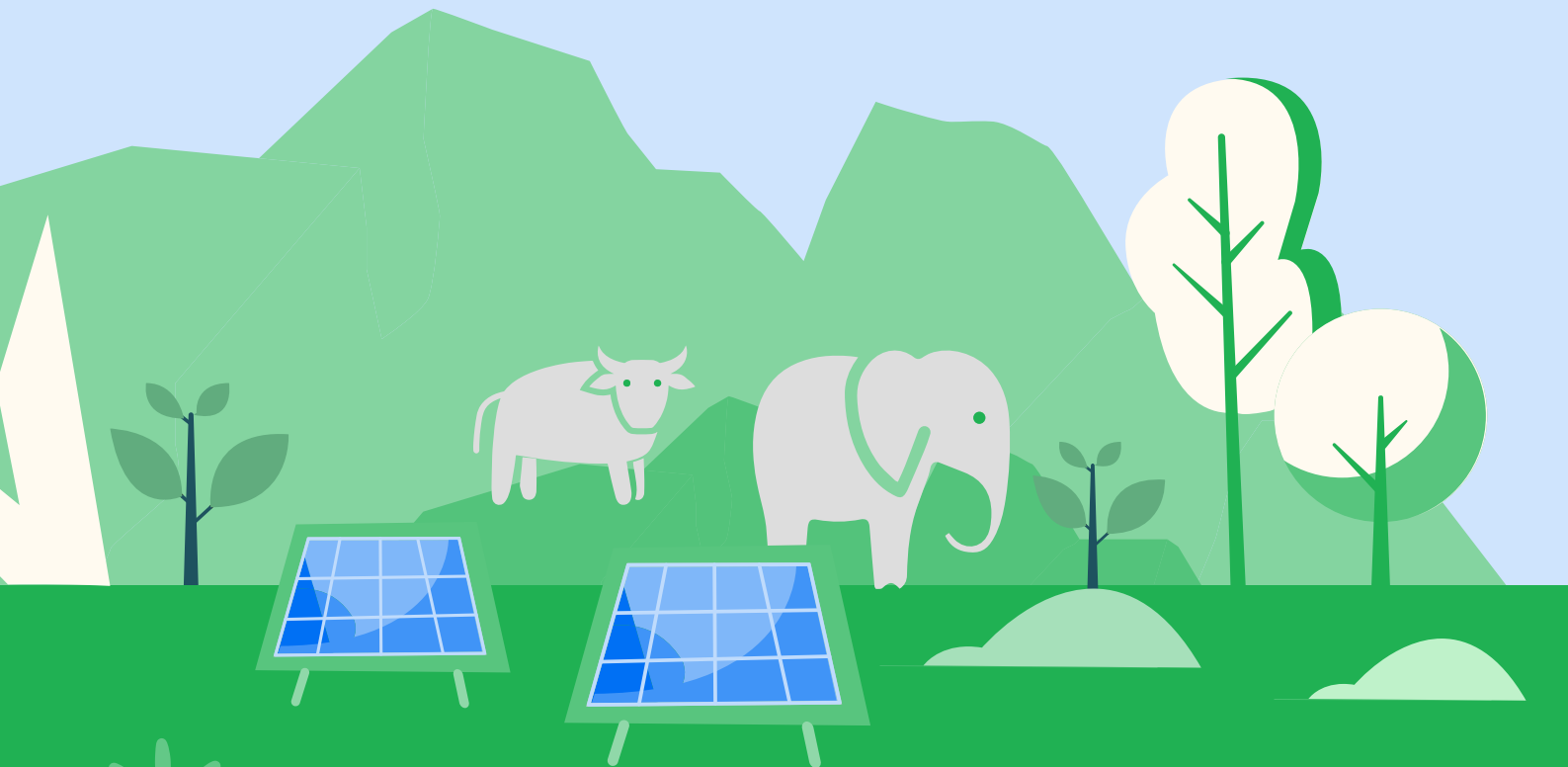
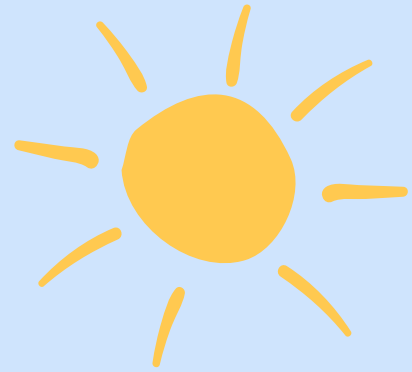




Southland Rubber

Think Good, Better Will Follow



Sustainability Report 2022

Making Sustainability Progress
amidst Global Challenges



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About the report

Our Objective

As the largest privately-owned rubber processing group, we recognize the importance to share publicly our sustainable development including our ethical and transparent business conduct.

Report Preparation

This Report was prepared by our in-house Sustainability Working Group. The top management engaged and supported the preparation process as well as approving the publication of the Report.

Guidelines & Standards

This Report makes disclosures based on the **Global Reporting Initiative (GRI) Standards**. We make references to these elements of the GRI requirements as our guidelines. Additionally, we also express our commitment to contribute to the **17 Sustainable Development Goals (SDGs)** of the UN by linking them to our operational and sustainability activities.

Reporting Scope

This is the sixth Sustainability Report of Southland Rubber, Thailand. The Report covers sustainability performance of our 17 factories under 9 entities from January to December 2022.

Our 9 Entities include:

- Southland Rubber Co., Ltd.
- Southland Resources Co., Ltd.
- Southland Resources (Chumphon) Co., Ltd.
- Southland Resources (Trang) Co., Ltd.
- Southland Resources (Phetchabun) Co., Ltd.
- Southland Latex Co., Ltd.
- Southland Latex (Phatthalung) Co.,Ltd.
- Uni Rubber Co., Ltd.
- Unimac Rubber Co., Ltd.

Feedback & Contact

For feedback and inquiries, please contact us at csr@southlandholding.com.

Reporting of 3 sustainability aspects



“Think Good, Better Will Follow”

Message

from the Managing Director

Dear Stakeholders and Readers,

In line with our mission of **“Continuing to be a reliable and dependable supplier of quality natural rubber”**, we had extended our past efforts, as reported since our first Sustainability Report in 2017, to attain new sustainability performances to meet the challenges of present times.



Several global developments in 2022 had brought hardships and pains to businesses, communities and individuals. Disruptions of oil and gas supplies due to the Ukraine-Russian conflict had resulted in volatile energy costs. This had also accelerated the global inflationary trends on food and other materials. Central banks' raising of interest rates had further added to financing costs. Rising costs are threatening demand for goods and services, expected to lead to economic slow-down. We had focused on implementing projects that would mitigate these impacts.

At this juncture, I wish to extend my deep appreciation to our Sustainability Working Group for the untiring efforts to make progress in our sustainability programs, despite the negative global factors we are facing.

Climate Change Mitigation:

Lessons from uncertain supplies and rising costs of oil and gas motivated us to expand usage of renewable energy. We introduced our plan for the first two factories—Southland Resources Co., Ltd. (BJ3 in Rayong province and BJ4 in Buengkan province)—in 2020 and could start generating solar energy at the end of 2022. The shift to renewable energy can result in carbon emission reductions and mitigate the risks of energy constraints that struck the world economy badly in 2022. As a result, we devised a strategy to continue the solar rooftop projects in the other four factories. Now that the contracts have been signed, the construction will proceed as planned. That means six of our factories will have used solar energy by 2025, and our use of solar energy will account for around 11 percent of total energy consumption. In addition to the renewable energy, we started collecting data on Scope 3 carbon emissions to get a more holistic picture of the organization's carbon footprint. Additionally, we have started with using 4 electric forklifts to replace our traditional diesel powered forklifts.

Employee Care and Social Contribution:

As for the social aspect of our sustainability management, our people and local communities are at the heart of it. Due to the rising inflation that caused economic tensions this year, we carried out 2 financial assistance programs—the Extra Allowance Project and the Education Loan Project—to reduce the financial burden and increase the morale of employees.

Apart from sporadic engagement activities and social contribution efforts, we also paid attention to ongoing projects. We were able to successfully continue our ongoing engagement projects with Ban Klong Nokkratung School, focusing on sustainable lunches for local students. Continuously, we have made a plan to follow up on and expand the projects with the school and also carry out similar activities in our other factories' neighboring areas.

We believe that a sustainable business is built on strong employees and communities. Therefore, we will always move forward together with our people and communities. It was very heartening for me to hand over on behalf of the Group a donation of 1,000,000 THB to the Hatyai Hospital Healthcare Foundation.

Making progress in sustainability had always been what we pursue. In 2022 we managed to achieve the lowest loss time injury frequency rate, injury frequency rate, and incidents in the last 5 years. With respect to continuous enhancement of employment skills, we attained the highest number of hours of training in the last 3 years. In these pages you will find examples of our factories' innovating simple protective measures and yet had mitigated significant risks to work injuries.

Sustainable Natural Rubber and Supply Chain:

In observing that “sustainability begins at home”, in 2022 we initiated for the first time an annual online Q&A exercise to score understanding of our published policies on ethics, social, environmental, health, safety, and other issues. Our factory team leaders, supervisors and senior levels of employees individually took part and were made to pass the exercise.

The natural rubber industry heavily relies on nature. Recognizing our reliance on natural capital, we have taken steps to establish a sustainable natural rubber supply chain, both on our own and in collaboration with our business partners. We continued close engagement with our suppliers through the supplier capacity building program. Plus, we made an earnest attempt to evolve our traceability approach by engaging with our customers in identifying the sources of our natural rubber supplies.

In the months ahead, we shall focus on one program - our natural rubber agroforestry program: to coordinate and support agroforestry among our natural rubber suppliers who are rubber farmers interested in the program, working with the cooperation of agroforestry experts and other relevant parties.

We encourage readers to learn more about our sustainability efforts in this Report. We are open to positive changes and further improvement in our sustainability journey, motivated by our motto: **“Think Good, Better Will Follow”**.

Business Overview

Business Type & Background


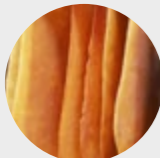

Southland Rubber, a privately-owned company, is a natural rubber producer head-quartered in Thailand. The company was founded in 1986 and had considerable experience in the natural rubber industry.

Customers & Markets

Our customers are tire makers and manufacturers of natural rubber-related products. Our primary markets include China, Japan, Korea, Thailand, Malaysia, the Americas, and European countries.

Product & Production Capacity

We provide our customers with 3 types of products, with a total capacity of **1,571,320** metric tons/year.

 <p>Block Rubber TSR (Technically Specified Rubber)</p> <p>STR 10, STR 20, STR Mixture</p>	<p>1,118,000 Metric tons/year</p> <p>7 factories</p>
 <p>RSS (Ribbed Smoked Sheets)</p> <p>RSS #1, RSS #2, RSS #3, RSS #4, RSS #5</p>	<p>260,000 Metric tons/year</p> <p>5 factories</p>
 <p>Latex Concentrate (60%)</p> <p>High Ammonia (HA), Medium Ammonia (MA), Low Ammonia (LA), Deproteinized Latex</p>	<p>193,320 Metric tons/year</p> <p>5 factories</p>

Number of Factories with ISO Certification

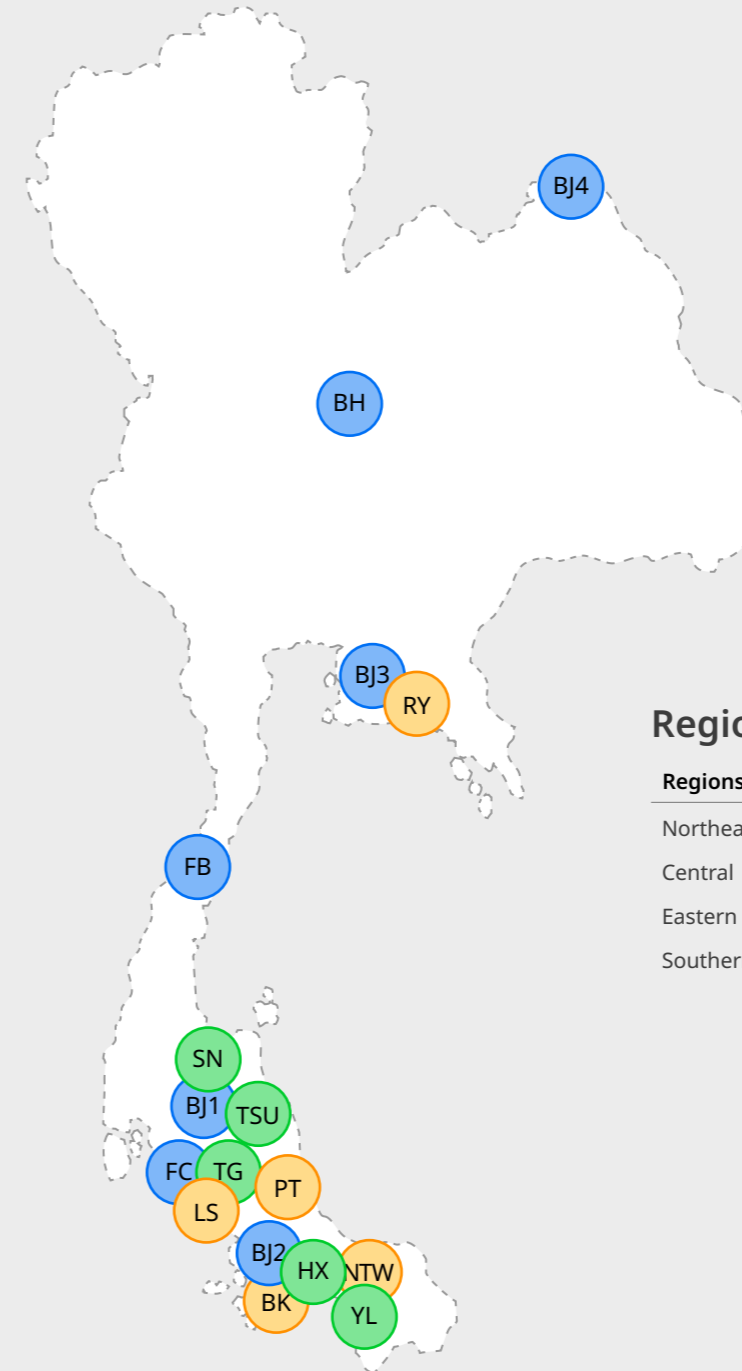
100% ⁽¹⁷⁾ ISO 9001 Certified	100% ⁽¹⁷⁾ ISO 14001 Certified
82% ⁽¹⁴⁾ ISO 45001 Certified	33% ⁽⁴⁾ ISO/IEC 17025 Certified

