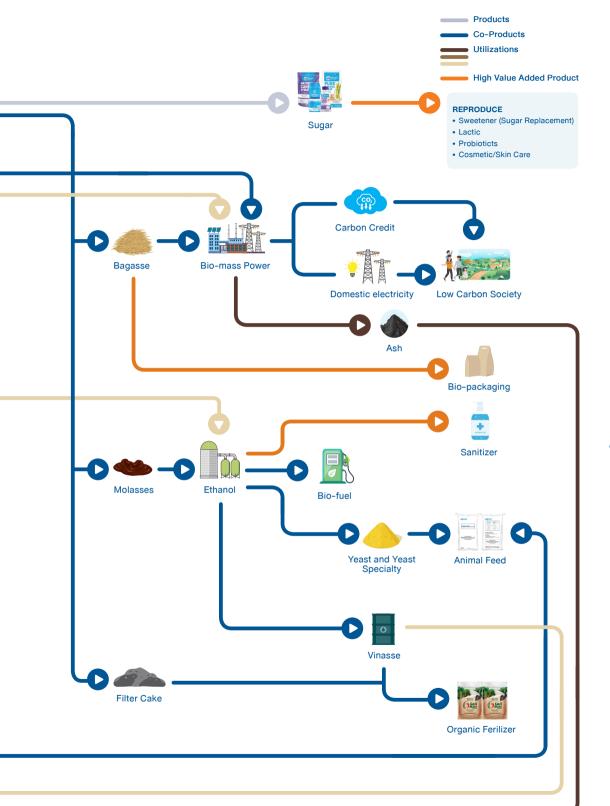
by the Department of Industrial Works, Ministry of Industry

• United Farmer and Industry Co., Ltd. (Mitr Phu Wiang Branch)





Sustainability Report 2020 **G** Mitr Phol Group



Mitr Phol Group **1** Sustainability Report 2020

Stakeholder Engagement

Mitr Phol Group realizes the importance of stakeholder engagement. It, therefore, conducts regular communication via communication procedures and different channels to create an understanding of issues that raise concern or attention among stakeholders. The Company also takes their opinions and integrates them into its decision-making procedures and business operation planning. Such integration will drive the Company toward sustainable growth.

7 groups of stakeholders



After reviewing and analyzing potential impacts in procedures and value chain to identify stakeholder groups, the management will select significant stakeholders. At present, there are seven groups of stakeholders, namely shareholders, farmers, communities, suppliers, customers and consumers, employees and government sector, and civil society.



Mr.Samran Sarabun Deputy Permanent Secretary Ministry of Agriculture and Cooperatives

"Mitr Phol Group coordinated with the community and liaised with every sector using the Bio-Circular-Green Economy (BCG Economy) to create added value to its products. The company supervises farmers in all aspects, shares knowledge about sugarcane plantations to increase productivity. Mitr Phol Group creates a network system to support sugarcane farmers with a sugarcane harvesting machine, including buying from them sugarcane leaves to reduce the burning of sugarcane. Mitr Phol Group targets its benefits and stakeholders', considering that farmers and the company share the same heart vein.





Ms.Waraporn Osathaphan Senior Executive Vice President Siam Kubota Corporation Company Limited

"Mitr Phol Group has in place a good environmental management, in particular, the water management, water supply risk management in drought crisis, dust management including its propriety efficient waste management which can be improved into various business, and also guides us toward the reduction of the greenhouse gas emission under the concept 'From Waste to Value'.

What I would like to see Mitr Phol carry on and develop is to extend their support and promotion on buying sugarcane leaves from farmers. As we can see now that Mitr Phol Group's biomass power plants may not fully cover the whole corp, which may be due to the logistics limitation. Hence, my suggestion is to ensure the farmers will get the best interest out of this and the sugarcane leave burning is at minimal rate, mitigating dust pollutant.

Ms. Thanyaporn Krichtitayavut Director

Global Compact Network Thailand – GCNT Mitr Phol has embraced a better change by initiating the From Waste to

Nitr Phol has embraced a better change by initiating the From Waste to Value project and the Mitr Phol Modern Farm Project. The company also supports farmers in water management, encourages them to minimize burning sugarcane before harvesting, and paves farmers toward high precision agriculture. GCNT expects to see Mitr Phol applies circular economic principles to develop environmental-friendly packages and effective water management to secure our water supply in the future.





About this Report

Since 2013, Mitr Phol Group has been publishing the Sustainability Report intending to disclose its sustainability performance to the stakeholders, which covers three-dimension namely economy, society, and environment. The report is based on the Global Reporting Initiative Standard GRI following the core disclosure format.⁽¹⁰²⁻⁵⁴⁾

Scope of this report (102-49)(102-50)(102-51)(102-52)

This report presents our performance from 1 November 2019 to 31 October 2020, covering Mitr Phol Group's and subsidiaries' performance within Thailand only. The information is divided into seven business groups: farming business-2 farming companies, sugar business-10 sugar manufacturing companies, renewable energy business-32 renewable energy companies, wood substitute materials business-6 wood substitutes material manufacturing companies, fertilizer business-4 fertilizer manufacturing companies, logistics and warehouse business-3 logistics and warehouse companies, and other business-8 companies. This report describes 100% of economic, social, and environment performance as Mitr Phol Group's total revenue in Thailand.



See the list of companies within the scope of this report





Identifying Materiality and Scope of Report

Mitr Phol Group has selected sustainability topics that are relevant to the group's business operations by studying global sustainability concerns in economic, social and environmental dimensions. The following criteria was used to select the topics:



Importance of the topics to the global food and beverages industry, electric and Wood substitute materials.



Mitr Phol Group's strategic plans, which are reviewed on an annual basis.



Stakeholders' expectations of Mitr Phol Group



Relevancy to topics covered in Mitr Phol Group's sustainability report in 2019.



Sustainability topics to be disclosed for international sustainability assessment

There are four steps in the selection of material topics and the scope of impacts. Operation details are as follows.



Results of the Materiality Test (102-47)



Low significant and Influence Odderate significant and Influence Initial significant and Influence



- 1. Climate change and water resources management
- 2. Safety, Occupational health, and Environmental management
- 3. Human Rights
- 4. Sustainable value chain management
- 5. Contributions to society
- 6. Corporate Governance and Risk Management
- 7. Employee welfare and development
- 8. Digital and Technology
- 9. Innovation management
- 10. Packaging
- 11. Health and nutrition
- 12. Stakeholder engagement
- 13. Customer relationship management

Sponsorships and Membership in Organizations (102-13)

Mitr Phol Group also initiated the addition of the United Nations Sustainable Development Goals (UN SDGs) from 11 to 17 targets through its corporate sustainability operation, which covers economic, social, and environmental aspects.





