



Growing Together,
Forwarding to
the Circular
Economy



Sustainability Report

Executive Summary 2019

Mitr Phol Group

# Vice Chairman of the Board and Chairman of the Executive Committee's Message

Mitr Phol Group has emphasized sustainable development by defining a framework that covers all business operations in three dimensions, namely economic, social, and environmental. Under the principles of good corporate governance along with building good relationships with stakeholders, we get operational goals to align and support the United Nations Sustainable Development Goals (UN SDGs). Mitr Phol Group's sustainable development framework in three dimensions are as follows: "Transparent Organization with Collaboration to All", "Take Good Care of Community" and "Care for Environment" and all three dimensions will be driven by innovation and digital integration.



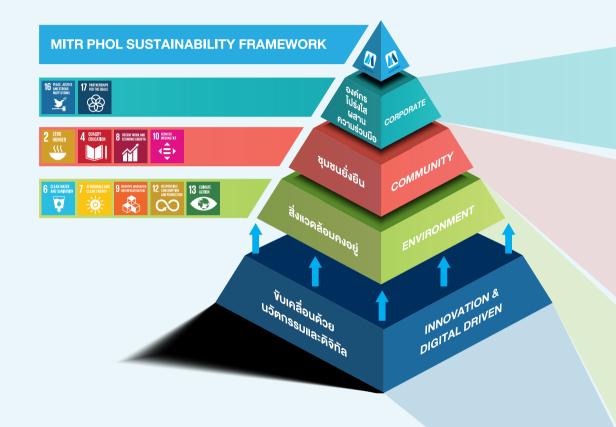


# Growing Together, Forwarding to the Circular Economy

We are committed to responsible for social and environment in order to build a robust economy/ community aligned with the adherence to circular economy guidelines that emphasize the cost-effective use of resources and recycling by using innovative technology to optimize the use of resources and aimed to balance the environment.

Because we believe in development aimed at maintaining a balance between economic, social, and environmental are the way to grow steadily and sustainably.





Our sustainable development for Mitr Phol Group is to dedicatedly focus on the development of an organization, communities, and environment together with a balance under the philosophy "Grow Together". This supports the United Nation 11 sustainable development goals through Mitr Phol Sustainability Framework.

# Important Operation Details

# Transparent Organization with Collaboration to All

- Good Governance
- Coordinating Teamwork and Building Network

### Sustainable Community

- · Supply Chain Management
- Take Good Care of Community
- Human Resources Management
- Implementation of Human Rights
- Occupational Health and Safety

### **Care for Environment**

- Water Management
- Energy Management and Climate Change
- Waste Management
- Air Quality Management

**Crucial Driver** 

Innovation

# Performance Highlight

### **Economy**



100% of our employees have been communicated and acknowledge the Mitr Phol Group's code of conduct, policies, and practices related to corporate governance.



Mitr Phol Group had local purchasing of **31.8** million baht, which accounted for **97.80%** of the total procurement costs.



Received an ISO 20400:2017 Sustainable Procurement Guidelines Certification.

### **Society**



Supporting budget for society and communities with a total value of **112** million baht.



There were 5 occupation groups established with cash flow in the community of 164.975 baht.



Transformational leadership in the communities of **510** people have been created.



240 specialize learning centers have been established.



7 district learning centers have been established.

"Chuenjai By Mitr Phol" generated income to the community of





**87** personnel with disabilities.



Employees engagement of Mitr Phol Group accounted for **71%** 

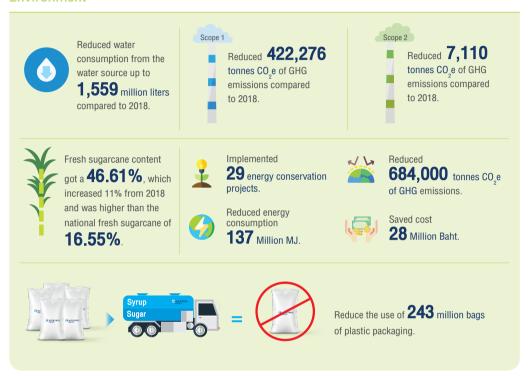


Lost-Time Injury Frequency Rate (LTIFR) of employees: 1.18 person/1 million working hours.