Our Employees


Males **55%** Females **45%**


Total **5,043**


Location of Operation



Head Office

 Address
55 Rajyindee Road, Hatyai, Songkhla, Thailand

 Contact
Tel. (66) 074 342742

 Website
<https://www.southlandholding.com>

9 Entities
(as listed on [page 3](#) of this Report)

Regions and Provinces

Regions	Provinces	Factory Codes
Northeastern	Bueng Kan	BJ4
Central	Phetchabun	BH
Eastern	Rayong	BJ3 RY
Southern	Chumphon	FB
	Surat Thani	SN
	Nakhon Si -Thammarat	BJ1 TSU
	Phatthalung	PT
	Trang	FC TG LS
	Songkhla	BJ2 HX BK NTW
	Yala	YL

7 STR
Processing Factories

BJ1 BJ2 BJ3 BJ4
FB FC BH

5 RSS
Processing Factories

YL HX SN TSU
TG





5 Latex
Concentrate Processing Factories





NTW BK RY PT
LS

1. ISO/IEC 17025 Testing and Calibration Laboratories applies to only STR factories and Latex factories.
2. Data as of December 31, 2022

Engagement with Stakeholders



Stakeholders & Key Topics	Engagement Channels	Expectations/ Needs	Our Responses/ Activities
 <p>Shareholders</p> <ul style="list-style-type: none"> • Good Governance • Risks & Opportunities • Transparency • Business performance • Company's Policies 	<ul style="list-style-type: none"> • Shareholder meetings • Financial reports • Performance reports • Sustainability reports • Online communication through various channels e.g. email, website, video conferencing 	<ul style="list-style-type: none"> • Continuous growth of business and good performance results • Transparent business conduct • Regular policy review and policy implementation • Compliance with related national laws and regulations and other internationally recognized guidelines and standards as well as sustainability practices • Good relationships with other stakeholders 	<ul style="list-style-type: none"> • Annual policy review • Compliance program • Shareholder meetings • Risk assessment on different topics • Internal audits • Engagement activities with other stakeholders e.g., social contribution activities • Activities and projects to promote sustainability and improve the sustainability performance of each aspect • Whistleblowing mechanism
 <p>Employees</p> <ul style="list-style-type: none"> • Company's policies • Occupational health & safety • Employees' welfare & well-being • Career development • Human rights and labor practices • Employees' satisfaction 	<ul style="list-style-type: none"> • Surveys and interviews • Company newsletters • Information sharing (e.g. one point lessons and safety statistics) on bulletin boards, website, intranet system, and other online platforms • Meetings, training, online Q&A review • Whistleblowing channels e.g. suggestion boxes • Morning talks 	<ul style="list-style-type: none"> • Career development • Good welfare & remuneration • Good & safe work environment • Equality and no discrimination • Decent treatment • Compliance with national labor laws 	<ul style="list-style-type: none"> • Welfare committee meeting • Employees satisfaction survey • Whistleblowing mechanism • Compliance program • 5S, safety activities and KAIZENS • Activities to promote employees' well-being e.g., providing subventions to ease rising inflation and for other purposes
 <p>Customers</p> <ul style="list-style-type: none"> • Customers' policies • Quality feedback • Sustainability issues • Sustainable procurement • Supply chain sustainability • Sourcing raw material / traceability 	<ul style="list-style-type: none"> • Meetings • Visits & audits • Surveys / Questionnaires • Online communication through various channels e.g. email, website, video conferencing • Sustainability report 	<ul style="list-style-type: none"> • Compliance with customers' policies • On-time delivery • Consistent product quality • Prompt responses to requests and inquiries • Information security / confidentiality of customers' information • Participation in customers' activities/ projects • Sustainability efforts 	<ul style="list-style-type: none"> • Acknowledgement of customers' policies • Policy alignment with customer's policies • Onsite visits and audits • Online and onsite meetings / conferences • Customer satisfaction survey • Responses to customers' feedback
 <p>Financial institutions</p> <ul style="list-style-type: none"> • Transparency • Financial information • Business strategies & risk management • Compliance with business agreement 	<ul style="list-style-type: none"> • Financial reporting • Head office and factory visits • Sustainability reports • Online communication through various channels e.g. email and website 	<ul style="list-style-type: none"> • Long term partnership • Financial transparency • Compliance with terms and conditions in financial deals 	<ul style="list-style-type: none"> • Head office visit • Financial reporting • Compliance with terms and conditions in financial deals

Stakeholders & Key Topics	Engagement Channels	Expectations/ Needs	Our Responses/ Activities
 <p>Raw material suppliers</p> <ul style="list-style-type: none"> • Supplier Code of Conduct & Sustainable Procurement Policy • Sustainability issues • Required practices when suppliers visit factories • Anti - bribery & monopoly practices • NR Traceability 	<ul style="list-style-type: none"> • Meetings & workshops • Supplier self-assessment • Questionnaires & surveys • Onsite-visits • E-newsletters • Phone calls 	<ul style="list-style-type: none"> • Fair trading conditions and agreement • Competitive pricing • Transparency • On-time payment • Support in policy compliance • Prompt responses to requests and inquiries 	<ul style="list-style-type: none"> • Communication and acknowledgement of Supplier Code of Conduct & Sustainable Procurement Policy • Supplier sustainability self-assessment • E-newsletters • Onsite supplier engagement meetings • Onsite-visits • Capacity building
 <p>Communities</p> <ul style="list-style-type: none"> • Community's well-being • Sustainability issues • Employment of local people • Environmental impacts • Community support & assistance 	<ul style="list-style-type: none"> • Questionnaires & surveys • Community visits • Engagement activities • Whistleblowing channels 	<ul style="list-style-type: none"> • Social and environmental responsibilities • Community support & assistance • Compliance with national laws • Listen to communities' voices • Decent treatment • Prompt responses to communities' feedback • Employment opportunities 	<ul style="list-style-type: none"> • Whistleblowing mechanism • Community visits and surveys • Social contribution activities • Support local products • Participation in local traditional activities
 <p>Governmental sectors</p> <ul style="list-style-type: none"> • Compliance with national laws & regulations • Taxes • Sustainability issues • Endorsement, awards, and certification 	<ul style="list-style-type: none"> • Training & workshops • Factory visits & audits • Seminars & conferences • Sustainability report 	<ul style="list-style-type: none"> • Compliance with national laws & regulations • Transparency • Social and environmental responsibilities 	<ul style="list-style-type: none"> • Participation in the government's certification programs e.g., Green Industry Certification and Good Labor Practices Certification • Factory visits & audits by related governmental agencies
 <p>Contractors & Outsourced providers</p> <ul style="list-style-type: none"> • Supplier Code of Conduct & Sustainable Procurement Policy • Sustainability issues • Practices when visiting factories • Anti - corruption & monopoly practices 	<ul style="list-style-type: none"> • Meetings & workshops • Supplier self-assessment • Questionnaires & surveys • E-newsletters • Phone calls 	<ul style="list-style-type: none"> • Fair trading conditions and agreement • Competitive pricing • Transparency • On-time payment • Support in policy compliance • Prompt responses to requests and inquiries • Long term partnership 	<ul style="list-style-type: none"> • Communication and acknowledgement of Supplier Code of Conduct & Sustainable Procurement Policy • Supplier sustainability self-assessment • E-newsletters • Supplier assessment • Onsite-visits

Business Guidelines & Transparency

Our operational activities are guided by our business principles, relating to our vision, mission, core values, business motto, business code of conduct, and other policies. This helps us achieve our mission and create mutual sustainable growth and prosperity along the supply chain.

Business Principles

Business Core Values

- Integrity**
- Vision**
- Respect**
- Passion**

Vision

Southland Rubber to be a leading processor focusing in major natural rubber producing areas, emphasizing on business excellence, social responsibility and the environment.

Mission

To continue to be a Reliable and Dependable Supplier of Quality Natural Rubber.

Motto

“Think Good, Better Will Follow”

We established our policies as the standards of practice for everyone in the organization, as well as guides for dealing with our business partners. In early 2022, we reviewed, approved and published our updated policy documents. These policy documents listed hereunder were updated to align with our customers’ policies, the Global Platform for Sustainable Natural Rubber (GPSNR) Policy Framework, and other related internationally recognized standards.

- | | | |
|---|--|---|
| Code of Conduct <ul style="list-style-type: none"> • Business Code of Conduct • Supplier Code of Conduct | Environmental Policy <ul style="list-style-type: none"> • Environmental Policy | Social Policy <ul style="list-style-type: none"> • Occupational Health & Safety Policy • Human Rights & Labor Practices Policy |
| General Policy <ul style="list-style-type: none"> • Whistle-Blower Policy • Information Security Policy • Personal Data Protection Policy | Economic Policy <ul style="list-style-type: none"> • Sustainability & Sustainable Procurement Policy • Quality • Anti-Bribery Policy | |

- We adopt the following systems to ensure compliance with the policies:
- Socializing Compliance Requirements
 - Compliance Program (communication, audit, and review)
 - Whistleblowing mechanism

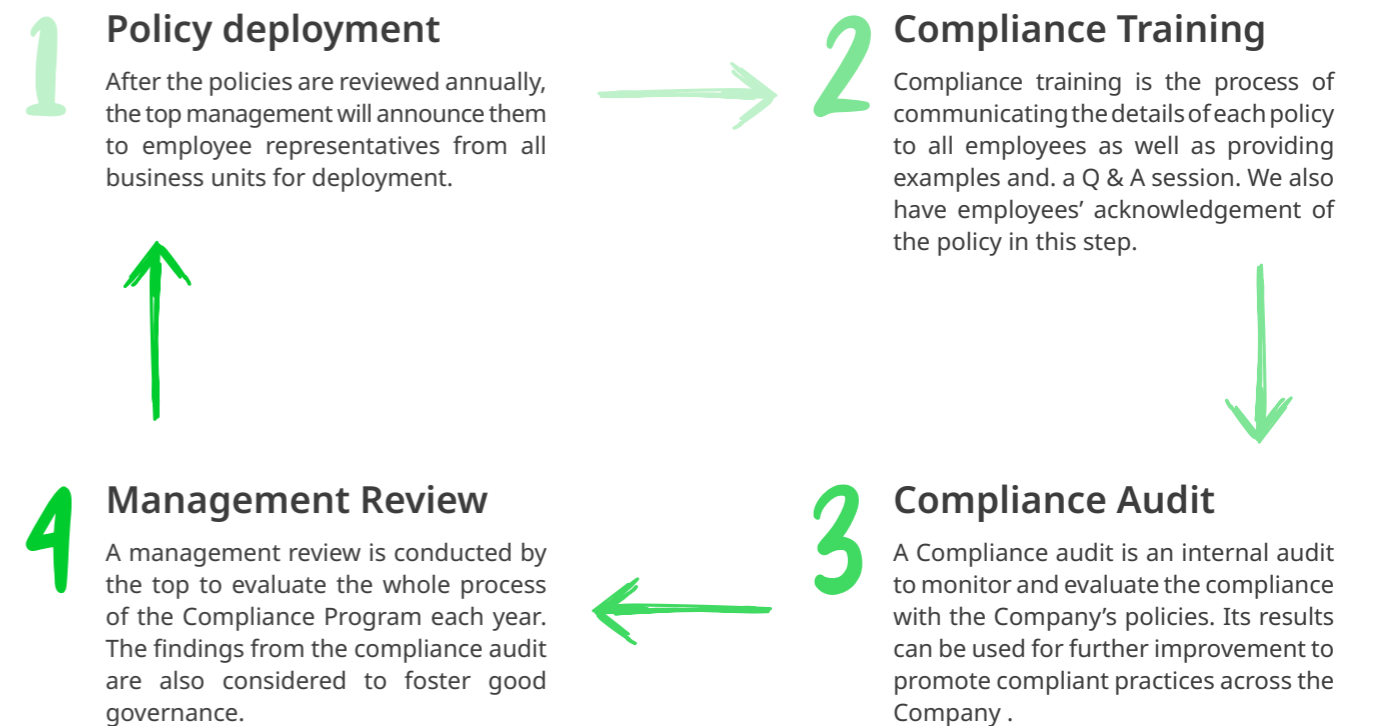


Ensuring Compliance

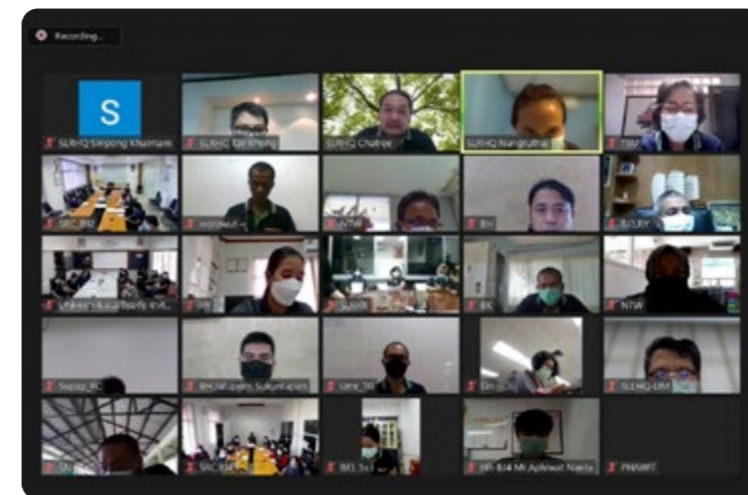
We need to ensure that our business principles are implemented and adhered to. Hence, we need strategic tools to help us achieve our purpose, and this is where **the Compliance Program and Whistleblowing Mechanism** come in to provide a systematic approach to compliant practices.

About the Compliance Program

The Compliance Program is the system to ensure compliance with the Company's business principles. It was initiated in 2019 and continues to the present. It is implemented on a yearly basis. The elements of the Compliance Program include policy deployment, compliance training, compliance audit, and management review.



The Compliance Program in 2022



- Policy announcement to business units 100%

- Employees participated in the compliance training 100%

- Business units subjected to the compliance audit 100%

Compliance Awareness Test

The Compliance Awareness Test was used to help ingrain our policies in our employees. It was part of the Compliance Program initiated this year. It is a customized online test where a variety of questions related to all policies were incorporated. Through the test, we aimed at encouraging employees to acknowledge, understand, and actively adhere to the Company's policies as standards of practice. The test allowed employees to read the policies to review their contents, and that contributed to a better understanding, which leads to compliance. **Employees at the supervisory and higher levels were required to take the test.**



Employees
100%



Average Scores
87%



Policies
10



Business Units
18 Factories & Head office

Voice of Test Takers



Ms. Ng See Yeet

Internal Audit Director and Compliance Director

96.7%
Scores

"The Compliance Awareness Test was initiated to improve employee awareness regarding Company policies. Through a digital platform, it enabled us to reach out to employees more easily. And it is a tool that suits the modern age of technology. We could evaluate their understanding of the Company policies and utilize the results to further enhance our communication.