Economic Dimension Performance



Economic Dimension Performance



Good Corporate Governance and Corporate Risk Management

Challenges

Amid the ongoing COVID-19 pandemic, affecting economy and society in global scale, people have adopted a new normal lifestyle that minimizing the traveling and diverting to work mostly from home, which consequently accelerates the use of online platforms. It is challenging for the company to maintain the business operational standards of responsibility, transparency, and fairness, and simultaneously set flexible risk management policy and measures in order to adjust accordingly under any circumstances in due time, to carry on our sustainable business operation.

Good Corporate Governance

Commitment and management approach

Mitr Phol Group has issued policy and guidelines in support of good governance, outlining the responsibilities and duties of Board of Directors, executives and employees, for their acknowledgment and compliance. This is to ensure the adherence of good governance in the business operation, and effective, transparent and verifiable management system, with an aim to build stakeholders' trust in sustainable business growth building.



Performance

Mitr Phol Code of Conduct (102-16)

At Mitr Phol Group, we continuously conduct training sessions related to business ethics under the course "Mitr Phol Culture and Ethics" and "Corruption Control and Prevention" to communicate and build awareness on ethics, policies, guidelines, and complaints channels. Amid the COVID-19 pandemic, we continued running the courses through an online platform with adjustments to modernize the presentation to meet attendees' style.



Remarks: * Code of Conduct training has been provided since 2017 Covering all business units of Mitr Phol Group.

Anti-Fraud and Corruption

As a clear expression on the anti-corruption and fraud intention, Mitr Phol has set explicit policy on the anti-fraud and corruption, and promoted and supported its personnel for compliance as a practice guideline, by Mitr Phol Sugar Corp.,Ltd. has been certified to be part of the national project - the Collective Action Against Corruption (CAC) by the committee of CAC. CAC has been established under the collaboration of leading private organizations to encourage the private sector's participation in resolving corruption issues in Thailand. Despite the COVID-19 outbreak, Mitr Phol Group participated in the anti-corruption campaign held by the Anti-Corruption Organization of Thailand, which was held virtually via the online platform for the first time this year, emphasizing our commitment to fight against corruption issue in Thailand.





Mitr Phol Group attended the Anti-Corruption Day 2020 via the first virtual collaboration in Thailand, held under the concept "Fraud-busting is super easy, just a fingertip away" on 15 September 2020.

Corporate Risk Management (102-11)(102-15)(102-30)(102-31)

Commitment and management approach

Risk management is an important foundation in business operation towards sustainable growth of benefits for all shareholders. It also fulfills the needs and expectations of stakeholders. Mitr Phol Group's Board of Directors has appointed a Risk Management Committee and assigned them to stipulate the company's risk management policy and guideline and submit to the Board for consideration. The Risk Management Committee is responsible for reviewing at least once a year to ensure consistency with the changing business landscape. A follow-up review on the implementation of the risk management plan, including risk evaluation in different aspects, will be conducted to ensure consistency with the company's risk management policy, strategies, and goals.

Mitr Phol Group has adopted COSO Enterprise Risk Management – Integrated Framework to use as a tool in the risk management procedure throughout the enterprise. The framework emphasizes four key aspects of risk: strategic risk, operational risk, financial risk, and legal and regulatory compliance risk. Every year, Mitr Phol Group conducts a risk evaluation and prepares risk profile to manage and maintain corporate risks at acceptable level.

Performance

In 2020, Mitr Phol Group's key risks were as follows:



Business Continuity Management

Mitr Phol Group has adopted the Business Continuity Management System (BCMS), with reference to ISO 22301:2012, as an operational framework at the head office and its seven leading factories. In addition, the Company has integrated the Crisis communication procedure to ensure accuracy and suitability of the communication, both internal and external, on any incident to minimize the impact on the reputation and image of the Company. All these measures have been implemented with an aim to build trust among our customers, business partners, and all stakeholders on the business continuity of the company.

Business Continuity Plan Training

To cope with the uncertain situations that could unfavorably affect our organization, Mitr Phol Group has prepared its readiness from propriety business continuity plan trainings that conducted every year. In 2020, the COVID-19 outbreak posed a significant challenge for Mitr Phol Group to prepare a plan in response to the case where an infected case is found in a necessary process. For example, raw materials procurement, production, storage, and delivery. Each factory has allocated responsibilities into 4 teams: the communication team, cleaning team, product management team, and route inspection team to ensure precise responsibilities assignment and sufficient resources. Continuous training is required to be conducted in all factories to assure their steadiness for an actual incident.





Investigation Team





On-Site Business Continuity Plan Training Activity

Sustainable Supply Chain Management

Challenges

The Coronavirus 2019 outbreak has posed changes in business operation where transportation is limited, affecting logistics of raw materials and products. Eventually, Mitr Phol Group had to add up measures and guidance to manage the risk that cover the entire supply chain. Mitr Phol has applied technologies to communicate with vendors and farmers to ensure the procurement of raw materials, production, and delivery schedule with quality and on time and leverage corporate and vendor potentiality toward sustainable business operation.

Commitment and management approach

Mitr Phol Group has set a sustainable procurement policy and Mitr Phol Supplier Code of Conduct which covers our attention on business ethics, human rights, labour rights, safety, occupational health, and environment. Mitr Phol Group communicates and ensures vendors' strict compliance. The Company has applied international standards as a working frame, for instance, Sustainable Procurement policy ISO 20400:2017, BONSUCRO STANDARD, and the Forest Stewardship Council supporting the rubber farmers.

To mitigate risk, Mitr Phol Group enforces a supplier risk management system using the supply positioning model, including stringent due diligence prior to registering a new supplier. Audits of suppliers' sites or questionnaires are performed on an annual basis.

Further information

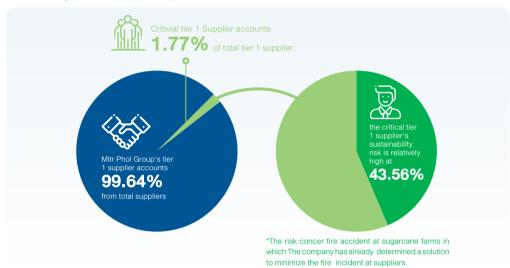


Performance Procurement in local scale ⁽²⁰⁴⁻¹⁾

Mitr Phol Group places importance on supporting local suppliers and procures raw materials such as sugarcane and other products and services, including packages and repair work. Our local procurement in 2020 **97%** of the total procurement expense.

Supplier Performance Assessment (308-1) (408-1) (408-1) (409-1) (414-1)

The Company's supplier performance assessment includes environmental, social, and good corporate governance topics. The assessment is conducted in suppliers' establishments or via a supplier questionnaire form on an annual basis. Our suppliers will be informed of their result, while those whose assessment result is at high risk must improve their performance to mitigate such risk.