Lost-Time Injury Frequency Rate (LTIFR) of contractors: **0.62** person/**1** million working hours.

#### **Environment**



#### **Innovation**





### **Good Governance**

We have driven the business in accordance to good governance because effective management, transparency, traceability, respect for the need of all stakeholders appropriately and continuous improvement are the key to support business competitiveness which brings business to sustainable growth.



# Supply Chain Management

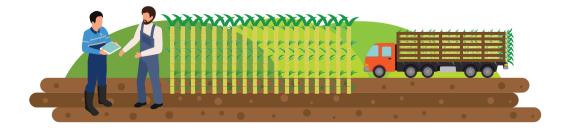
Supply chain management is one of Mitr Phol Group's priorities in business operations. For the company to procure raw materials, produce, and deliver to customers with quality and punctually which maximizes customer satisfaction starting from the selection of suppliers, improving manufacturing processes, storing and shipping all the way to risk supervision and governance throughout an entire supply chain. To enhance the capability of the organization and business partners to pursue sustainable business operations.



Mitr Phol Sugar Corp., Ltd. received an ISO 20400: 2017 Sustainable Procurement Guidelines Certification from ISO Certification Institute (MASCI), which shows that the company's procurement system is efficient and promotes sustainable development throughout the supply chain.

Mitr Phol Group had | which accounted for

local purchasing in 2019 | 97.80% of the total procurement costs.



# Collaboration and Building Network

We are committed to be the key mechanism towards coordinating with every sector including both public, private and civil society for a concrete development for instance, being a part of an establishment of the Global Compact Network Thailand (GCNT) for moving one step forward towards the United Nations Sustainable Development (UN SDGs). Collaborating with the government sector to drive Thailand's policy in sustainable agriculture and develop Smart Farmer by the introduction of technologies and innovation to implement in agriculture. In addition, to support doing precision farming through training and sharing of knowledge related to farming, etc.



Collaborating with the government sector to drive Thailand 's policy in sustainable agriculture and develop Smart Farmer.



Mitr Phol Group and other leading organizations in Thailand jointly unveiled the Global Compact Network Thailand (GCNT).

# Networking in which Mitr Phol has collaborated with

#### 1. Bangkok

#### Government sector

Digital Economy Promotion Agency Ministry of Agriculture and Cooperatives

Ministry of Industry

Ministry of Energy

Ministry of Social Development and Human Security

Office of the National Economic and

Social Development Council

Ministry of Education

Ministry of Higher Education, Science,

Research and Innovation

**Excise Department** 

Ministry of Commerce

Ministry of Labour

Ministry of Public Health

Ministry of Interior

King Mongkut's Institute of Technology Ladkrabang

#### Private sector

Charoen Pokphand Group

True Corporation Public Company Limited

Thai Beverage Public Company Limited

The Siam Cement Public Company Limited

Betagro Public Company Limited

PTT Public Company Limited

The Stock Exchange of Thailand

Central Group

**CP Intertrade Company Limited** 

Bangsue Chia Meng Rice Mill Company Limited

Tipco Foods Public Company Limited

Siam Kubota Corporation Company Limited

Dairy Home Company Limited

**Total Access Communication Public Company** 

Thai Sugar Millers Corporation Limited

#### Civil Society sector

Thai Health Promotion Foundation

Community Organizations Development Institute (Public Organizations)

Thailand Science Research and Innovation (TSRI) Thailand Development Research Institute (TDRI) National Health Commission Office

Thai Sugar and Bio-Energy Producers Association

The Thai Chamber of Commerce and Board of Trade of Thailand

The Federation of Thai Industries Pid Thong Lang Phra Foundation Social Innovation Foundation

Global Compact Network Thailand

#### 2. Nakhon Pathom

#### Government sector

Mahidol University, Salaya Campus Kasetsart University, Kamphaeng Saen Campus

#### Private sector

Sampran Model, Sookjai Foundation

#### 3. Samut Sakorn

#### Private sector

King Wish Company Limited

#### 4. Sing Buri

#### Government sector

Thepsatri Rajabhat University, Sing Buri Office of the Non-formal and Informal Education, Sing Buri