Clear understanding and awareness are the foundation of compliant practices, which are the ultimate goal of the whole Compliance Program. I did the test myself a couple times, and I found that it also helped me, as the Internal Audit Director and Compliance Director, to see a more holistic picture when conducting related audits. We will continue the Compliance Awareness Test in the coming years to encourage employee active engagement, which will also strengthen good governance and sustain the future of our business operation."



Mr. Methee Kittikunsereekum

Branch Manager, Southland Latex (Phattalung), PT

83.3%
Scores

"To me, the Compliance Training itself, where the Company's policies are explained, is good. Through that, the Company can engage better with employees rather than seeking their acknowledgement by telling them to read on their own. It is even better when the Company came up with the Compliance Awareness Test. As a branch manager, my responsibility regarding the Compliance Program is to ensure that our operations stringently conform to the Company's policies. The awareness test helped me understand the policy more clearly, and it gave me a chance to re-check and brush up on my knowledge. Hence, I could spread it to employees under my management scope in a more understandable manner. All in all, it could improve the policy's communication.



Ms. Phanicha Mhanma

Shipping Officer, Southland Rubber, HX

93.3%
Scores

"In my opinion, the Compliance Awareness Test is a great tool that helps me understand the Company's policies more clearly. Before the test, it was pretty challenging for me to grasp all the ideas at once and come up with questions right away. On the contrary, the test really asks many of the same questions that I have in my head but could not put into words during the online training.

While taking the test, I got to review the contents of the policies to give the best answers to each question. Reading is powerful, but reading with the purpose of finding the answer is even more powerful. Thus, the concepts of the policies are better embedded in my memory, which leads to stronger compliance.

I hope that the company will continue using this tool because every time I take the test, it is another opportunity to review the policies, especially when there is an update. And the more I review them, the better I understand and conform to them. I think we should have at least 2 sessions per year.



Ms. Nungruthai Songsang

HR Supervisor & Sustainability WG Member

100%
Scores

"I think the Compliance Awareness Test is very useful for bringing the Company's policies into practice or implementation. After participating in the Compliance Program's policy review and announcement sessions, as well as other related activities, I have general ideas of sustainability development incorporated in the policies, as well as the company's commitment to achieving it.

With the Compliance Awareness Test initiated this year, it really helped me have a more profound understanding of the policies without having to read them all thoroughly again. The questions on the test assisted test takers in understanding the key concepts of the policies and requirements we must follow."



Mr. Tanakorn Chanjatunat

IT Supervisor, Programming Team Leader

96.7%
Scores

"To me, the test could help create awareness among employees and better embed the concept of sustainability and its link to business growth. To be honest, it is pretty difficult to make all employees read all policies thoroughly, including myself. The Compliance Program, where the policies were announced and explained, was essential and also a great tool to pass the message through.

However, I view it as an introduction. But with the test, it gave a sense of challenge, which encouraged me to go back and read the policies, which helped me understand the overview and context of the company better. For example, the terms "traceability, and vertical and horizontal growth" are beyond the scope of my regular work, but now I understand the concept and think it's interesting."

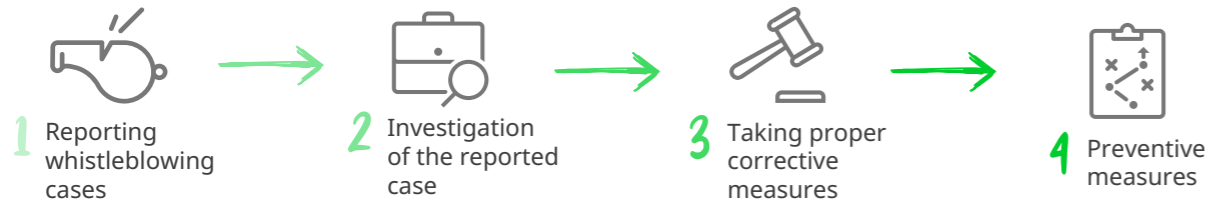
Whistleblowing Mechanism & Whistleblowing Cases

The whistleblowing mechanism is employed to ensure ethical practices and compliance with the company's policies. Through whistleblowing channels, employees and other stakeholders can report their concerns and grievances with protection from the Company as long as the reporting is truthful and done in good faith.

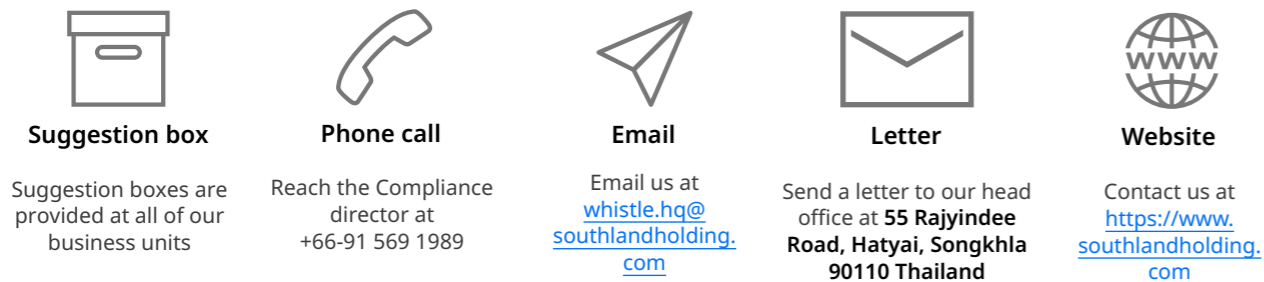
In 2022, we received and resolved **6 whistleblowing cases**.

Whistleblowing Procedure

Ensure the **safety and confidentiality** of the whistleblower throughout the procedure.



Whistleblowing Channels



Anti-Bribery/Corruption Management

Anti-bribery/ corruption is fundamental to fairness and transparency in all of our operational activities. We manage and prevent bribery/corruption-related issues by adopting the following approaches.

- Anti Bribery / Corruption Policy Review
- Compliance Audit of Anti-Bribery/Corruption Policy
- Anti Bribery / Corruption Risks Assessment & Preventive Measures
- Communication & Acknowledgement of Anti-Bribery / Corruption Policy
- Training on Anti-Bribery/ Corruption Policy
- Receiving Gifts Compliance Records
- Whistleblowing Mechanism
- Summarize Performance Results

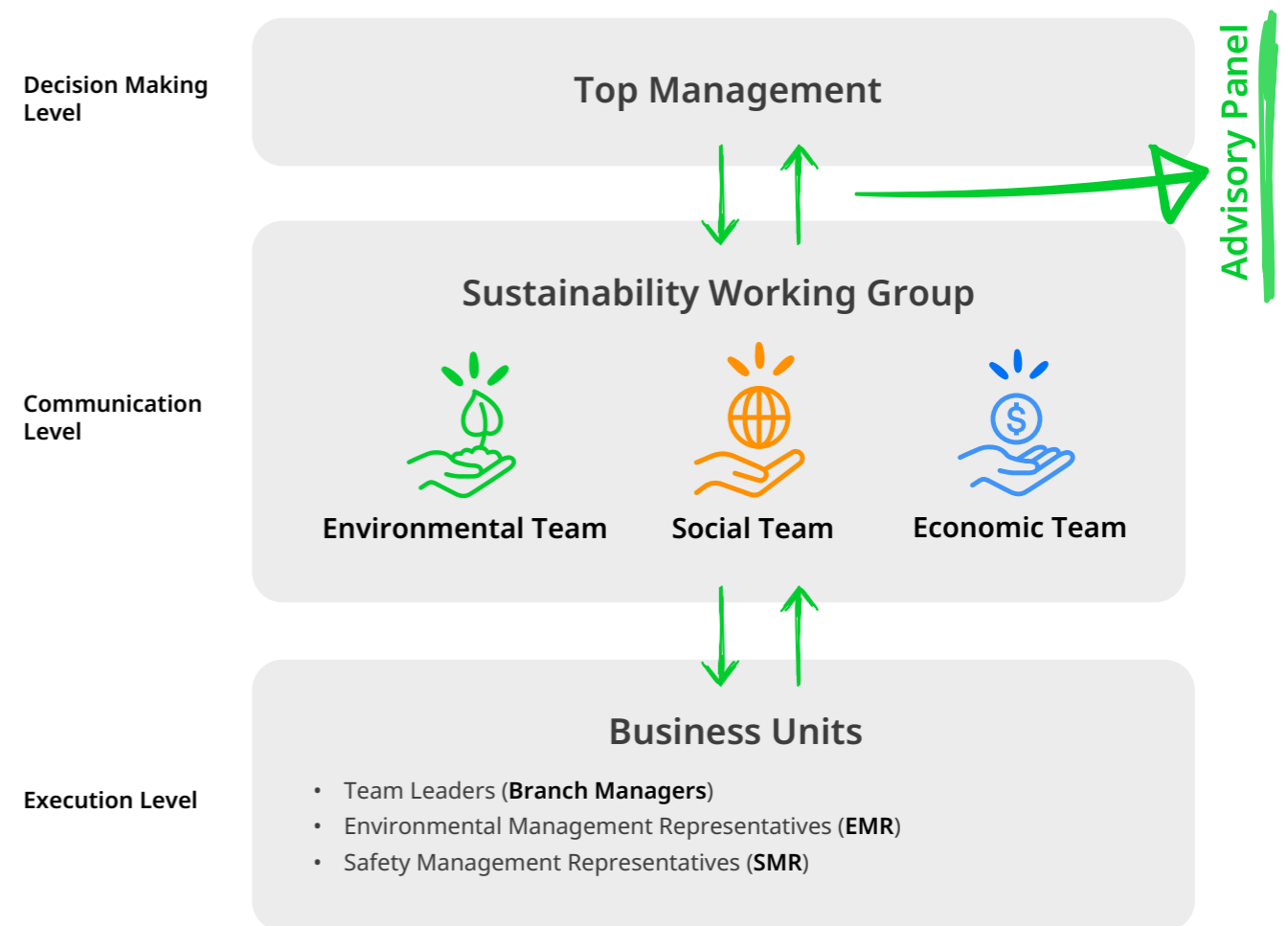
Anti-Bribery/Corruption Performance Results

Employees are communicated on and acknowledged Anti-Corruption Policy	100%	Factories audited on anti-bribery / corruption	100%
Employees trained on Anti-Corruption Policy	100%	Reported incidents of corruption	Zero cases
Training hours on anti-corruption per employee	3.73 hrs./employee	Factories subjected to anti bribery / corruption risks assessment	100%

Sustainability at Southland Rubber

Our sustainability efforts prioritize integrating the 3 pillars of sustainability—environment, society, and economy—into our business management. Along our sustainability journey, we have worked on several projects and organized many activities to promote sustainability. The activities and projects are carried out in line with our **sustainability management**, which consists of 2 key elements: **sustainability structure** and **key sustainability topics** of each dimension. In addition, we have also been making efforts to align with sustainability commitments and standards of practice at the global level, e.g. SDGs, UNGC principles, GPSNR principles, and ILO conventions.

Sustainability Structure



The Main Function of Each Level of the Sustainability Structure



Materiality Assessment

The scope of our sustainability reporting is based on the material issues gained from materiality assessment, where we engage stakeholders' needs and expectations in prioritizing such issues and coming up with management activities. This year, we continue to use the same materiality survey format that we reported in 2021 with a total of 18 material topics based on 3 dimensions of sustainability.

Materiality Assessment Process and Materiality Matrix



Environmental Aspect

- Pollution Control
- No Deforestation
- Energy Consumption
- Waste Management
- Reduce-Reuse-Recycle

Social Aspect

- Health & Safety
- Employee Welfare
- Diversity & Inclusion
- Working Environment
- Empowerment of Women
- Community Engagement
- Local Job Opportunities

Economic Aspect

- Product Quality
- Supplier Sustainability Awareness
- Product Delivery
- Supply Source Traceability
- Customer Responsiveness
- Customer Relationship

Sustainability Management Overview

The following are key sustainability topics that have been selected to be included in this Report. We have made continuous efforts to address each of the topics and also linked them to the SDGs (Sustainable Development Goals). Thus, this page describes an overview of our sustainability management.

Reporting Topics for Each Aspect and Contribution to SDGs



Environment

Commitment:

Attach great importance to the conservation of the environment and the efficient use of resources to promote environmental long-term sustainability.

Key sustainability topics:

- Climate Change & Decarbonization
- Water management
- Biodiversity/ Nature Protection
- Waste management
- Air Pollution Management

Contribution to:



Society

Commitment:

Commit to responsible business conduct with deep concerns for employees as well as for the communities in the vicinity of our factories and to support their economic well-being.

Key sustainability topics:

- Human Rights & Labor Practices
- Workplace Safety
- Employees' Well-Being & Development
- Community Engagement

Contribution to:



Economy

Commitment:

Ensure transparent business conduct by putting effort into anticorruption while focusing on consistent, good-quality products and close engagement with raw material suppliers.

Key sustainability topics:

- Supplier Development
- Sustainable Supply Chain
- OTOP (One Tambon/ town One Product) entrepreneurship stimulus program in Thailand

Contribution to:





Key Management Activities on Social Aspect

Sustainability Performance

NO.	Topics	Targets	Results	Remark
1	Incident frequency rate (I.F.R)	< 2.5	1.07	(number of reported injuries / total working hours) x 1,000,000
2	Lost time injury frequency rate (LTIFR)	< 2.5	1.07	(number of lost-time injuries / total working hours) x 1,000,000
3	Work-related fatality	0 case	0 case	-
4	Average safety training hours per person	≥7 hours (per year)	13.18 hrs. / person	-
5	Average training hours per person	≥25 hours (per year)	35.17 hrs. / person	There were many integrated trainings.
6	Female employees in managerial level	≥30%	42.13%	-
7	Whistleblowing cases	Resolve 100%	Resolved 100%	There were six whistleblowing cases.
8	Employees trained on Human Rights & Labor Practices Policy	100% (per year)	100%	-
9	¹ Good Labor Practices Certification (GLP)	17 factories	16 factories	-
10	ISO45001 (Occupation Health & Safety Management System Certification)	17 factories	14 factories	-
11	Social Contribution Activities	≥30 activities (per year)	90 activities	-

1. GLP Certificates are provided to organizations having good labor practices and fair, lawful employment conditions by the Department of Labor Protection and Welfare (Thailand). The certificates are valid for 2 years, and organizations are required to answer questions in the GLP checklist and provide evidence in order to have the certification renewed.