According to the supplier performance assessment in 2020

There was no child labour risk, forced labour issue found. Mitr Phol Group does not terminate business operation with the supplier being assessed for such risk as well.

Enhancement of supplier's delivery performance

Mitr Phol Group realizes the vitality of development and supports sugarcane farmers and wood suppliers. To ensure the suppliers will meet the sustainable raw material management practice, to deliver quality raw materials on a continual basis, the followings are our supports:

Mitr Phol ModernFarm

Mitr Phol Group applies the "Mitr Phol ModernFarm" program to develop cane farmers by introducing modern farming practices and technology to help increase productivity. The program is made up of four main approaches:



Growing legumes to protect soil surface



Controlling tractors and machinery's wheel tracks



Minimizing plowing



Fresh cane cutting and using leaves as ground cover

Water Management for farmers in promoted zone

Mitr Phol Group has established water management approach for farmers and an additional solution to cope with the drought crisis, Mitr Phol Group has promoted sugarcane farmers to use solarpowered water pump with a target to have 1,500 sets/year. In 2025, farmers will have complete 7,195 sets of solar-powered pumps.

One Agri Application – All in one application, serve all you need.

Mitr Phol Group has developed the One Agri application to facilitate communication between farmers. With this application, the farmers will proceed with any transactions via their mobile device conveniently, fast, anytime, and anywhere. Furthermore, farmers will receive updates and news and acquire promotions with Mitr Phol at a convenient and fast approach. The application is available for download and installation on Android and iOS.

See the registration and access methods for One Agri Application







Sugarcane Personnel Development Project , the sharing of knowledge from Mitr Phol ModernFarm to farmers

Mitr Phol ModernFarm Academy (MFA) takes part in developing sugarcane personnel, which is arranged to encourage everyone to see their potential. Mitr Phol vision to assist its employees in learning and gaining expertise in various fields, enabling them to discover the answer toward success. The learning focuses on practices to support creative solutions among learners where everywhere is a classroom. The MFA application gives space for learning that inspire and exchange ideas to innovate new items. Mitr Phol sets a target to arrange a project for 60 people per year.

In addition, the Company has initiated the Expert Mitr Phol Group ModernFarm project intending to develop promotion 205 staff at the head of the zone level to ensure that they will be able to pass on the knowledge to farmers. The project concentrates on practices allowing sugarcane farmers to try plantations in Mitr Phol ModernFarm program. In 2021, additional 200 employees will be learning while the modern farming program will be passed on to over 10,000 rais in the promoted zone to enhance their income and productivity.





The objective of the Sugarcane Family Business Project is to promote and raise awareness of farmers' children on the importance of sugarcane plantations, to be the successor of their family business, and development of sugarcane plantations using technologies. The interested farmers' children who prefer agriculture attended the project and took part in learning modern sugarcane plantation in Mitr Phol ModernFarm approach. Under supervision of Mitr Phol promotion staff and parents, this approach envision them to accept as well as assure their confidence to carry on business from the parents. After the event, they would apply the knowledge gained to carry on the family's sugarcane business and develop themselves as a farmer and become Mitr Phol ModernFarm learning center for other farmers in the future.





Training Sugarcane Family Business

Development of wood substitute suppliers

For development of wood substitute suppliers for our wood substitute business, Mitr Phol has focused on three aspects as follows: economic social and environmental as a development guide.



Safety training for suppliers promoting agroforestry plantation



Promoting agroforestry plantation



Customers and Consumers



Challenges

Every business is affected by the Coronavirus 2019 outbreak, which is causing changes in our daily routine, including the shopping where people prefer to make it online more and more. Seeing the opportunity to build an online business, the Company has developed a platform called **"Plook Mitr Shop"** beforehand, as a store that offers selected agricultural products and other products from farmers and general vendors. The online store perfectly responds to the change of business operation. Meanwhile, consumer trend today tends to health care and food safety, for instance, organics food, reducing white flour, sugar, and high-fat food. Mitr Phol Group has researched and innovated technology into its product and services as a choice that meets consumers' demand ad needs ideally.



Commitment and Management Approach

At Mitr Phol Group, customers and consumers are classified as significant stakeholders; therefore, all of our product and service development is proceeded with due attention, considering the quality and safety of the products. We have implemented the international quality and standard management system to cover raw material feeding and manufacturing processes. Mitr Phol Group has in place product quality testing as well as a retraceable product system to assure confidence among our customers and consumers.

In maintaining a good relationship with customers and consumers, the Company has conducted the assessment, monitoring, and satisfaction survey through various approaches in each business. These efforts will eventually generate a sustainable product and service development that will meet customers' and consumers' needs and support sustainable manufacturing and consumption.

Performance We Take Pride in Quality and Safety

Quality and Safety Management

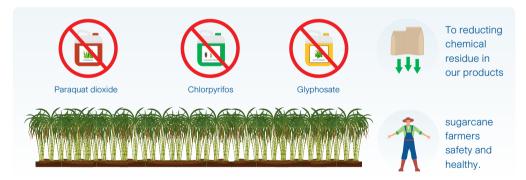
The Company's attention on quality and safety covers the entire supply chain, from raw material procurement until the product reaches consumers' hands. Our manufacturing process and quality control procedures meet international standards and are retraceable. As a protocol in developing our performance and manufacturing process, the Company establishes product compensation and reclaim in safety matters, including complaint channel to receive a report. Furthermore, Mitr Phol Group's propriety food quality and safety policy is a framework in our manufacturing process. At least once a year, the food quality and safety is reviewed as a ground for continued improvement, development of quality management system and food safety system. This year, there is no violation case on health and product and service safety violation ^{(416-2).}

Further information



Agricultural raw material management

Agricultural raw material procurement is an upstream part. Mitr Phol Group has prepared an approach for agricultural raw materials without promoting hazardous chemicals, such as



Another of our effort to screen raw materials with the genetically modified organism is the Non-Genetically Modified Organisms: Non-GMOs policy is disclosed on the Company's website to acknowledge our consumers and raise their confidence in our products.

See Guidelines for Agricultural Raw Material Sourcing





See Genetically Modified Organisms Policy (GMOs)

We concern about the health and proper nutrition of our customers and consumers

Alternative sugar products

We have developed alternative sugar products for those who prefer a healthy option, such as Mitr Phol Lite Sugar - our new innovative product that gives consumers a reduction of calories by 50%.

Further information



Air Safety Glue Technology - Wood Substitute

Panel Plus, Mitr Phol's subsidiary that conducts wood substitute manufacturing business. The company has invented an innovative wood substitute coated with melamine to serve health-conscious consumers. With the air safety glue technology, our product can reduce formaldehyde emission, which is harmful to health. The wood substitute is without aggressive odor, harmless to eyes and nose, and health.