Sing Buri Provincial Agricultural **Extension Office** 

Mai Dat Sub-district Administrative Organization Office, Sing Buri

Pho Sonakho Sub-district Administrative Organization Office,

#### Sing Buri Private sector

Sufficiency Economy Learning Center of Khun Rangsan Boonnakan

#### - 5. Suphan Buri

#### Government sector

Suphan Buri Industry Office Nong Ya Sai Community Development District Office, Nong Ya Sai District, Suphan Buri

Nong Ya Sai District Agricultural Extension Office, Nong Ya Sai District, Suphan Buri

Chaeng Ngam Sub-district Administrative Organization Office, Suphan Buri

Nong Makha Mong Sub-district Administrative Organization Office, Suphan Buri

Suphan Buri Provincial Social Development and Human Security Office

#### Private sector

**Development of Agricultural Learning** Center (ALC) of Khun Nathara Yamphikul, Suphan Buri

#### Eastern

#### ► 6. Rayong

Private sector

Songsalueng Natural Agriculture Center



Remarks: Government sector Private sector Civil Society sector

#### Northern

#### 7. Chiang Mai

Government sector Maejo University

#### Northeastern

#### 8. Kalasin

#### Government sector

Kalasin Provincial Social Development and **Human Security Office** Som Sa-at Sub-district Administrative Organization Office, Kalasin Chum Chang Sub-district Administrative Organization Office, Kalasin Kut Khao Sub-district Administrative Organization Office, Kalasin

#### Private sector

Kalasin Natural Agriculture Center of Khun Charoemsuk Thanuamsit

#### 9. Khon Kaen

#### Government sector

Khon Kaen Provincial Social Development and **Human Security Office** Chum Phae Sub-district Administrative

Organization Office, Khon Kaen

Chai So Sub-district Administrative Organization Office, Khon Kaen

Non Sa-at Sub-district Administrative Organization Office, Khon Kaen

Kut Kwang Sub-district Administrative Organization Office, Khon Kaen

Ban Meng Sub-district Administrative Organization Office, Khon Kaen

Chorakhe Sub-district Administrative Organization Office, Khon Kaen

Khon Kaen University

Department of Agriculture, Khon Kaen Province Khon Kaen Agricultural Research and **Development Center** 

Nong Ruea District Agricultural Extension Office Nong Ruea Hospital

#### Private sector

Mekin Farm, Chorakhe Sub-district, Khon Kaen Tesco Lotus, Khon Kaen DTAC Net-Arsa, Khon Kaen Wanaphan Garden

Non-toxic Vegetable of Sumsung Agricultural Cooperative Limited, Sumsung District

#### 10. Roi Et

#### Government sector

Roi Et Provincial Social Development and Human Security Office

Nong Yai Sub-district Administrative Organization Office. Roi Et

#### 11. Chaiyaphum

#### Government sector

Chaiyaphum Provincial Social Development and Human Security Office Ban Duea Sub-district Administrative Organization Office, Chaiyaphum Nong Kha Sub-district Administrative Organization Office, Chaiyaphum Nong Khon Thai Sub-district Administrative Organization Office, Chaiyaphum Ban Kaeng Sub-district Administrative Organization Office, Chaiyaphum Khok Sa-at Sub-district Administrative Organization, Chaiyaphum Chaiyaphum Rajabhat University, Chaiyaphum Department of Agriculture, Chaiyaphum Phu Khiao District Agricultural Extension Chaiyaphum Industry Office

#### - 12. Loei

#### Government sector

Si Songkhram Sub-district Administrative Organization Office, Loei Khok Khamin Sub-district Administrative Organization Office, Loei

#### Private sector

Ban Khok Yai Sufficiency Economy Learning Center of Khun Chaloemchai Intarachaisri, Loei Daughters of Charity Foundation, Loei Branch

#### 13. Amnat Charoen

#### Government sector

Amnat Charoen Provincial Social Development and Human Security Office Amnat Charoen Industry Office Nam Plik Sub-district Administrative Organization Office, Roi Et Na Mo Ma Sub-district Administrative