Human Rights & Labor Practices

Human rights and labor practices are significant issues that various sectors at all levels—business, government, non-governmental organizations, and international organizations—place importance on. We are well aware of the impacts that might arise from these issues. Therefore, we conducted **human rights due diligence** covering all business activities and participated in the Good Labor Practice certification program by Thailand Department of Labor Protection and Welfare to ensure sound management on human rights and labor practices.

Human Rights Due Diligence

Our human rights due diligence framework is composed of **5 steps** as follows:



Policy Review & Compliance Program

The human rights due diligence framework started by expressing our commitment towards human rights and labor practices through our HRLP Policy. The Policy is reviewed on an annual basis to ensure alignment with the related standards used as its guidelines. The Compliance Program (P.11) is the tool for policy communication and compliance across the Company.

The HRLP Policy was reviewed, and there were no significant changes that affected HRLP risk assessment procedures.

Guidelines , Commitment, and Training

“ We are committed to the continuous improvement of our operations through raising awareness, reviewing, auditing and holistically managing potential risks associated with human rights violation and non-compliance with good labor practices.

- Applicable laws
- UN Global Compact Principles
- Universal Declaration of Human Rights: UDHR
- United Nations Guiding Principles on Business and Human Rights: UNGP
- International Labor Organization’s eight core conventions
- GPSNR Policy Components



100% of employees were trained on the **HRLP Policy**

HRLP Risk Assessment Training

We organized the human rights and labor practices risk assessment training in September to recap and refresh the risk assessment procedures for related persons. The training was held online by the head office, and the participants included management representatives, branch managers, HR personnel, purchasing personnel, and representatives from other departments.

Through the training, we could share the latest revision of relevant documents, ensure clear understanding of the risk assessment procedures, and have a Q&A session and information sharing, which helped increase the effectiveness of the risk assessment.

Key Training Materials & Factories Attended

HRLP Risk Assessment Procedures	✓
HRLP Risk Assessment Form	✓
Factories Receiving the Training	100%
17 factories	



HRLP Risk Assessment, Mitigation Measures, and Internal Audit

We conduct the human rights and labor practices risk assessment at least once a year to identify and review the risks so that appropriate mitigation plans and measures can be implemented according to the risks and their levels . The assessment covers all operational activities that can involve human rights and labor practice risks both inside the Company and in the supply chain (supplier assessment).

After conducting the risk assessment and implementing the mitigation measures, we also conducted an internal audit to ensure compliance with the HRLP Policy and the mitigation measures, and further work on improvement areas.

Activities	Performance
Factories conducting HRLP RA	100% (17 factories)
Factories audited on HRLP	100% (17 factories)
Tier 1 suppliers are assessed on HRLP	100% (1,217 suppliers)
HRLP cases received through whistleblowing channels	6 HRLR cases (received and resolved through whistleblowing mechanism)

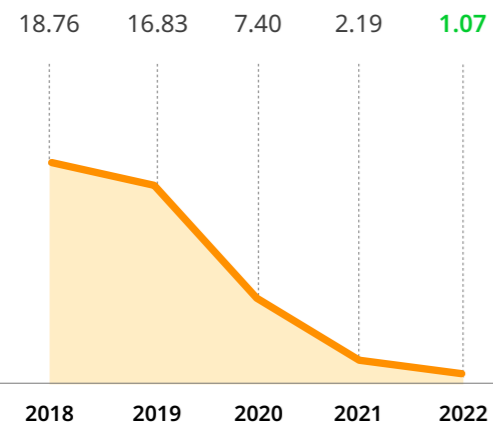
Workplace Safety

We have made constant efforts to achieve our commitment in creating a safe workplace and safety culture where we instill the "safety first mindset" in all employees and promote the enhancement of safety practices.

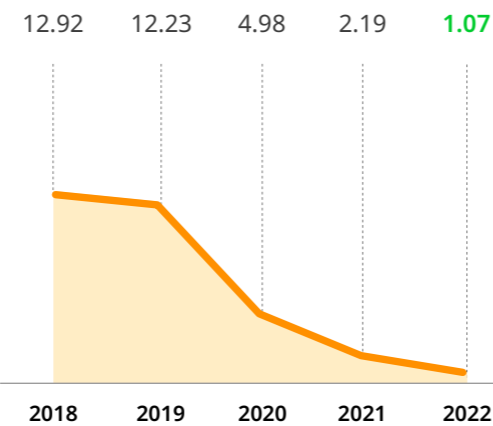
Key Safety Performance

Our safety performance has improved over the years. According to the performance data, it suggests the trend that I.F.R, LTIFR, and total accidents are likely to continue dropping compared to previous years. We have employed different strategies to prevent and eliminate accidents and ensure a safe work environment for all.

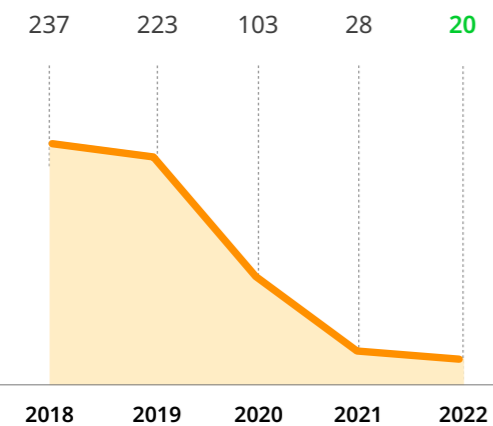
¹Incident Frequency Rate (I.F.R)



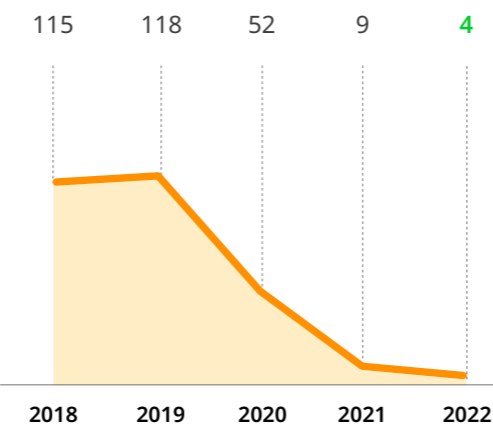
²Lost Time Injury Frequency Rate (LTIFR)



³Accidents



Finger Injuries



Comparison of Key Safety Performance in 2021 and 2022

The following are comparisons of key safety performance of 2021 and 2022.

Metric	2021 Value	2022 Value	Change (%)
I.F.R	2.19	1.07	-51.1%
LTIFR	2.19	1.07	-51.1%
Accidents	28 cases	20 cases	-28.6%
Finger Injuries	9 cases	4 cases	-55.6%

1. Injury frequency rate = (number of reported injuries / total working hours) x 1,000,000
 2. Lost-time injury frequency rate = (number of lost-time injuries/total working hours) x 1,000,000
 3. Accidents refer to both injuries and damaged properties.

Key Safety Measures

Safety KAIZENS

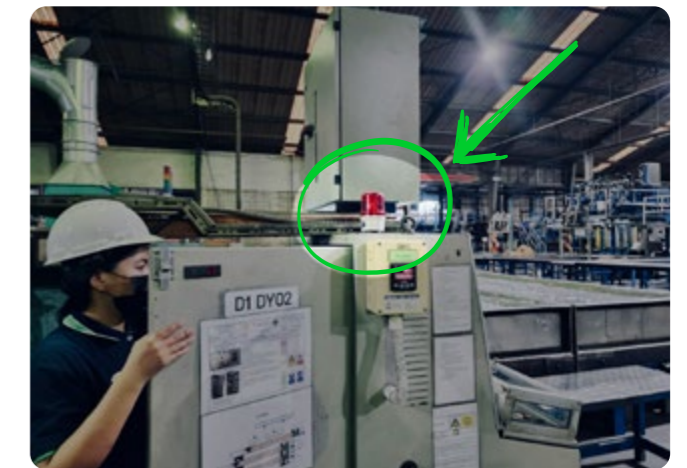
KAIZENS (process improvement activities) are developed to prevent accidents and their recurrence, in addition to other measures such as retraining, reviewing work procedures, and sharing one-point lessons (OPLs). Safety KAIZENS generally focus on the technical adjustments of machines to eliminate accidents and decrease their severity as much as possible. The key KAIZENS this year are as follows:

● Safety Patrol Lamp - BJ2

Safety patrol lamps were installed on the electrical control cabinets of the production line to prevent potential electrical accidents. The safety sirens will activate when there is an electric current circulating in any electrical equipment in the production line. This KAIZEN is aimed at reducing the chance of accidents caused by machine-related factors.



With electric current: **Dangerous**



Without electric current: **Safe**

● Machine Accessory Adjustment - NTW

We adjusted an accessory of the centrifuge machine used for producing latex concentrates to prevent finger injuries during the assembling process. When lifting the bowl up from the machine for cleaning, we need to use an eye bolt to connect the bowl with the crane. This can cause safety risks when workers put their finger in the hole of this accessory without waiting for the machine to completely stop. Hence, we adjusted this process by shifting to a solid metal without a hole.



Before: **With a hole**



After: **Without a hole**

● Rubber Puncher Guarding - BJ2

Rubber punchers are pieces of equipment used in STR labs for testing rubber properties. When workers reach their fingers to align the rubber while operating the equipment, it may cause finger injuries. As a result, we implemented Kaizen to prevent finger injuries. The equipment will only function if both buttons are pressed simultaneously. Thus, using the safeguard can provide full protection for workers' fingers even when they need to align the rubber. First, we started with using a plastic safeguard, as displayed in the below picture, to immediately eliminate the risk factor. The removable plastic safeguard, on the other hand, caused inconvenience and time constraints for the working process because we needed to take it off every time we placed a rubber sample. Hence, to maximize its efficiency, we switched to permanent metal safeguards. Thereby, it contributes to both safety and work efficiency.



Before: Without safeguard & with temporary safeguard

After: With permanent safeguard

● Modifying Centrifuge's Look-hole - PT

Some of our centrifuge machines are older models with a small look-hole to monitor operation. Workers needed to bend down and look through the small hole to check if the belt had completely stopped before disassembling the bowl. This caused inconvenience and could lead to accidents or injuries because of the posture while bending down. To facilitate the work process and prevent accidents, we modified the look hole by making a clear, rectangular space in place of the look hold. With this see-through space, workers can check the machine's operation easily.



Before: With a small look hole

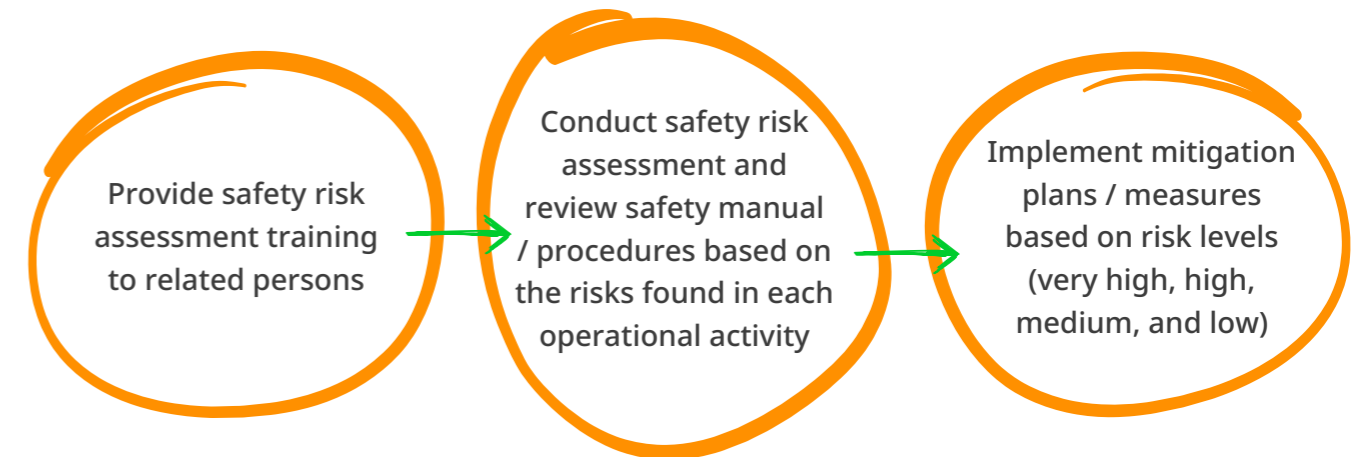
After: With a larger see-through space

Safety Risk Assessment Training & Safety Risk Assessment

We started the safety risk assessment training in 2021 and have continued the training program this year. The training reviewed the procedures of the safety risk assessment to ensure its effectiveness and accuracy. The target groups for the training included **branch managers, safety management representatives (SMR), and safety officers, other related persons** of each operating unit.

Following the training, every factory would conduct a safety risk assessment to cover as many operational activities as possible, e.g., periodic maintenance of machines, using work tools, and cleaning work areas. Each factory is required to **perform a safety risk assessment at least once a year** and re-conduct the safety risk assessment every time an accident occurs.

After the safety risk assessment, factories need to review safety manuals based on the risks found in each activity and implement mitigation measures based on risk levels.