Further information



Alcohol gel and spray for hand cleaning "Chuenjai by Mitr Phol"

Mitr Phol Group's hygiene includes alcohol hand sanitizer gel and alcohol hand sanitizer spray, a new product group made under the brand "Chuenjai by Mitr Phol" for cleaning without rinsing. The product safety is guarantee by natural alcohol extracted from sugarcane, having high purity, which is widely used in medicine and pharmaceutical fields. We respond to consumers' demand in Coronavirus 2019 situation.





We have developed a wide ranges of products to meet the need of our custoemrs and consumers.

New Product – Premium Syrup branded 'SENORITA' We have launched the premium syrup under the name SENORITA. The product is released in 12 flavors that offer the natural smell and sweetness. The premium syrup collection is the fine selection from premium quality sources of raw materials and fruits around the world as a choice for restaurants, cafe and general customers.

Further information



Special fertilizer CRF, the new technology that control the mineral release for 9 month long.

Premium fertilizer with special formula or called CRF (Controlled Release Fertilizer) based on new technology from Japan. With CRF, farmers will be able to control the fertilizer release to the plants. When adding fertilizer to the soil, it will gradually release nutrients to plants. In this way, the plant will receive adequate nutrition throughout 270 days or 9 months, while farmers only fertilize them once from previously twice. CRF helps farmers minimizing the cost of fertilizing, convenient management within the farms.







Innovation and Digital Technology



Challenges

Now in this modern world where innovation and digital technology play a vital role, Mitr Phol Group has prepared for the diversification, for instance, applying information technology into an analysis process to develop manufacturing procedures, product delivery, and services, innovation development to create the highest value to the sugarcane. Eventually, such will pave the solid foundation as well as leverage the sugarcane and sugar industry and Mitr Phol's business operation toward sustainable growth.

Commitment and Management Approach

Mitr Phol Group establishes Mitr Phol Innovation and Research Center to conduct research and development covering six fields throughout the upstream to downstream, including Crop Production, Sugarcane Technology Operation, Sugarcane Technology ad Management, Sugar Technology, and Specialty, Bio-based Chemicals and Energy and Global Sourcing for Innovation.

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Sustainability Report 2020

Mitr Phol takes technology and digital force, including programs, information technology, internet, computer data, and computer data security, as a driving factor in business operation. The Company has a propriety management approach to ensure that Mitr Phol Group's computer data and system are secured and consistent with relevant laws.



Acting as a policy and operational standards for information technology of Mitr Phol Group for efficiency and effectiveness.



Establish a Cybersecurity Committee

To manage risks in cybersecurity to ensure that the organization will have risk management. Information security in a good system and be prepared to protect against cyber threats that may affect the business.



Training on technology and digital knowledge

To prepare employees apply new technology to work more efficiently, and communicate knowledge to prevent cyber threats that are presently threats.

Performance Risk Management on Cybersecurity

Mitr Phol Group conducts corporate risk assessment annually covering economic, social, and environmental aspects, including information technology that could potentially impact corporate strategy. After raising the importance of risk management on the cyber threat in the previous year, the Company has prepared a reliable management plan, including appointing the Cybersecurity Committee with an aim to support the cybersecurity management to ensure the adequacy, propriety, and efficiency to accomplish the strategic target set forth.

The key to sustainable cybersecurity management is in addition to both hardware and software equipment that must be properly invested, knowledge, understanding and awareness of employees at all levels in the organization it is important. Mitr Phol Group has organized public relations, provided knowledge and prepared a training plan for dealing with cyber threat situations. To create a culture of cybersecurity throughout the organization.



Develop the Organization and Human Resource with Technology

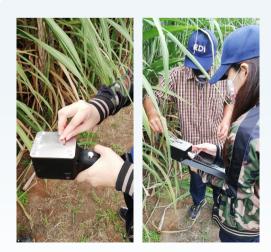
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At present, the Digital and Technology Transformation Working Group has applied various technologies in its working process. We have digitalized the data by collecting every factory and store data in the system for analysis and seeking for development of the manufacturing process. Mitr Phol Group intends to create the "Digital Factory" for better performance. In addition to corporate development, Mitr Phol also supports personnel development to gear up for the changes in technology. The Company provides training and education on using technology or new programs such as Power BI for data analysis and creating statistical data; Microsoft Teams - used for the meeting as a training tool within the organization. In addition, Microsoft Teams is also applied to monitor work via Microsoft Planner.

Using Drone for Smart Agriculture

Mitr Phol has applied the UAV (Unmanned Aerial Vehicle) to assist in various activity of sugarcane farming, for instance, to survey the sugarcane plantation area, analyze minerals in the soil before the plantation proceed, monitor the sugarcane growth, forecast the sugarcane productivity before the sugarcane crushing season, and to feed sugarcane with fertilizer and nutrients. With UAV, the performance has been improved, facilitating farmers, and minimize cost of operation.





Example analysis using the Near Infrared Spectroscopy (NIR) technique

Mitr Phol Group has applied the Near-Infrared Spectroscopy (NIR) technique - the non-destructive testing technique in testing quantity and quality of sugar in cane, indicating the sugarcane's ripeness efficiently before the harvest crushing without damaging the sugarcane example being tested.

Bio-fertilizer from microorganism products made in small capsules

Realizing the importance of sustainable agriculture, Mitr Phol Group has selected the microorganism beneficial to sugarcane growth, wrapped in the natural polymer that is biodegradable and inserted into a microcapsule. The microorganism will enhance the growth of sugarcane while the sugarcane farmers can use the active microorganism conveniently. Using microorganism products on such a tiny scale will minimize the chemical fertilizers among farmers while enhancing sugarcane growth. The beneficial microorganisms can survive and retain vital minerals at the sugarcane roots. Mitr Phol has proudly adapted the bioinnovative product to improve the sugarcane plantation and promote the sugarcane business.





High Quality Feed Grade Yeast

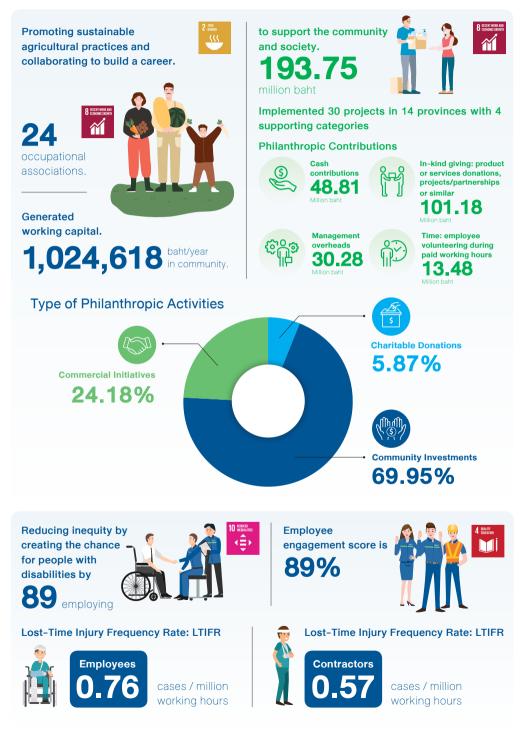
This product is initiated in the ethanol production process, where fermentation liquid is blended to extract yeast. Then the yeast will be developed to increase the concentration and turned into yeast products for the animal feed under the brand KOBOTEN. After continual development and quality improvement, our yeast has become the Yeast Specialty and further developed into high-quality feed grade yeast under the brand KOBOTENnutri.