Organization Office, Roi Et

Amnat Charoen Agricultural Research and **Development Center** 

Amnat Charoen Provincial Agricultural **Extension Office** 

Amnat Charoen Provincial Energy Office Amnat Charoen Provincial Livestock Office Amnat Charoen Provincial Auditing Office Provincial Offices for Natural Resources and Environment Amnat Charoen

#### Private sector

Ban Khok Charoen Sufficiency Economy Learning Center of Khun Prayong Boonthong, Amnat Charoen Phu Tawan Organic Farm







### 2021 Goal

All **25** sub-districts



will have established at **least One** learning center per sub-district.

**30%** of agricultural households in the sub-districts will be self-reliant sugarcane farmers.



At least **10%**of households in
the sub-districts
will be model families.



Performance to recruit and select the target area for developing to role model sub-district

2018

21
sub-districts

to 25 sub-districts

A total of 338 villages took part in the program.

More than 1,620 families



became volunteers and participated in a sufficiency economy program.

# Sustainable Community Management

We took part in the development and promotion of sub-district community committees as known as "Mitr Phol Sub-District Committees" in 25 sub-districts, which helped them to develop techniques and tools for work. Develop management at a group and network-level helps to build an important foundation by enhancing quality and capability for people to have the mental strength for them to be self-reliant.

125 role models

136 community researchers

**34** communicators

510 change leaders



Building

16 community
databases



Creating **17** community research papers.



Setting up **240** specific knowledge centers for specific areas.

Forming **7** learning centers in each of the following seven sub-districts:

Baan Gang, Kok Sa-art, Kok Kamin, Nong Yai, Mai Dad, Kud Kwang, and Naam Pleek.





**11 families** were self-sufficient for energy production

biogas in **6** families

coal in 3 families

solar power in **2** families



Establishing **6** clubs for the disable persons in the communities to provide a network of support for each other

(Nong Kon Thai sub-district, Kok Sa Art sub-district, Naam Pleek sub-district, Kud Kao sub-district, Nong Yai sub-district,

and Nong Maka Mong sub-district).



# Community Farming and Food Safety

We are encouraging in the change of behavior by applying cognitive and practical principal under the sufficient economy philosophy which leads to the change in farmers' lifestyle in various dimensions. Including planting for consuming in family rather than buying from others and managing area for integrated crop production or new theory of agriculture which reduces their dependency on external assistance.

### Out of the 25 sub-districts



**12** safe vegetable farming groups

We have a combined cash flow from several activities in excess of **2.1** million baht for the year.





Farmers' expenses for consumption are reduced



More environmentally friendly behavior is adopted



Well-being and health of members in farming household are improved due to the consumption of safer and more hygienic food

# Community Local Economy

We promote and develop professional skills based on their competency, capability and resources available in each community. Developed to integrate into a diverse group of activities in each area. To generate income along with the development of management systems in terms of cost, production, marketing, and accounting, expanding to community enterprises.

## 5 different career groups



Communities have revolving money from the group of activities by

164,975

baht

from **25** sub-districts that are part of the sustainable community

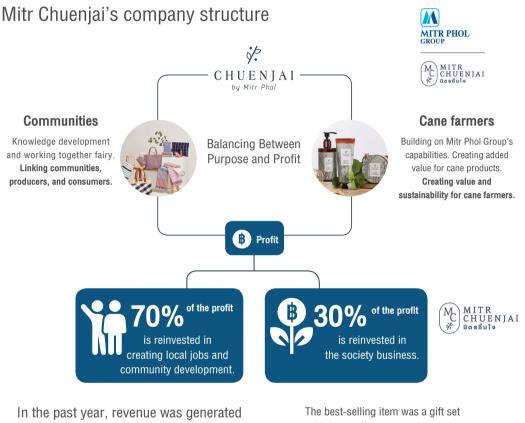






Coconut broom group

Besides, Mitr Phol Group has operated a community enterprise, "Mitr Chuenjai Company Limited", with the consideration to contribute to society and business returns, It creates profits back to society under the brand "Chuenjai by Mitr Phol" to become a fully integrated social enterprise by 2022.



for communities.



combining quality community products in a wooden box with an attractive design.