Safety Risk Assessment Result in 2022



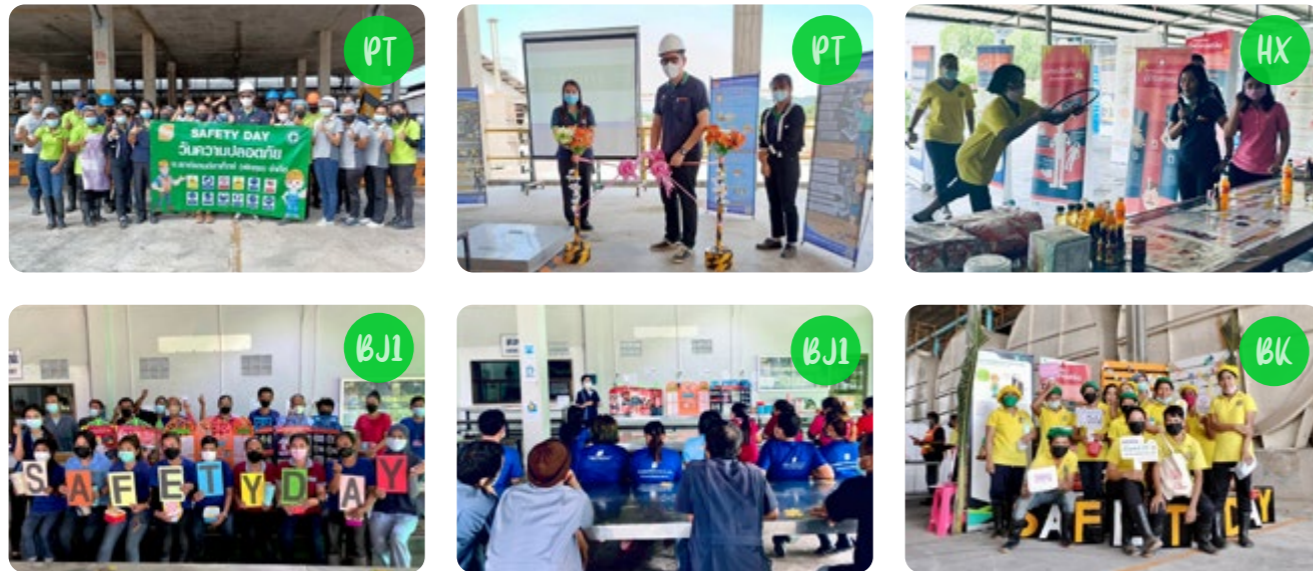
 **Factories Trained on Safety Risk Assessment**
100%
 (17 factories)

 **Factories Conducting Safety Risk Assessment**
100%
 (17 factories)

Factory Safety Days

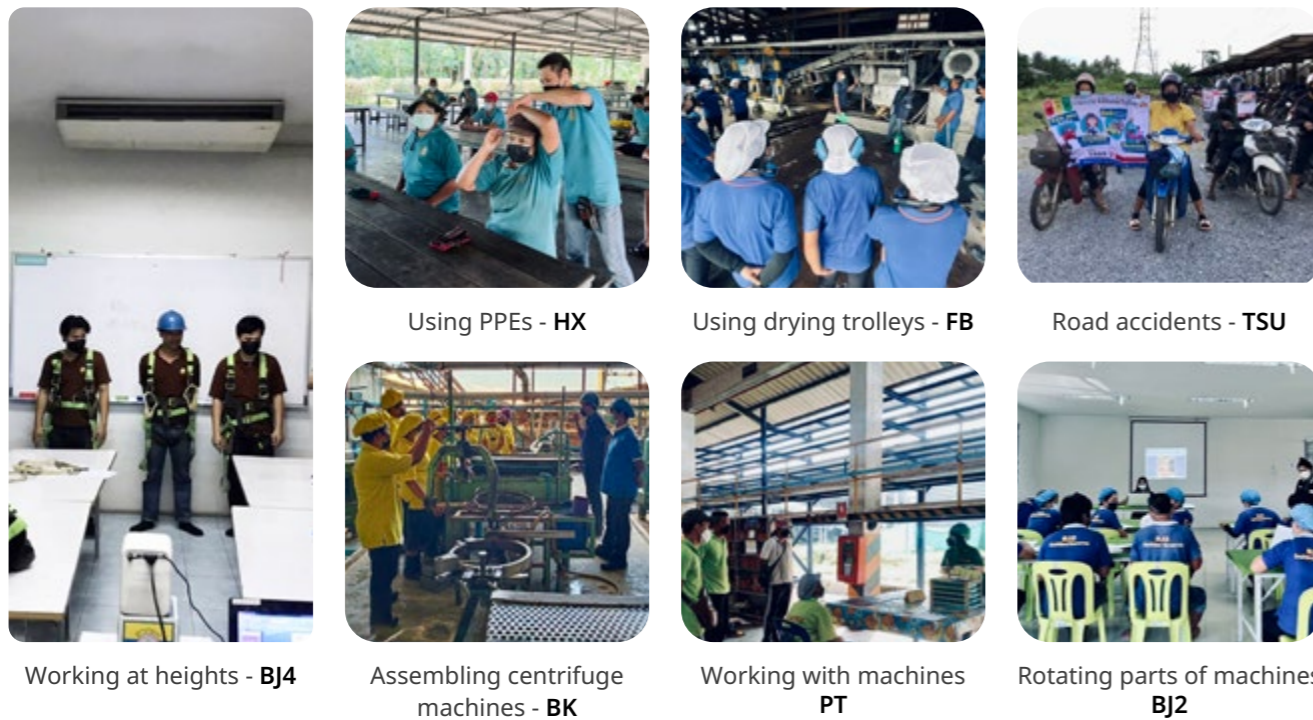
Factory Safety Days were initiated in 2021, and we have continued the program this year. The factory safety days are aimed at stimulating employees to be aware of safety at workplaces as well as **instilling the “safety first mindset” in employees**. The program is also regarded as a tool to help us achieve our commitment in creating a safety culture in which employees and visitors are safe from hazards.

The contents of the program could vary slightly based on the operational activities of each product group. However, they mainly **focused on safe operations in different activities**, such as work procedures and correct use of PPEs, potential risks and hazards, etc.



Focused Safety Topics of the Month

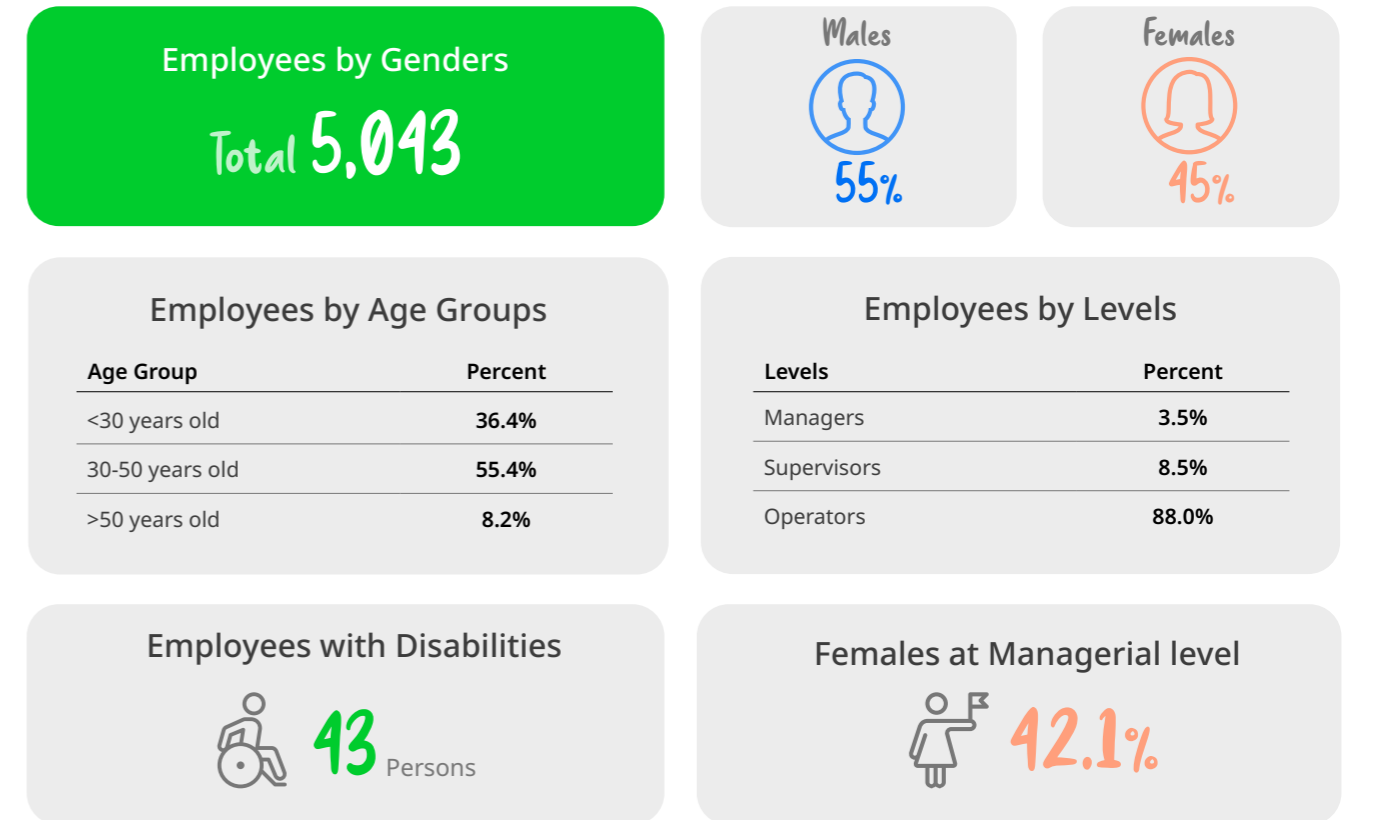
The focused safety topics of the month are another key safety measure that has been carried out for two consecutive years. We used the lessons learned from our safety records and the potential risks found in our safety risk assessment for the training sessions of this program to enhance safety practices and performance. There were 7 safety topics in the program this year. The factories could select the topics related to their operation and were free to work on each topic in any month as appropriate for their operational activities at that time.



Employees' Well-Being & Development

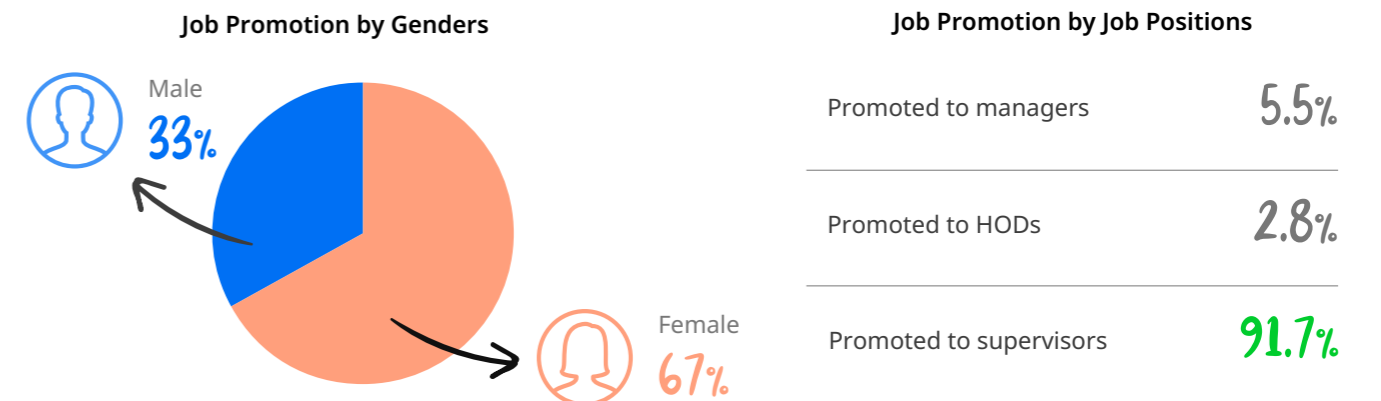
Employees' well-being and development covers the efforts and activities that help create a decent working life for all employees, ranging from welfare, assistance, and training to job promotion. Also, we listen to employees' feedback from the yearly employee satisfaction survey to continuously improve our management with regards to this topic.

Employee-Related Information and Job Promotion



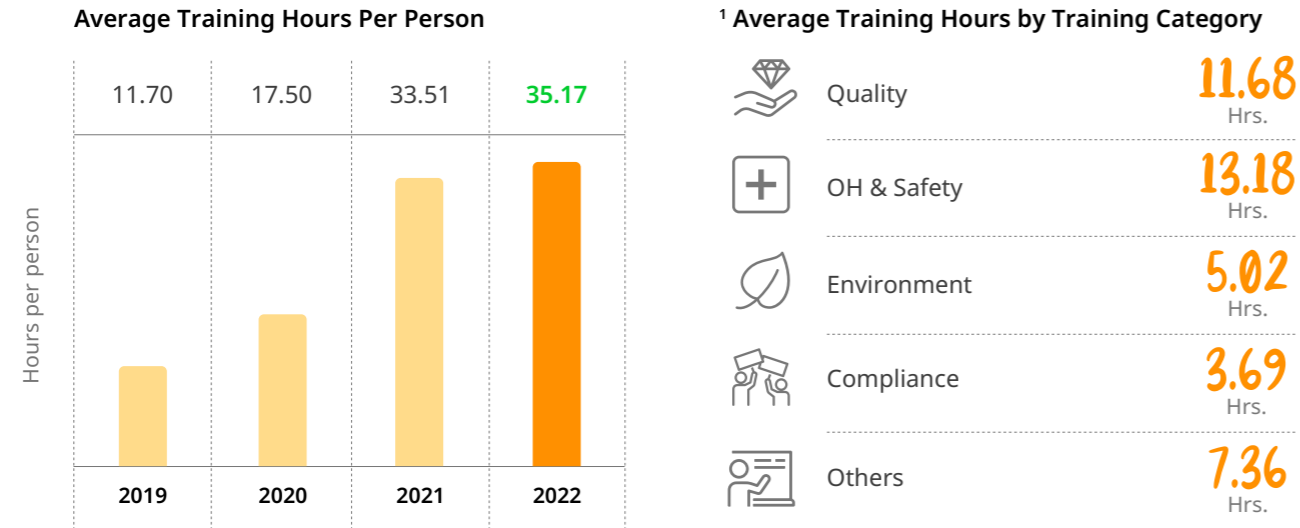
Job Promotion

Career advancement is important to employees' growth in a career path. We provide equal opportunities for career advancement based on employees' experience and suitability for the position without bias. This year, we promoted 36 employees to higher job positions, and 100% of higher-level jobs were promoted from within the organization.



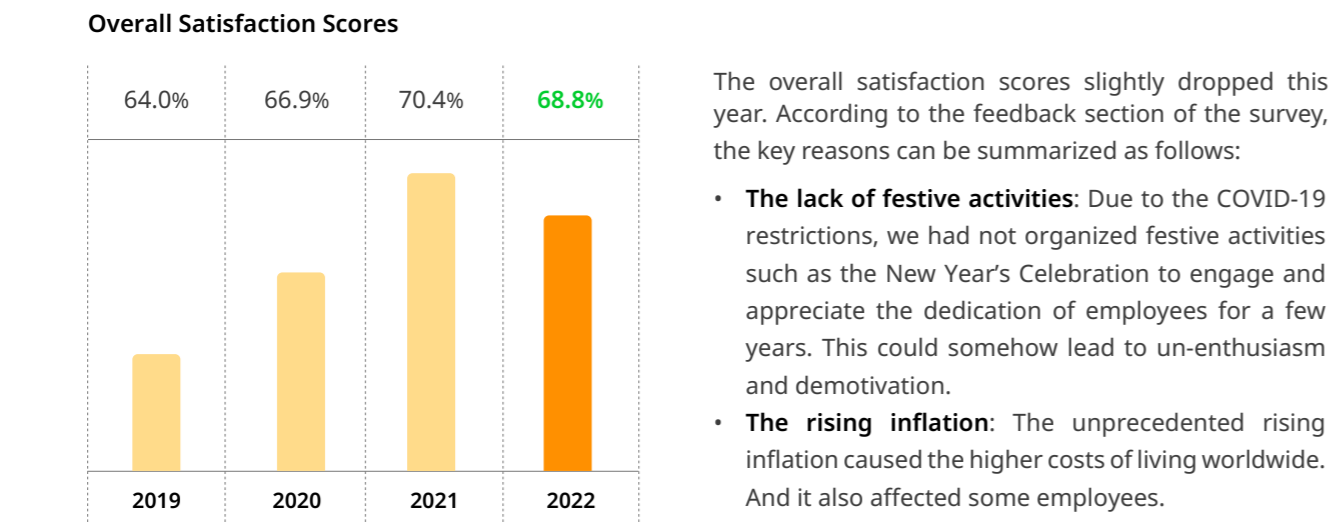
Employee Training

We provide adequate training on different categories to employees every year. Not only do we organize training sessions to satisfy legal requirements, but we also aim to enhance employees' capacity on work-related skills and knowledge and other relevant issues.