Social Dimension Performance



Sustainable Community



Human Rights Achievement

Challenges

Since Mitr Phol Group's business activities involves various groups of stakeholders, especially human rights which considered sensitive and potentially could impact our business operation, we realizes the importance in the operation that minimize risk of human right violation throughout the supply chain and therefore has prepared the measure to ensure that our business is conducted in strict compliance with human rights protection.

Commitment and Management Approach

Respecting human rights is one of the business codes of conduct under good corporate governance Mitr Phol Group considers and always follows the concept. Moreover, we have encouraged our personnel to adhere to practice guidelines at work. The concept is integrated as a part of Mitr Phol Code of Conduct. The Company also prepares Mitr Phol Supplier Code of Conduct as a guideline approach toward human rights to demonstrate our strong endeavor in managing human rights throughout the value chain.

Mitr Phol Group has determined explicit policies related to human rights to be consistent with the relevant laws and international practice at human rights achievement. For example, Human Rights policy, Diversity policy, Quality and Food Safety policy, Security, Safety, Occupational Health, and Environment policy. The Company communicates to ensure understanding among personnel through various platforms and channels. The communication was also made to our stakeholders to acknowledge and understand Mitr Phol's approach toward work.

Performance

Mitr Phol has Human Right Due Diligence (HRDD) in place by applying the United Nations Guiding Principles on Business and Human Rights; UNGP as a framework for human rights management. Our work comprehends our business activities in Thailand, including all areas and business activities within our supply chain (suppliers and business partners) including investment in related businesses (merging and acquisition including joint venture) and cover all operating sites in Thailand where our operation base is located. Such comprehensive procedures assess human rights risks to ensure suitability with the current environment and to seek prevention and avoid human rights violation in terms of Mitr Phol's personnel, suppliers (farmers, contractors, customers), and business partners. The procedures are shown in the picture below.



Human Rights Due Diligence (HRDD)

With our commitment to human rights achievement this year, Mitr Phol Group, represented by Mitr Phol Sugar Corp., Ltd., received from the Department of Rights and Freedom Protection, Ministry of Justice the Outstanding award for the Role Model Entity in Human Rights for the year 2020, in large business entity category. The reward marks a significant milestone of our human rights achievement assessment in comparison to national criteria.





Employee Management



Challenges

Mitr Phol Group has placed importance on personnel development through different learning platforms in response to current situations. For instance, project assignments, coaching by supervisors, and training courses help improve their upskill, reskill, and futureskill to build the organization's strength and readiness for rapid changes. At the same time, flexibility and adaptability development has also been carried out for our personnel.

Commitment and Management Approach

Mitr Phol Group has given precedence to key aspects related to our employees. In this regard, the diversity policy has been set to enable equal treatment in the workplace for all employees. The policy allows them to be treated without discrimination and accept diversity in genders, races, ethnicity, values, cultures, and disabilities. The equality issue is considered throughout the process of recruitment, employment, and appointment. We also encourage learning, personnel development, and care to enable effective performance and adaptability to changes supporting the organization's goal of sustainable success. The Company has a solid determination to providing fair and adequate remuneration that supports the whole employees' lives (100%) within 2022.

In addition, the current crisis has revealed the importance and necessity of digital literacy, adaptability, and collaboration skills in both living and working in the 21st century. In 2020, Mitr Phol Development Institute provided courses and adjusted its learning formats to suit the global situation under the Mitr Phol Transformational Leadership Program to improve employees' upskill, reskill and build futureskill, enhancing their reaction to changes in the era of digital disruption. The Company emphasizes developing accordingly to the 70:20:10 learning method, which consists of 70% of learning by themselves and doing, 20% of learning from others and instructor, and 10% of learning from training that is believed to help to enable learning and behavior changes among the employees that genuinely affect their performance.

Performance

Employee Diversity and Equality (102-7)(102-8)

At Mitr Phol Group, we support and encourage gender equality where everyone can develop their capacity and grow into a competent staff.



Mitr Phol Group's Employee Development (404-2)

Owing to Mitr Phol Group's employee development direction that emphasizes the 70:20:10 learning method to enhance learning and embrace digital transformation, Mitr Phol Group has conducted the following employee development projects during the year 2020;

1. Learning through real experience acquired from doing development (70%)

Important projects as a result from our employee development courses includes business development projects carried out under the Mitr Phol Transformational Leadership Program 2020 (MTLP1, MTLP2, MTLP3) courses.



2. Learning development from the others (20%)

Throughout the year, the Company arranged employee development by learning from others, such as the Mentoring Program, which arranged to develop 11 executives of the mid and top levels into our future leaders through the "Mentor System." The mentors are selected from the executives of Chief Operating Officer or higher to give advice, work coaching, and support in all-rounded development on workability, preparing them for the business growth in the future.



3. Learning in classroom/training development (10%)

Due to the ongoing situation of the COVID-19 outbreak, every organization has to confront challenges, adjust its operational formats, and impose new strategies to maximize the organization's efficiency. It also affects our learning method used in the organization from classroom development previously set to be 10%. Upon crisis, Mitr Phol Development Institute has carried out learning programs in a new platform that serves leadership competency and MITR beyond culture. The new learning curves are mainly arranged via digital platforms to improve the knowledge and ability of all employees, including reskill and upskill. Mitr Phol Group has explicit intention to provide them with access to the learning centers to extend their potentiality and be prepared for changes under the project called MITR beyond Reskill - Upskill.