# Other Community Development







"Mitr Phol
Art Camp"
project - Creating
the consciousness
for youth to love
and cherish the
community.









Partnership
School - To develop
the education
system through the
collaboration of private
companies and the
schools.









## Human Resources Management

We realizes employees are a critical factor in the success and leveraging of an organization. Therefore, a human resource management strategy was established. Which comprises increasing the productivity of employees, strengthening employee engagement toward the organization, developing the capability of employees to the international level, enhancing organizational efficiency including; raising the standard and work with managing human resource.



### Mitr Phol Group employs Persons with Disabilities



employs **87**persons with disabilities



**33** persons of whom work in the company



while **54** persons work within the communities

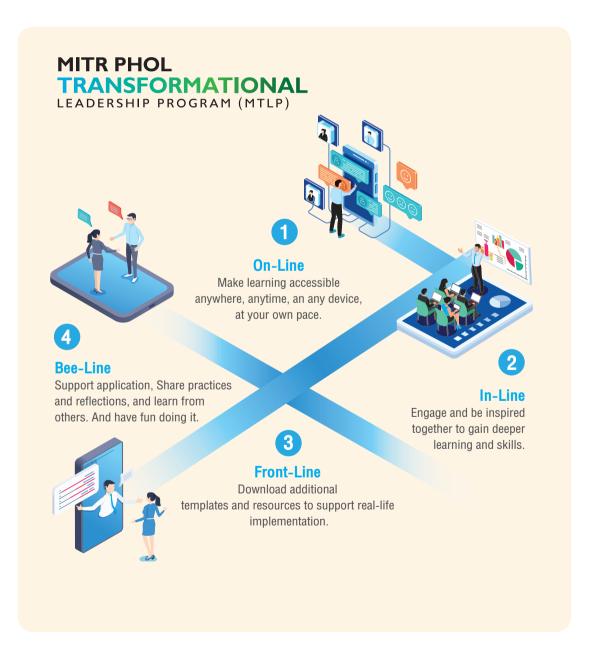


Five associations for persons with disabilities have been established, with a total of

**661** member

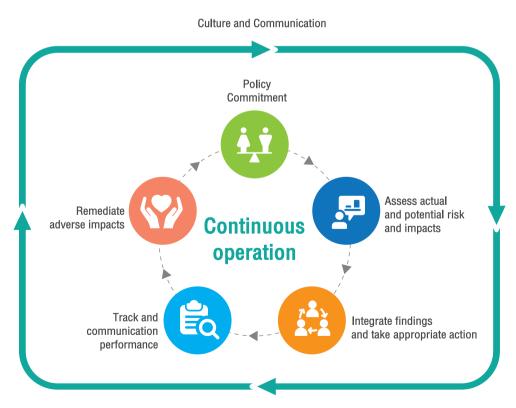
### **Employee Development by Mitr Phol Group**

We prepare employees in the era of digital transformation. Therefore, a specific course of the Mitr Phol Group is created the program to prepare and modernize learning onto digital transformation as follows:



# **Human Rights**

We recognizes and have made compliance with human rights a part of the Mitr Phol Code of Conduct alongside with Supplier Code of Conduct because the company believes that respect for human rights is one of the basis in doing business with fairness and help businesses grow sustainably. Hence, the Human Rights Due Diligence (HRDD) process has been implemented as a framework for Human rights management to prevent and avoid human rights violations in terms of personnel, Mitr Phol Group, business partners (farmers, contractors, customers), and business associates with management procedures as follows:



**Human Rights Due Diligence** 

Also, we have emphasized child rights which the company has integrated the rights of children into the business practice and in line with the Child's Rights and Business Principles (CRBP) starting from 2016 to the present through the following child rights advocacy operations:



Providing breastfeeding support; by setting up breast milk feeding for mom in the nursing room.



Scholarships are awarded to employees' children that are lower than the bachelor's degree level.





Mitr Phol Group has taken part in developing children and youth; Open the door for them to access the Thai educational system.