Employees Satisfaction

We conducted an employee satisfaction survey on a yearly basis to gain feedback from employees regarding work-related issues. Employees' feedback enables the Company to consider areas that need improvement for better quality of working environment, employees' working life, and labor practices.



1. There were many integrated training programs, which means a training program can be classified in more than one category.

Support Employee's Well-being

There are several activities in 2022 that aims at providing welfare and assistance to employees. These activities contribute to their well-being and a happy work life and encouraged employee engagement with the company. We are committed to continuously listening to employees' voices and responding to their needs as deemed appropriate, since we have always strived to grow collectively.

1. Breast-Feeding Corner

The Breast-Feeding Corner is a new welfare benefit provided to employees who are mothers. The welfare aims at facilitating employees with new-born babies and up to 5-year-old children. With the Breast-Feeding Corner, employees can continuously provide breast milk to their children over a long period of time, at least during the first 6 months after giving birth, without affecting their work. Even though employees don't take their children to work, they can use the Breast-Feeding Corner for expressing, storing and refrigerating their breast milk for feeding their children later on. Currently, 58.8% of factories have the breast-feeding corners.



2. Financial Assistance for Employees

There are **two financial assistance projects** for employees this year. Presently, the world is facing an economic slowdown, and some of our employees might be affected by this economic condition. Hence, we initiated the assistance programs to help relieve such a state to a certain extent.

● Cost of Living Allowance

Due to the rising inflation caused by various factors, we came up with the extra allowance project to help employees with relatively low incomes. The extra allowance will be provided to employees together with their usual salary or wages for six months, starting from June to December. We will consider organizing similar projects in the future based on the context of the economy and our business.

Entitled Employees	Project Duration	Total Value
<ul style="list-style-type: none"> Employees with monthly salary under THB 20,000 Workers receiving daily wages (legal minimum wage based on each province) 	7 months (June to December 2022)	≈THB 7,000,000

● Education Loan

The education loan project was initiated for employees who need to support their children's education. We offer interest-free loans up to a maximum of three times the salary per person to employees in need. The loans are available for employees with children of all levels of education, starting with kindergarten. There's no limit on the number of borrowers. We can offer the loans to as many employees as are interested in the project, as long as they meet the requirements of the loans. This project is a long-term employee assistance project that will be carried out continuously year to year.

<p>The Number of Borrowers</p> <p>6 employees</p>	<p>Maximum Limit of a Loan</p> <p>3 times the salary</p>	<p>Total Loan Amount</p> <p>THB 176,000</p>	<p>Interests Rate</p> <p>0%</p>
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Engagement Activities with People with Disabilities

On December 3, which is International Day of Persons with Disabilities, we carried out engagement activities with people with disabilities, including both our employees and members of surrounding communities. The observance of the Day aims to promote an understanding of disability issues and mobilize support for the dignity, rights, and well-being of persons with disabilities. Our commitment to creating an inclusive and equitable workplace that also promotes opportunities and independence for persons with disabilities is consistent with the purposes of the Day and was expressed through the employment of and engagement with people with disabilities.

Engagement Activities

The activities we organized on the International Day of Persons with Disabilities were as follows:

- Visiting local residents who are people with disabilities
- Educating employees and local residents on the benefits available to people with disabilities
- Handing out survival bags to employees and local residents



Disability Types



Community Engagement

We place great importance on close engagement with local communities as they are one of our key stakeholders. We organized a number of activities with local communities where our operations are located in order to create beneficial impacts that will help them progress with us in a sustainable manner. We aim to create and maintain a healthy and harmonious relationship with the surrounding communities to promote peaceful coexistence.

Community Engagement and Social Contribution Activities

There were **90 social contribution activities** in 2022.



Donation for a Local Hospital

Head office, December 9th, 2022



We made a donation of 1 million THB to the Hatyai Hospital Foundation, a local public hospital in Hatyai district. The donation would be used to support the foundation's health-care activities, which contributed to the good health and well-being of our communities.



Promoting Careers for Locals

Southland Resources - BJ3, August 23rd, 2022



The factory collaborated with the Wangwa District Sub-district Administrative Organization, Rayong, to organize a career support program for locals. The program taught employees how to make wicker baskets. The key material is rattan, which is a local plant in the community. The program aimed to help community members gain incomes in order to build a strong and happy community.



Beach Cleaning

Factory and Date : Southland Latex Co., Ltd. (RY), March 24th, 2022



RY, in collaboration with local residents, organized a beach cleaning activity at Laem Mae Phim Beach, Rayong. There were 24 participants in the activity. The activity helped improve the scenic environment of the beach and provided an engagement opportunity between the company and the community.



Antigen Test Kit (ATK) Donation

Southland Resources - BJ2, January 13th, 2022

We **donated 300 antigen test kits** to a local school named Ban Klong Nokkratung School. COVID-19 restrictions in Thailand were lifted and schools also re-opened onsite after running educational activities online for approximately 2 years. However, new-normal practices are going on, and we wish to support local communities on this matter. Therefore, we donated the ATKs as a part of this effort. We also carried out similar activities of COVID-19-related donations at other locations.



Providing Survival Bags for COVID-19 Quarantine

Southland Resources - BJ1, February 9th, 25th, April 4th 2022

We provided survival bags to **30 employees and 82 families in 3 local communities** that were under quarantine. The survival bags included dried and instant food, e.g., rice, canned fish, and instant noodles. The activity was aimed at supporting the well-being and raising the morale of employees and surrounding communities.



Supporting Careers for the Local Community

Southland Rubber - HX, July 15th 2022

HX organized a teaching activity to help create careers for the local community. The factory taught interested community members to make tiny donuts and Kanom Dok Jok, a traditional crispy Thai dessert. Plus, the factories provided cooking utensils such as frying pans and molds to the community which then kept them at the community's hall so that its members could share them.



Fish for Students' Lunch

Southland Resources - BJ4, June 27th, 2022

BJ4 organized the fish for the students' lunch project at a local school named Banraisuksun School. The project's goal is to provide students with a sustainable food source while also teaching teachers and students how to raise fish in an earthen pond. The project will be run every year for a 4-month duration each time. This time we **provided 2,000 fry and 10 sacks of fish food** to the school.



Provide Drinking Water

Southland Resources Phetchabun - BH, April 11th, 2022

BH provided 30 packs of drinking water to government employees working at public service points during the Songkran festival. We wished to raise the morale of those working on the public holiday to facilitate and ensure the safety of people traveling during the holiday.



Tree Planting in a Buddhist Temple

Southland Rubber - SN, June 11th and August 18th, 2022

SN planted a total of 123 trees of 4 species in the area of a Buddhist temple named Nikhom Thammaram Temple to increase green canopies in the community. A Buddhist temple is considered a public place for people in the community to share for different purposes. Thus, planting trees in the temple can benefit many people when they grow big enough to provide shade and improve the scenic environment.



Engagement Projects with a Local Elementary School

We started 2 projects—**Sustainable Lunch for Local Students** and **Replacing Old Light Bulbs with LED Light Bulbs**—with the local school called **Ban Klong Nokkratung School** in 2021. Our 3 Bangklam factories— Southland Resources Co., Ltd. (BJ2), Southland Rubber Co., Ltd. (HX), and Southland Latex Co., Ltd. (BK)— were in charge of the projects.

Now the school has opened onsite after the COVID-19 restriction was lifted. Therefore, we were able to resume the projects successfully on **August 26, 2022**.

1. Sustainable Lunch for Local Students





This project was aimed at promoting sustainable lunches and learning activities for students. Not only did the students have access to sustainable and healthy food sources, they also had the opportunity to experience basic agricultural food production, teamwork, and responsibility.

The project consisted of 2 parts, a hen house and a vegetable plot, with the details as follows:

● Hen house

We finished the construction of the henhouse, which we started in 2021. Apart from building the hen house and providing hens, we also provided other equipment such as ready-made poultry cages, chicken nipple waterers, and chicken food to facilitate the husbandry conditions of the hens.



 The number of hens provided 37 Hens	 The expense of hens & chicken feed 8,240 THB	 The expense of the hen house construction & accessories 52,315 THB	 Total expense 60,555 THB
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Follow up

We last followed up the activity on **November 4, 2022**. The school reported that the hens laid **7-8 eggs per day**, which was relatively a small number compared to the number of hens they had. This was resulted from the age of the hens. They were quite young at the time of following up.

Therefore, we needed to periodically follow up the activity to foster its development and make further improvement of the project in the future.

● Vegetable Plot

In 2021, we surveyed and repaired the school's indoor vegetable plot. This year we also **extended 3 more plots of 1.5 x 6 meters** to the outdoor area so that the school can have more space for growing vegetables and harvest more vegetables for the students. Plus, we provided fertilizer and a variety of vegetable seeds to the school.



List	Quantity
Fertilizer	5 packages
Chinese cabbage seeds	14 packages
Bok choy seeds	14 packages
Chinese broccoli seeds	5 packages
Kailaan seeds	9 packages





Follow up

Same as the hen house, we followed up the activity on **November 4, 2022**. It was found that, even though the school could ripe the vegetables, the soil quality need further improvement. Fertile soils would bring about better crops in both quality and quantity. We will keep following up the progress of the activity and supporting the school along the road to achieve the desired results.

2. Replacing Old Light Bulbs with LED Light Bulbs

We carried out the plan to replace old light bulbs with LED light bulbs for the school. After checking the number of light bulbs that needed replacement, we proceeded to install LED light bulbs in different areas of the school. We selected LED light bulbs as the replacement to promote energy efficiency, which also contributes to carbon emission reduction.



	54 LED light bulbs		5 Light sockets
	19 Installation locations e.g., canteen, sidewalk, classroom		
	9,630 Expense THB		

Follow up

The new LED light bulbs had worked well so far. We will regularly check with the school for the number of light bulbs in different locations that need replacement.



Key Management Activities on Environmental Aspect

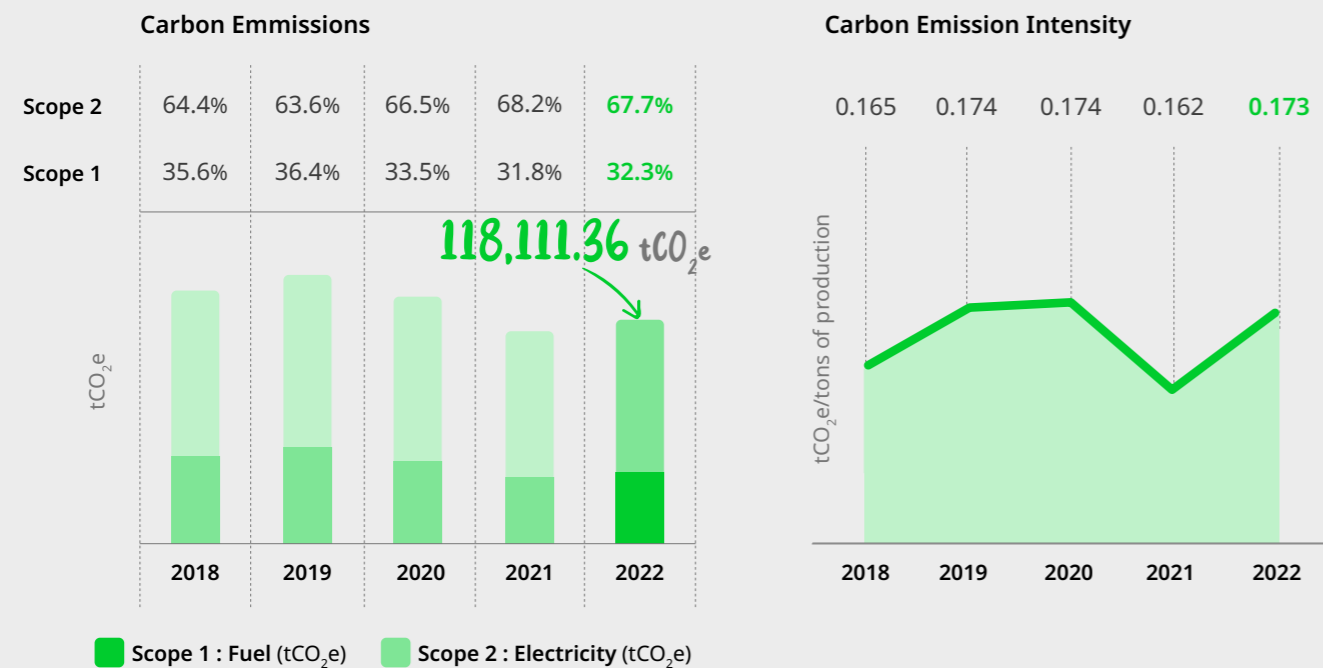
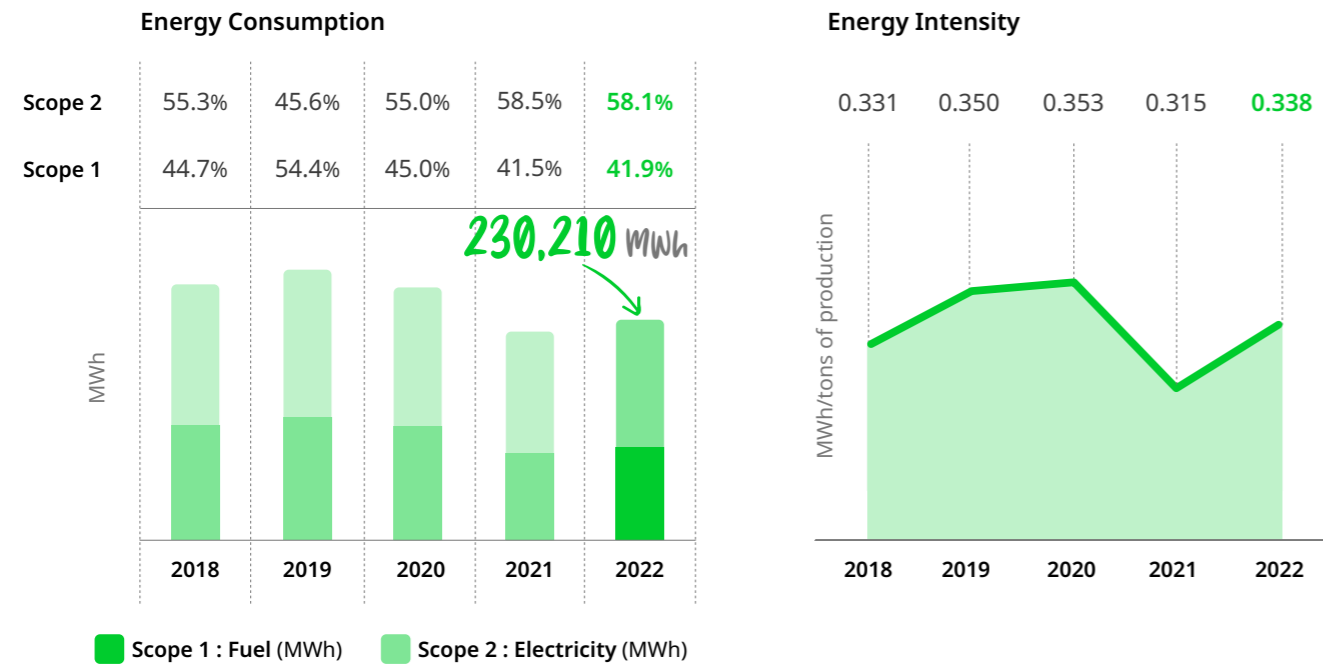
Sustainability Performance