In 2020, Mitr Phol Group prioritized employees development for personnel at all levels. Following are employee training hours:

Amount of Mitr Phol Group's employee training hours in 2020* (404-1)



Average amount of Mitr Phol Group's training hours 20.33 (Hours/Person/Year)

Remark: *means data as of 1 November 2019 - 31 October 2020

Employee Care

Mitr Phol Group has taken care of employees during the coronavirus 2019 (COVID-19) epidemic situation as follows:





Provide insurance cover for Handing out masks and Coronavirus for all employees' alcohol gel to employees Mitr Phol Group

Support for internet and telephone bills for employees while working at home as appropriate



Flexible time management



Organize activities for employees during work from home to relax for employees who have to work from home

Employees' Engagement to the Organization

To continue development on employee management, the Company has conducted surveys about employees' engagement to the organization every year. Following are the results:



Organizational Engagement



Remark: *means data as of 1 November of the previous year – 31 Oct of that year



After analyzing the result, the Company conducted a group discussion, and asked the employees for additional opinions, to identify the cause of such positive result and to carry on such factor the nourishes the employees' engagement. Moreover, the Company has prepared a continued monitoring plan in which the executives have a vital role in supporting and encouraging employees' engagement in every activity. At Mitr Phol Group, we realize that employees' engagement with the organization is a key factor that enables them to work with our organization amicably for the long term. Meanwhile, employees will be happy to work at their best performance, leading the Company toward success.

Management of Security, Safety, Occupational Health and Working Environment

Challenges

Businesses of Mitr Phol Group is heavy industry that involves the use of various heavy equipment and machinery and a number of personnel operating in different circumstances. Hence, the security, safety, occupational health, and good environment of the workplace are considered key to our business operations. Mitr Phol Group has considered all employees, contractors, and relevant parties, with a goal of zero accident set to avoid any loss and maintain our business operations' continuity and sustainability.

Commitment and Management Approach

We are committed to improving our workplace security, safety, occupational health, and good environment in alignment with international standards and in preparation to becoming a world-class organization. Our executives intend to create a culture of security, safety, occupational health, and working environment across the organization, which need to be strictly followed.

The Company has prepared a policy on security, safety, occupational health, and environment (SSHE), and has management system for security, safety, occupational health and working environment, and international standards of the environment management system, such as ISO14001:2015 and ISO45001:2018. In addition, the Company communicated and transmitted the safety, occupational health, and environment goals to all groups of stakeholders ranging from executives, employees, contractors, and all relevant parties.⁽⁴⁰³⁻¹⁾



Mitr Phol Group has conducted follow-ups on the company's performance in security, safety, occupational health, and working environment. Moreover, the Management conducts reviews of management guidelines during the monthly meetings. In addition, risk evaluation of our previous operations is carried out with an arrangement of risk identification, risk assessment, and incident investigation to identify risk and opportunities, covering all operational procedures, activities, and areas related to work, machinery, production equipment, as well as operational activities of the contractors that significantly involve our organization. The consideration covers all regular, unusual, and emergency situations. Plans to control and reduce the risks to an acceptable level have also been stipulated for all significant risks, including changing risks. The Safety, Occupational Health, and Environment Department in each area are responsible for implementing the workplace safety plans, monitoring the mentioned plans periodically, inspecting the operations on workplace safety, and reviewing the statistics of potential hazards.⁽⁴⁰³⁻²⁾

Mitr Phol Group has deployed physicians and nurses from the hospitals standardized and certified by the Ministry of Public Health, to give advice, diagnose, and services throughout the working hours of employees and contractors in the medical room of each area as stipulated by law. Moreover, we have established a safety clinic to provide a care system for employees and contractors who have encountered danger at the workplace that affects their health, primary health prevention, and promotion system, advice and health care promotion, as well as injury or illness at workplace surveillance. There are guidelines in place for conducting activities to promote the services of our safety clinics that have been stipulated.⁽⁴⁰³⁻³⁾

Furthermore, Mitr Phol Group has appointed the Safety, Occupational Health and Environment Committee, which consists of employees and corporate representatives. The committee meeting is held at least once a month to report and give suggestions for measures or improvement guidelines to ensure compliance with the workplace safety laws and workplace safety standards. With strict compliance with the legal framework, such progress will affirm the safety among employees, contractors, and external parties performing work or using services in our establishment.⁽⁴⁰³⁻⁴⁾

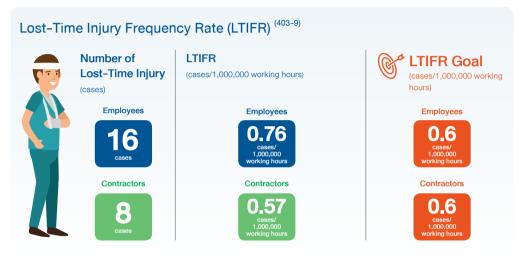




Performance

Security, Safety, Occupational Health and Working Environment Statistics

Mitr Phol Group has set a goal for lost-time injury frequency rate and collected monthly statistics on incidents that occurred to employees and contractors reported by the Safety, Occupational Health, and Working Environment committee.⁽⁴⁰³⁻⁹⁾ Then, the data will be reported to the top-level management of each business group for their acknowledgment and comparison with the target set forth. The management will eventually consider and give an order for a solution and to prevent reoccurring.



Remark: Further details on safety, occupational health and working environment is described in the Annex.

Raising awareness on Security, Safety, Occupational Health and Working Environment (403-5)(403-6)

Mitr Phol Group has initiated and pushed forward the building of safe working culture across the organization to reduce risks that may lead to work-related loss of life and injury of both employees and contractors. It is the Company's commitment to enhance knowledge and abilities, cultivate a good culture of security, safety, occupational health and working environment, and to encourage engagement all employees, community members, and stakeholders, including giving advice to employees and their representatives. Our achievements in the previous year are as follows.

- The Company conducted measurement and assessment on the working environment, including air quality, heat, noise, and light intensity of the workplace, to ensure a suitable and harmless working environment for the employees.
- The Company has allocated physicians and nurses from standard hospitals certified by the Ministry of Public Health for the medical room of each area as stipulated by laws. Moreover, there are safety clinics for employees and contractors who have encountered danger at the workplace that affects their health.
- Workout zones have been added to our factories, and fitness at the corporate headquarters to promote health among the employees.
- The Company arranged the training on a business continuity plan to ensure an uninterrupted business operation in response to the needs of the stakeholders.



Physical and mental health promotion activities have been carried out by cooperation between our factories and local, provincial hospitals.

Participation in the evaluation of working environment model

Mitr Phol's Phu Khiao sugar factory was awarded outstanding workplace model prize for safety, occupational health, and working environment of 2020, national (golden) certificate level, at the Labour Protection and Welfare Office of Chaiyaphum Province, organized by the Occupational Safety and Health Division, Department of Labour Protection and Welfare.



Mitr Phol's Phu Khiao sugar factory was awarded outstanding workplace model prize for safety, occupational health, and working environment of 2020.



Society and Community

Challenges

Mitr Phol Group believes that a business will grow sustainably when community and social development are progressing together. Therefore, we conduct community and society expectation surveys on a regular basis to improve our operation, which will eventually leverage the community's well-being. Our target is to support the community to be steadily and sustainably self-reliant, especially amid the crisis as in the past year.