# Occupational Health and Safety

We have emphasized Security, Safety, Occupational Health, and Environmental: SSHE substantially on business operation because the company sees the importance in every life, including employees, contractors, and stakeholders and aiming for zero accidents for avoiding loss which may have an effect on employees, contractors, and stakeholders including the impact on business operation. In which the company is determining to improve and enhance the capacity on stability, safety, hygiene, and environmental for a continuous improvement to step towards in being the World Class Organization.

Mitr Phol Group collects statistics of Mitr Phol employees and contractors every month from the Committee on Safety, Occupational Health, and Working Environment. The company has set a target rate of injury and strike time annually and there is a system to report the performance of safety in comparison with the following goals:

### Lost-Time Injury Frequency Rate (LTIFR)





# Safety starts with me











### Life Saving Rules for Sugar Factories Group

# √4 Must × 3 Must not

#### 1. Must wear



#### 3. Must switch off electric. air and hydraulic



before carrying out machinery maintenance or cleaning tasks and special permission must be sought prior to deaning in areas where machinery is present.

### Must not smoke in factory



except in provided areas and must throw cigarette butts only to the provided trash.

### 2. Must obtain



work permits for risky tasks (for example, work that involves heat or sparks, work at height greater than 2 meters, or work at spots with poor ventilation).

### 4. Must fasten safety belts (driver and

prior to moving vehicles from parking lots and keep safety belts fastened throughout the journey Factory vehicles are included.

all passengers)

### 6. Must not modify machinery



and equipment or bypass safety interlocks without permission from supervisors (manager level or higher)

### 7. Must not use telephone



(no call/photo taking/typing/listening) in areas prone to fires and explosions while operating machine and driving all types of vehicles.

# M MITR PHOL









### **Life Saving Rules** for Sugarcane Business





3. Must wear a safety equipment





machineries, farming tools and every vehicle types for the readiness before use.



report unsafe action/ unsafe condition/ machine abnormalities such as tools & equipment/ near miss scenario including all the accidents that have happened in all of







7. Must not drive vehicles





8. Must not drive

home with poor physical



10. Must not use eed in driving all types' of vehicles exceeding the requirement of law.















### Water Management

Water is an extremely critical natural resource in any business operation. At present, climate fluctuations disturb seasonal rain, water shortage problems in many areas which affect the amount of water used in agriculture and production process that may affect the competition between businesses and communities. Mitr Phol Group places great importance on water management; we have set a water management committee up to monitor the situation and manage water use efficiently. There is a water shortage risk assessment in terms of quantity and quality in every area where the company operates annually to discuss the universal water management practices that meet the needs of business operations and the community.

Mitr Phol Group has implemented various projects to use water more efficiently and achieve the goals set with details as follows:



Collecting rainwater to substitute water usage from natural sources.



Water footprint evaluation and water balance analysis to find solutions to reduce water usage.



Reducing water usage.

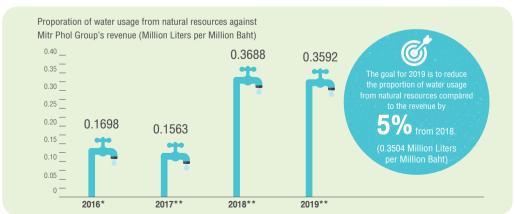


Reusing water.



Recycling treated wastewater.

Performance of reducing water usage from natural resoursces:



# Energy Management and Climate Change

We are committed to energy management and climate change. It has been implemented using the guidelines of the ISO 50001 standard to help improve energy management and climate change. There is a campaign to harvest fresh sugarcane and create incentives for farmers. An Energy Conservation Committee has been established to operate on energy management to achieve the goals set.



Implemented

29 energy conservation projects.



Reduced

684,000 tonnes CO<sub>2</sub>e of GHG emissions.



Reduced energy consumption

137 Million MJ.



Saved cost

28 Million Baht.

Apart from this, Mitr Phol Group also promotes a Low Carbon Society by selling 327,000 tonnes of carbon dioxide equivalent to the various department in both public and private sectors that are interested in carbon offset to make greenhouse gas emissions equal to zero. This is an important mechanism that encourages all sectors to take part in solving global warming problems. As well as supporting government policies that want to reduce greenhouse gas emissions. At present, we have carbon credits of 930,000 tonnes that are certified by the Thailand Greenhouse Gas Management Organization (TGO).