NO.	Topics	Targets	Results	Remark
1	Number of trees planted	20,000 trees (in 2022)	13,789 trees	-
2	Number of locally found tree species planted	≥10 species (per year)	86 species	-
3	Reduction of CO ₂ emissions	Reduce ≥10% by 2030 (compared to base year of 2017)	+ 10.54% (118,111.36 tCO₂e)	Base year 2017 was 106,843.68 tCO ₂ e
4	Reduction of CO ₂ emissions intensity	Reduce ≥10% of CO ₂ emission intensity by 2030 (compared to base year of 2017)	+ 14.56% (0.173 tCO₂e/tons of production)	Base year 2017 was 0.151 tCO ₂ e / tons of production
5	Recycle wastewater	100%	100%	-
6	Wastewater discharge	Zero	Zero	Recycled water after treatment will be reused in operational processes.
7	Reduction of waste disposed through landfill	Reduce by 50% (compared to base year of 2018)	Zero	Base year 2018 was 80.56 tons
8	Open burning	0 open burning	0.95% of total waste	<ul style="list-style-type: none"> • January-July: 0.95% • August-December: zero
9	Average environmental training hours per person	4 hours (per year)	5.02 hrs./person	-
10	ISO14001 (Environmental Management System Certification)	17 factories	17 factories	-

Climate Change & Decarbonization

Climate change is an urgent environmental issue that the global community must tackle together. We are committed to addressing climate change by putting effort into reducing carbon emissions and using energy effectively. We came up with various projects to drive the effort.

Energy Consumption & Carbon Emissions



• Emission factors for the calculation of CO₂ equivalents are based on TGO: THAILAND GREENHOUSE GAS MANAGEMENT ORGANIZATION (PUBLIC ORGANIZATION).
 • Scope1 includes LPG and LNG for heating, diesel, and gasoline
 • Scope2 refers to purchased electricity

Carbon Emissions Scope 3

We studied and have been collecting data on carbon emissions under Scope 3 to report on a more holistic carbon footprint of the Company. We began with **2 categories** among those related to our business operation. The categories included upstream transportation and distribution and downstream transportation and distribution. The operational activities that we collected data on included **the transportation of natural rubber raw materials** to our factories' warehouses and **the transportation of finished products** to the port for shipment. The data of all factories will be ready to be included in the next reporting cycle of our Sustainable Report.



Projects to Reduce Carbon Emissions

Currently, there are **two significant projects** regarding carbon emission reduction. The first project is the **solar rooftop project**. We initiated the project in 2020 and have been working on it until now. We also have a plan to extend the scope to cover more factories. Another project is the replacement of old fuel-powered forklifts with **electric forklifts**, which began this year.

1 Solar Rooftop Project

The use of renewable energy became our choice for the long-term project on efficient use of energy and carbon emission reduction. We decided to go with solar energy as an option for renewable energy since it suits our context and operation the most. We started the solar rooftop project in two STR factories—**BJ3** (Rayong province) and **BJ4** (Buengkan province)—under Southland Resources Co., Ltd. We will be able to generate solar energy for internal use at these two factories within 2023. Furthermore, we devised a strategy to continue the solar rooftop projects in the other four factories within 2025, which means a total of **6 factories** will be using solar energy by the end of 2025. It is expected that **solar energy will account for around 11% of total energy consumption** by 2025, which will **cut down approximately 16% of carbon emissions per year**.

2 Estimation of the project in 2025:

- 6 Factories (Number of Factories)
- 23.7³ MW (Total Capacity / Year)
- 21 M THB (Cost Saving / Year)
- 23,932 MWh (Power Generation / Year)
- 11% (Ratio of Solar Energy / Year)
- 13% (Carbon Emission Reduction / Year)

1. A Power Purchase Agreement (PPA)
 2. We use 2021's data for the estimation. Depending on actual operations and energy consumption, data may vary slightly from year to year.
 3. MV is short for maximum system voltage

Electric Forklift

We started replacing diesel forklifts with electric forklifts in our RSS factories to contribute more to energy efficiency and carbon emission reduction. Currently, we have used **four electric forklifts** in place of old diesel forklifts and will continue to shift from diesel forklifts to electric forklifts.

	Electric forklifts	¹ Diesel forklifts
Quantity	4	4
Operating hours / year	2,101	2,101
^{2/3} Carbon emission / year	3.98 tCO ₂ e	9.98 tCO ₂ e



Carbon emission reduction/year:
≈ 6 tCO₂e

We used 4 electric forklifts in 2022, which can reduce carbon emission by about 6 tCO₂e when compared to the use of the same quantity of diesel forklifts. When the use of the number of electric forklifts ramps up in the future, it will contribute to greater carbon emission reduction in the long run.

Solar Street Lights for Surrounding Communities

Southland Latex (Phatthalung) Co., Ltd. (PT) set **up 6 solar street lights** in communities nearby the factory to provide a light source at night for the convenience and safety of the residents and people travelling in those areas. We chose solar energy since it is a renewable energy source most suitable for the condition of the activity location, and we can also promote sustainable energy that causes fewer negative impacts on the environment.



Solar street lights : **6 sets**

Cost : **17,000 THB**

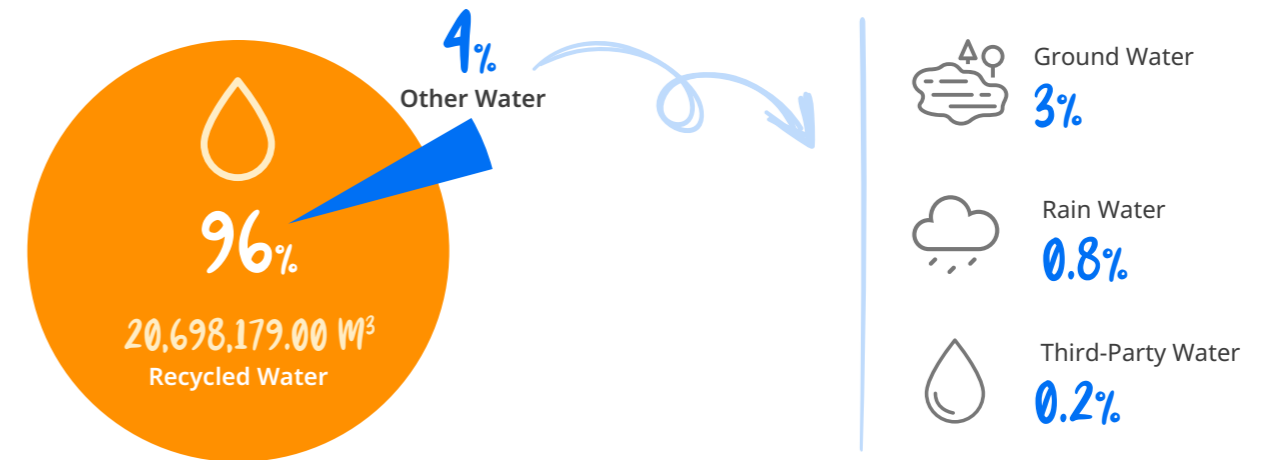
1. A diesel forklift consumes 2.12 liters of diesel per hour on average.
2. The emission factor for electric energy is 0.598.
3. The emission factor for diesel energy is 2.2376.

Water Management

Our water management focuses on recycling water and reusing the recycled water in order to reduce water withdrawal from other sources. This effort makes a contribution to the **responsible consumption of natural resources, the circular economy, and environmental protection**. We also ensure control of the quality of recycled water by regularly monitoring different parameters and zero effluent discharge to any water outlets.

Water Consumption by Sources

The majority of our water consumed is recycled water, which accounts for **more than 95%** of our total water consumption. Water from other sources, which makes up **less than 5%** of total water consumption, is used to dilute and fill up recycled water that can naturally evaporate overtime.

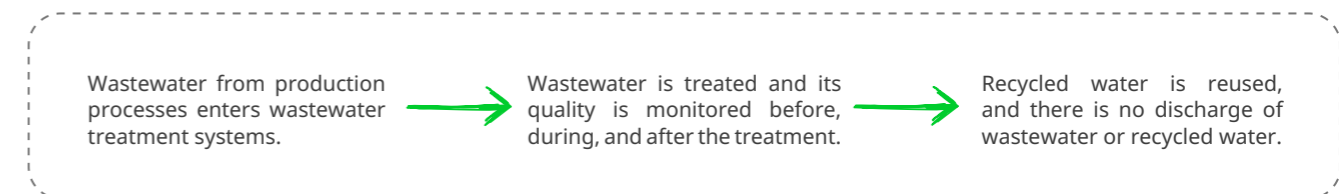


Recycling Water & Zero Effluent Discharge

The key principles of our water management include:

- Reduce water withdrawal from natural sources as much as possible
- Recycle wastewater and reuse the recycled water
- Contribute to zero discharge of effluent

The overall process of wastewater management can be summarized as follows:



Wastewater Treatment Systems & Quality Monitoring

Our wastewater treatment systems comprise **activated sludge** and **aerated lagoon**. Either one of these closed-loop systems is used in all of our processing factories as appropriate for the area and operation.

The monitoring of treated water quality consists of the following 2 parts:

- Internal daily monitoring of **PH & DO**
- Monthly testing by external laboratory of the following parameters: **PH, BOD, COD, TSS, TDS** and **TKN**

Projects to Improve Recycled Water Quality

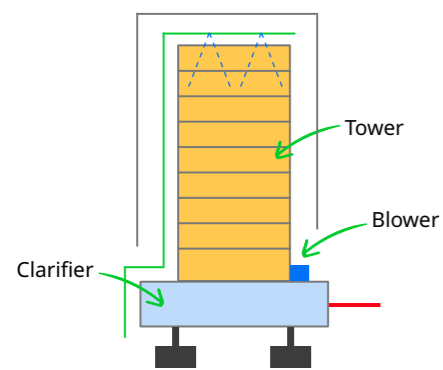
Latex Tower Project

Southland Latex Co., Ltd. (RY in Rayong province) embarked on the latex tower project to improve recycled water quality. In latex concentrate production, there are by-products that are either skim blocks or crepe rubber. Acid is needed for the coagulation of the latex. The higher the ammonia content of the latex, the more acid is required. And the amount of acid used can affect the quality of recycled water.

Therefore, we came up with the latex tower project, which uses latex movement from the height to accelerate ammonia evaporation. With less ammonia content, the use of acid also decreases, and the quality of recycled water improves.

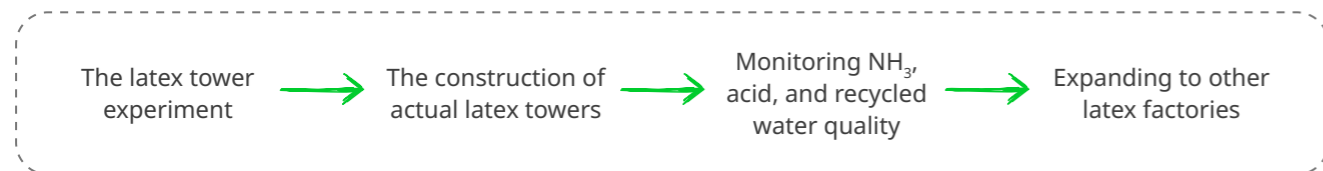
● The Latex Tower Experiment

We did the experiment of adopting 4 latex towers in the skim crepe production for a 2-month period to measure the result of ammonia and acid reduction. The results came out as follows:



Latex Tower	NH ₃ Reduction (%)	Acid Reduction (%)
Tower 1	33.33%	22.97%
Tower 2	37.50%	27.20%
Tower 3	25.81%	20.66%
Tower 4	34.38%	23.04%
Average	32.81%	23.47%

The results from the experiment showed that the latex towers could help reduce the ammonia content and acid used. Hence, we proceeded with designing the actual latex towers and their construction plan. Unlike the ones used in the experiment, the actual towers are closed constructions with a height of 12 meters. Going forward, we shall monitor the ammonia and acid reduction as well as recycled water quality and expand the project to cover other latex factories.



● Increasing Air Diffusers



¹Before : 105 diffusers
BOD: 446, TKN: 728

After : 523 diffusers
BOD: 34, TKN: 45

Air diffusers are used for adding air to the aeration system in the wastewater treatment system. The increased oxygen can facilitate microorganisms' ability to decompose organic matter and clear pollutants in wastewater. Southland Latex Co., Ltd. (NTW in Songkhla province) enhanced the efficiency of its wastewater treatment system by increasing the number of air diffusers in one of the aeration tanks. The parameters of Biochemical Oxygen Demand (BOD) and Total Kjeldahl Nitrogen (TKN) significantly improved in November after adding diffusers in October.