Commitment and Management Approach

We have driven sustainable community development with a time goal set for five years (2017-2021) in which the plans and success indicators of the project are designated for the community development operation in each area, covering the following three key targets:



All 3 goals above are aligned with the United Nations Sustainable Development Goals: UN SDGs 4 goals namely



Mitr Phol Group has carried out sustainable community development projects with designated teams at each sugar factory who are directly responsible for working closely with local authorities and networks to ensure our targets are met.

Performance

Followings are our sustainable community development projects:

1) Sustainable Community Management





The projects initiated under sustainable community management are as follows.

Building a Strong Community by the Power of Disabled Project:

This project offered job opportunities and income for people with disabilities to reduce social inequality and improve their self-independency. Mitr Phol Group hires 89 disabled employees in compliance with Article 33, while 54 disabled work in Sustainable Community Development Project in collaboration with many agencies such as local hospitals, local administrative organizations, community schools, and sub-district learning centers, and other 2 run their own business in compliance with Article 35. In addition, Mitr Phol has established 11 clubs for people with disabilities with an aim to improve their association process, skills, and knowledge, provide welfare for the disabled persons in the community, and cooperate with the associated organizations to join in the prosperity building for people with disabilities.





2) Community Agriculture System and Safe Food Development

In addition to initiating changes in their approach, such as self-sufficient agriculture principles, the project leverages the farmers' income by promoting organic vegetable cultivation and providing distribution channels which are considered one of our primary targets of supporting the communities.

clubs



Currently, safe vegetable clubs

Members attended the project

Generating a total turnover of 1,790,731 bath.





Nonetheless, during the current COVID-19 outbreak, Turning this crisis into an opportunity, Mitr Phol has introduced an online market to the farmers by using Line Official platform to establish an online store called **"Khao Pak Pla"** (Rice, Vegetable, Fish) as a center for agricultural goods, to support various types of consumers and offering them a feeling like shopping in a real market as they can buy directly from the farmers. From September to October 2020, the promotion of Line Official account **"Khao Pak Pla"**



Mitr Phol's Phu Khiao Sugar Mill zone and has generated a total turnover of 4,800 bath

from the sales of agricultural goods and community products



3) Community Economic System Development

The company has emphasized empowering the communities by supporting the gathering of communities interested in and capable of making local products by community members' expertise to generate income. There have been supports in training and educating the association members to enhance their goods quality. We also help by buying the community products in the area where our factories are located to use Mitr Phol factories.



24 group occupational associations have generated a total Circulating revenue

1,024,618 baht



Multipurpose cloth Group



Coconut broom Group

Sustainability Report 2020 **6** Mitr Phol Group

Apart from the performance of the above mentioned 3 principle aspects, Mitr Phol has conducted projects in support of community and society that cover other aspects, as below;

Mitr Phol-Banpu Solidarity to Aid Thailand on COVID-19 Confrontation Endowment

Mitr Phol Group has established the Mitr Phol - Banpu Fund with an aim to cope with the COVID-19 pandemic by providing crucial medical equipment to 36 hospitals allocated as a treatment center, government sectors, public sector, and educational institutions, and 70 vendors nationwide. Total value accounts for over 113 million baht.

ATTERPTIOL BARDU Double - Double doub

Mitr Phol Art Camp Online 2020

Mitr Phol Art Camp 7# was arranged online via "Facebook Live" broadcast from Sirindhorn Art Centre in Loei. The camp encouraged children to improve their skills and creative ideas through various learning activities and drawing contests under the "Pun Mitr (sharing with friends)" topic. There were 460 students from 21 schools joining the camp.



Mitr Phol Creates, Youths Make Art Project

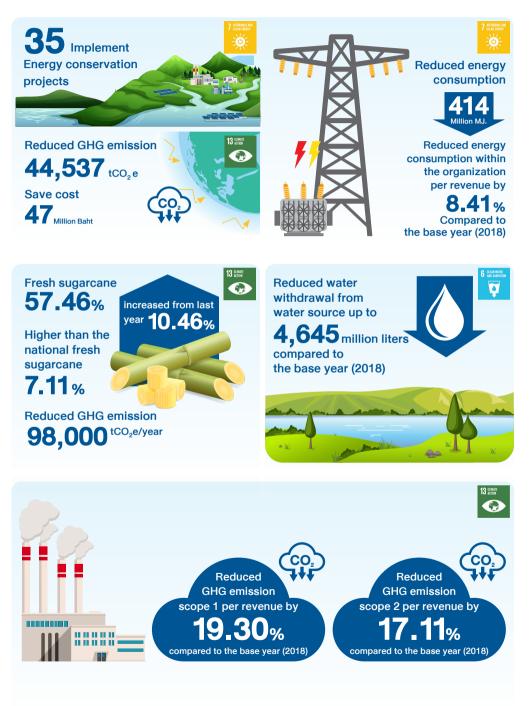
Mitr Phol Group, under the collaboration with the Association of Children and Youth networks for the Peace in the Southernmost Provinces of Thailand (Luuk Rieng Group), Tano Maero Subdistrict Administrative Organization Office, and Bandansantirat School, initiated the Mitr Phol Creates, Youths Make Art project. The project aims to develop childrens' skills, diverting them from drugs through art classes and crafts. There were 28 students from 5 schools in Betong district, Yala province.



Environment Dimension Performance



Care for Environment



Water management

Challenges

Water is an essential natural resource for business operations. Nowadays, climate change causes erratic rainfall patterns leading to water shortage in many areas and water shortage for consumption in agriculture and manufacturing processes. At Mitr Phol, we emphasize efficient water management and water consumption with reach to the environment and communities. Mitr Phol Group has set such a principle as one of its key indicators.

Commitment and Management Approach

Mitr Phol Group manages water through the Water Management Working Group. The Group brainstorms ideas on comprehensive water management planning for the organization, sources adequate water supplies for use in a suitable quality for production, and considers and listens to stakeholders' opinions to prevent conflict with the communities we operate in. Furthermore, the Company coordinates with government agencies such as the Royal Irrigation Department and the Department of Groundwater Resources, local governing entities and stakeholders in our operating territories to discuss water management solutions sufficient for business operations and communities' needs. (303-1) Mitr Phol's strategies for water management are as follows



sourcing surface water and groundwater as an alternative water resource



Reduce reduce water volume fed to the manufacturing process and general use



Reuse reuse condensate water in the manufacturing process

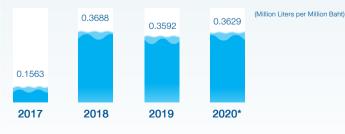


recycle hot water back to raw water ponds during sugarcane crushing season and recycle treated water into raw water ponds

For wastewater management, the Company strives to apply new technologies in the wastewater treatment process by building an efficient water treatment system to remove contaminants from the wastewater until the guality meets the criteria required by law and other regulations.