The biopower project by Mitr Pol Bio-Power (Dan Chang) (phase 2).



The biopower project by Panel Plus Bio-Power Company Limited.



The 133.6 MW thermal power from biopower project by Mitr Phol Bio-Power Phu Khieo (phase 2).



The 45 MW co-generation biopower project at Mitr Phol Bio-Power (Kuchinarai).

Carbon Credit 930,000 Tonnes CO

### Waste Management

We had committed to conducting business with an emphasis on environmental protection while adopting 3Rs (Reduce, Reuse, Recycle) principles for managing waste materials. Reduce the use of raw materials and reduce the amount of waste material sent to be disposed of with the consideration of plastic waste which is a major problem affecting the current ecosystem. Mitr Phol Group is also reducing the amount of Single-use Plastic Packaging, promoting the use of Compostable packaging.



Mitr Phol Group developed a packaging technology that aligned to the concept of a circular economy by using packaging made from paper coated with Bio-Based Polybutylene Succinate (BioPBS) made from corn in natural cane sugar packaging. The packaging is biodegradable in just 6 months and leaves no residue on the environment.



# Air Quality Management

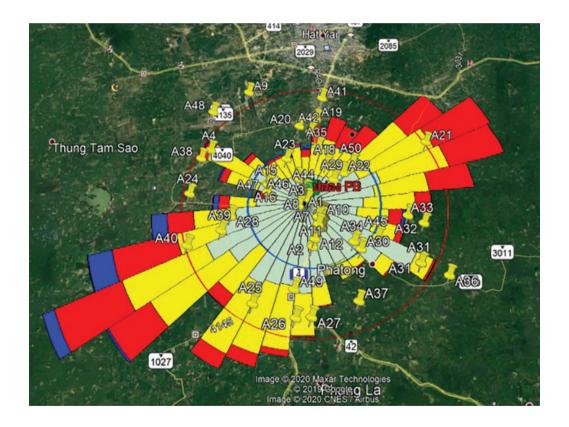
We realize the importance of air quality management. This is because the manufacturing process may generate air pollutants, especially the diffusion of dust which might affect employees and the surrounding communities. With awareness of the environmental impact, we strive to create measures and carry out air quality management projects both internally and in the area around the factory to ensure that the air quality meets the required standards. Besides, innovation and advanced technology have been implemented to simultaneously improve the company's air quality control system.





Controlling dust from bagasse storage areas such as using the water spray to prevent diffusion of bagasse and installing the cover of the bagasse conveyor bridge.

Panel Plus Co., Ltd. has also applied the AERMOD, mathematical model to assess the airborne emission. Which allows the company to control the discharge rate of the emission through the shaft, establish preventive measures and enable a better watch for an air emission during the period in which the wind changes direction, including being able to plan for mass relations and proactively going to the impact survey area to use the survey results to control the emission from the factory.



The AERMOD, mathematical model



### **Innovation**

"Creating Value for a Sustainable Life" requires innovation as a crucial driver. Therefore, we support the creation and implementation of research and innovation to build up stability and elevate the sugar cane industry/ biological industry. There will be divided into 4 parts as follows:





Employees who won the Mitr Phol Best Innovation Awards on an educational trip to South Korea.



Mr. Verajet Vongkusolkit, Chief Executive Officer of Thai Sugar, Energy and New Business Group-Mitr Phol Group (2<sup>nd</sup> from left) joins hands with Mr. Senathip Sripaipan, Chief Commercial Banking Officer, TMB, in collaboration on supply chain solutions, integrated financial and business management.





Mitr Phol natural cane sugar in a new packaging.





### **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, 3<sup>rd</sup> Floor, Soi Sukhumvit 2, Sukhumvit Road,

Klongtoey, Bangkok 10110

Tel: +66 2794 1651



Growing Together,
Forwarding to
the Circular
Economy







Report 2019