Performance

Proportion of Water Usage from Water Resources Per Mitr Phol Group's Revenues





Reduce the proportion of water usage from water resources per revenues by

10%. compared with 2018 baseline

- Data from 2017 - 2020 refers to data from 1 Nov of the previous year - 31 Oct of that year Remark: * Water usage from water resources of Mitr Phol Group in 2020 includes water from surface water, groundwater, third party water and produced water whilst the data during 2017 - 2019 include the data of surface water, groundwater and third party water.



Efficient Waste Management

Challenges

The world resources are rapidly destroyed as a result of continued consumption and the lack of care. Alone, the environment cannot recover fast enough due to the leaping growth of the economy. Every party should take part in a campaign and seek ways to utilize resources to the fullest extent to minimize environmental risks and build a network that will push the matter forward. With strong commitment, Mitr Phol Group strives to run efficient waste or unused item management to fully utilize resources and reduce expenses on the management of waste both directly or indirectly caused by our business operations. The Company commits to engage in saving the environment.

Commitment and Management Approach

Mitr Phol Group adheres to a circular economy approach that values the fullest utilization of resources and reuse materials through innovation and technology. This approach enables the highest utilization of resources and creates environmental balance under **"From Waste to Value"** and **"3Rs: Reduce Reuse Recycle"** principles. We turn waste from the manufacturing process into something valuable. For example, we use sugarcane bagasse as fuel to generate biomass electricity. Molasses is used in ethanol production. Filter cake and vinasse are used as raw materials in organic fertilizer production and the fertilizers can be used in our sugarcane fields. Mitr Phol Group encourages its employees to minimize generating waste in our daily lives. We also support proper waste sorting and raise awareness of non-recyclable waste.

Performance



Mitr Phol Group's Waste Volume

Remark: *Refers to data from 1 Nov of the previous year – 31 Oct of that year -From 2018 to 2020 the Company has collected data on hazardous and non-hazardous waste being reused and disposed by incineration including the data on non-hazardous waste being recycled and recovered.



Energy Management and Climate Change

Challenges

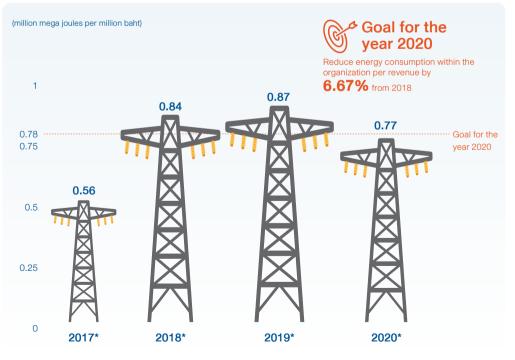
Upon the increase of the climate change severity, causing drought or flood in the country, there has been a change in greenhouse gas emission regulation, drawing attention from the world community. With strong commitment and awareness of the importance of effective use of natural resources, Mitr Phol Group has promoted alternative energy within the corporation while carrying on its sugar business toward alternative energy to meet the alternative energy demand in Thailand.

Commitment and Management Approach

With an aim to enhance the use of energy, the Company has in place energy management, which is in alignment with international standard ISO 50001 and as stipulated by law. Mitr Phol Group has appointed the Energy Conservation Committee to proceed with energy projects. Moreover, there are environmental agencies that supervise to ensure accomplishment to the energy reduction goal and the greenhouse emission scope 1 and 2 set forth. The Committee also monitors and reports the performance to Management regularly.

Performance

Proportion of energy consumption within the organization to Mitr Phol Group's revenue



Remarks : *refers to the data between 1 November of the previous year - 31 Oct of that year

The proportion of the greenhouse gas scope 1 and 2 per Mitr Phol Group's revenue

(tCO₂e per million baht)



Direct greenhouse emission (Scope 1) during 2018 -2020 dropped from 2017 due to the reduction in conventional energy consumption. On the other hand, there has been an increase in solar power consumption, cutting down greenhouse gas emissions. Another indirect greenhouse emission (scope 2) during 2018 - 2020 dropped from 2017 due to the increase in biomass energy consumption generated by Mitr Phol Group and solar power, which cuts down the power purchase from the third party.

Energy consumption at effective rate and the reduction of greenhouse gas within the organization ⁽³⁰⁵⁻⁵⁾

Mitr Phol Group has initiated energy conservation projects in its factories. The project aims to control and improve the manufacturing process, reduce energy loss and enhance energy consumption. For example, reduce energy use in the vacuum pan, stabilize the production process, minimize the production downtime, contributing to the decrease of energy consumption. The Company also develop alternative energy to cut down the greenhouse emission.



Efficient Management of Air Quality

Challenges

The current air quality issue draws the attention of all sectors to consider and seek solutions to control the pollutant emission from agricultural activity such as the burning after harvesting season and the industrial activity where the emission is from the factory manufacturing process. Hence, the effective management of air quality issues and pollutant emission control to leverage beyond the standard is a challenge for Mitr Phol Group to generate good air quality for our society and community.

Commitment and Management Approach

Considering that the Company's production process could result in air pollutants and eventually affect our employees and surrounding communities, Mitr Phol Group, therefore, highlights the importance of air quality management upon its operation impact.

Accordingly, the Company has prepared a strategy and management plan for air quality, including control procedures for internal air quality and around the factory. The procedures contain regular air quality measurement and monitoring to ensure the quality meets the criteria specified by law. Mitr Phol also applies advanced innovation and technology, which is environmental-friendly to its business operation to enhance pollutant prevention and effective air quality management.

Performance

Mitr Phol's air pollutants prevention consists of 3 categories

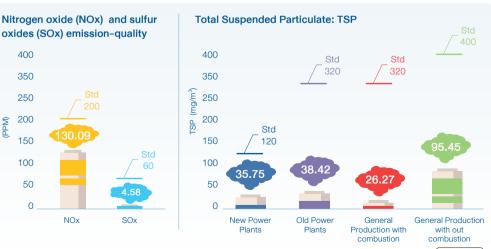


Prevention at the

transmission way



Mitr Phol Group's effort on continual control and leveraging air quality control system shows the result on the improved air emission quality in 2020 as follows;



Mitr Phol Group's air emission-quality



RESILIENCE

TO SUSTAINABILITY





Information Enquiry

If you require more information or would like to make a suggestion, please contact: Sustainable Department, Corporate Sustainability Division Mitr Phol Sugar Corp., Ltd. 2 Pleonchit Center, 3rd Floor, Sukhumvit Road., Klongtoey, Bangkok 10110, Tel: +66 2794 1651.



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