BOD Improved 93.7% **TKN Improved 93.8%**

1. In the Before picture, we used hoses to lead the 105 diffuser down the aeration tank.

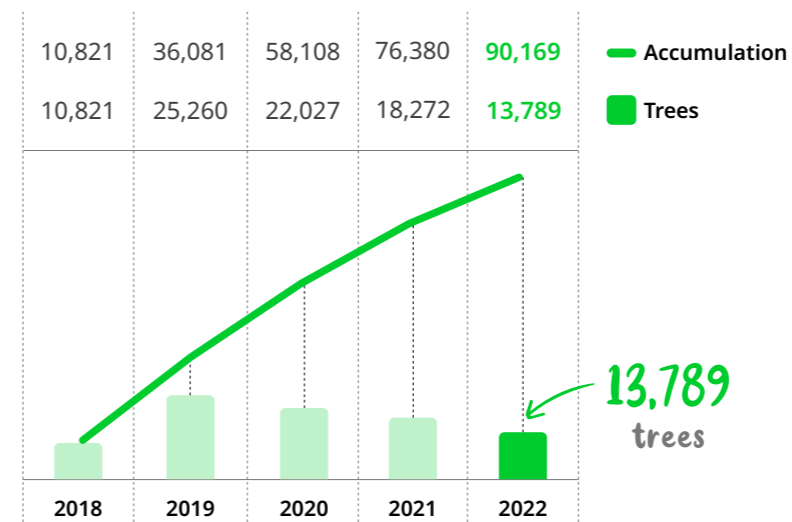
Biodiversity

We have demonstrated our commitment to **protect and enrich terrestrial biodiversity** for several years through the **tree planting program** initiated in 2018 and other related ad hoc activities. We continued to carry out the regular program this year.

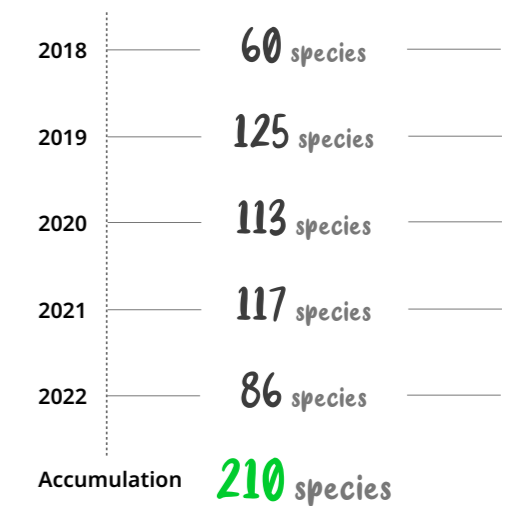
In addition, we made a plan to emphasize our biodiversity efforts by surveying the areas nearby our factory to receive primary diversity information, such as forest and water areas and the natural inhabitants of those areas. In the future, we can use the information to execute other biodiversity projects.

Tree Planting Program

The Number of Trees



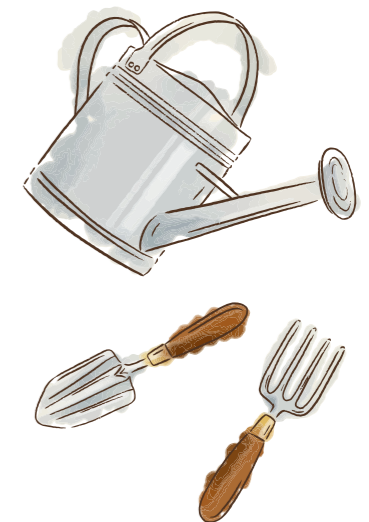
The Number of Tree Species



Nature in the Factory



In 2019, we organized an activity called **“Nature in the Factory”** for the top management level to express the commitment to protect nature and raise awareness among employees, as well as encourage their engagement in the regular tree planting activities.



The Trees Planted by the Top Management:



Mr. Pherm

our Managing Director

planted a **golden teak tree**

Height 270 cm in 2022



Mr. Ng Tze Kiat

our Assistant Managing Director

planted a **croton tree**

Height 80 cm in 2022



Mr. Ng Tze Kheng

our Assistant Managing Director

planted a **croton tree**

Height 110 cm in 2022

Tree Planting on World Environment Day

On World Environment Day, our factories also organized a tree-planting activity to highlight the importance of environmental protection. A total of 406 trees were planted in this activity.



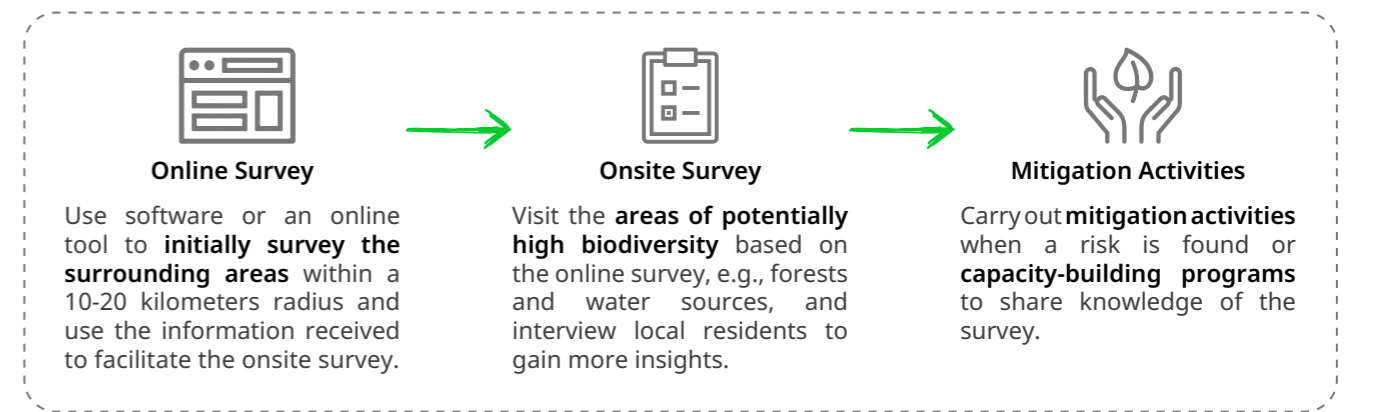
Biodiversity Survey

We intensified our effort on biodiversity conservation by conducting a biodiversity survey of the factory's surrounding areas. We employed online geographic tools—the QGIS Geographic Information System, the Forest 4 Thai application, the Pitak Pri application, and the Royal Forest website—to obtain initial information on selected areas. Understanding the natural ecosystems of neighboring areas allows us to plan appropriate conservation or mitigation activities to maintain and enrich healthy biodiversity.

This year **we started with 3 factories** from different product groups as pilot sites for the survey, and will do the similar survey in other factories.

Survey Processes and Results

The activity will be carried out in three steps: an online survey, an onsite survey, and mitigation activities. Now we are at the steps of the online survey for 3 pilot factories. As we keep making progress in conducting the survey both online and onsite, we can come up with mitigation activities where needed.



The following is information on the areas of potentially high biodiversity close to our factories :

● Latex group

🏠 Pilot Factory

Factory: Southland Latex (Phatthalung) Co.,Ltd. **Code:** PT **The number of biodiversity sites:** 4
Region: Southern Thailand **Province:** Phatthalung

🌿 Biodiversity Sites

Reserved Forest

- Kuan Kam Thong Forest** (about 3.5 kilometers from the factory)
- Kuan Sao Thong Forest** (about 2.5 kilometers from the factory)

Examples of Plant/ Animal Species

- Teak
- Ta-khian
- Parashorea stellata

Wildlife Sanctuary

- Talea Noi** (about 20 kilometers from the factory)

Examples of Plant/ Animal Species

- Parashorea stellata
- Lotus
- Sonneratia caseolaris
- Egret
- Cormorant
- Buffalo

4. **Kao Ban Tad** (about 20 kilometers from the factory)

Examples of Plant/ Animal Species

- Diospyros mollis
- Areca catechu
- Artocarpus lacucha
- Asian Koel
- Lepidiota stigma fabricius
- Eurema sari sodalis



(Latex)

SCAN ME

● RSS group

Pilot Factory

Factory: Uni Rubber Co.,Ltd. Code: TSU

The number of biodiversity sites: 4

Region: Southern Thailand

Province: Nathan Si Thammarat

Biodiversity Sites



1. **Nam Tok Yong Forest** (about 1 kilometer from the factory)
2. **Shong Ka Som Forest** (about 1 kilometer from the factory)

Examples of Plant/ Animal Species

- Iron wood
- Malacca teak
- Rubber tree



3. **Pak Prake Canal** (Near the factory, Located in the same area)

Examples of Plant/ Animal Species

- Climbing Perch
- Snake head fish
- Yellow Mystus



4. **Yong Waterfall National Park** (about 2 kilometers from the factory)

Examples of Plant/ Animal Species

- Anisoptera costata
- Artocarpus rigidus
- Intsia bijuga
- Gibbon
- Hawk
- Squirrel



(RSS)

SCAN ME

● STR group

Pilot Factory

Factory: Southland Resources Co.,Ltd. Code: BJ2

The number of biodiversity sites: 4

Region: Southern Thailand

Province: Songkhla

Biodiversity Sites



1. **Kuan Ai To Forest and Kuan Nui Forest** (about 6 kilometers from the factory)

Examples of Plant/ Animal Species

- Shorea roxburghii G. Don
- Hopea odorata
- Xylia xylocarpa



2. **Tone Nga Chang Waterfall** (about 20 kilometers from the factory)

Examples of Plant/ Animal Species

- Artocarpus lacucha
- Banyan tree
- Indian gooseberry
- Hornbill
- Fishing cat
- Wild elephant



3. **Nong Nok Kra Toong Canal** (about 3 kilometers from the factory)

Examples of Plant/ Animal Species

- Climbing Perch
- Snake head fish



4. **Songkhla Lake** (about 18 kilometers from the factory)

Examples of Plant/ Animal Species

- Ipomoea pes-caprae
- Rhizophora apiculata
- Shirakiopsis indica
- Fiddler crab
- Giant freshwater prawn
- Cockle



(STR)

SCAN ME



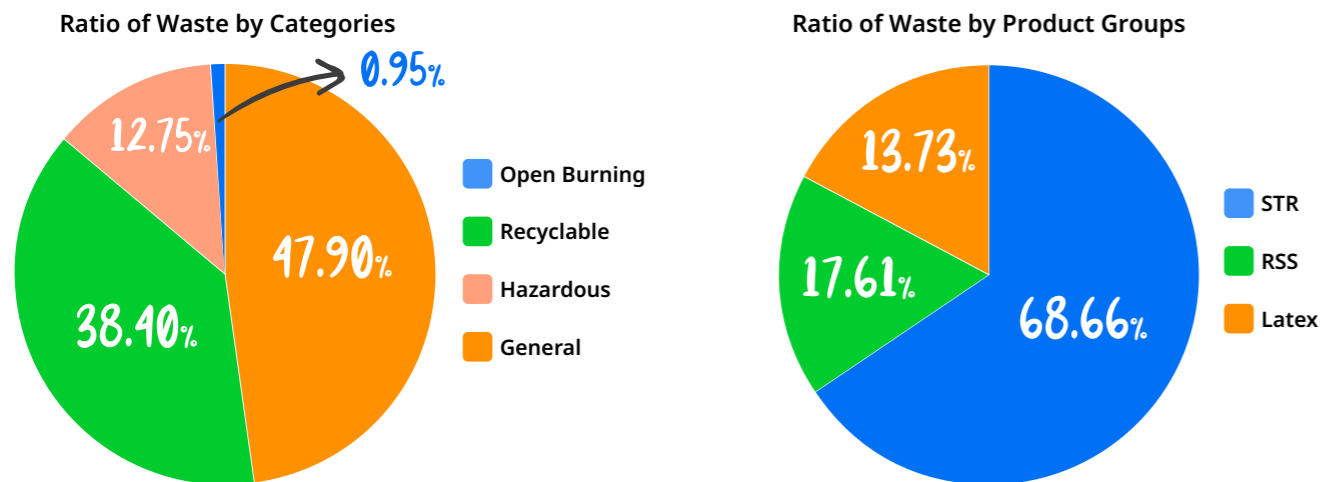
Scan QR Code for more information



Waste Management

Waste Generation & Disposal Methods by Categories

We separate waste into categories for proper disposal methods and adhere to the 3R waste management principle when sorting waste materials to reduce the impact of waste on the environment.



- **Recyclable wastes** such as metal, plastic, and cardboard are sold to recycling plants. Some materials, such as wooden pallets, are also upcycled and repurposed, for instance, to make furniture.
- **Hazardous wastes** which include used oil and solvent and chemical containers, for example, are collected and disposed of by licensed companies.
- **General wastes** are other waste materials other than recyclable and hazardous wastes. They are collected and managed by the local municipality where each factory is based.



Waste sorting at our factories

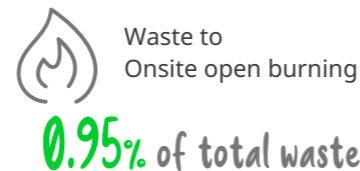
Performance Summary



Total waste generation increased in 2022 compared to 2021. The key reasons included higher production in STR factories and the huge increase in recyclable materials, especially metal.



In 2021, waste to onsite landfills accounted for 0.14% of total waste. In 2022, we no longer had waste to send to an onsite landfill. The waste is properly segregated and collected by local municipalities for proper disposal.

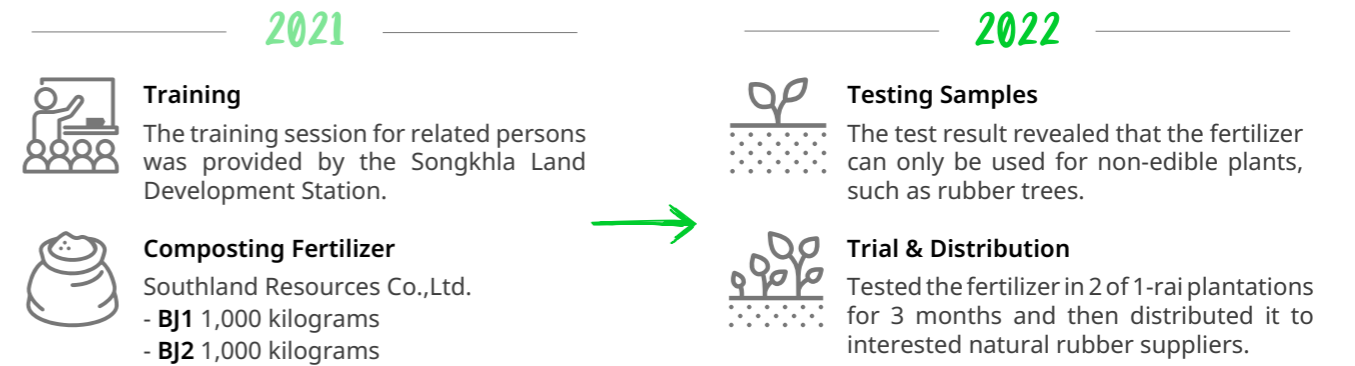


There were 0.95% of wastes for open burning on-site. We achieved our goal of zero onsite open burning in August. The waste was collected and properly disposed of by local municipalities.

Sludge – to – Fertilizer Project

We initiated the sludge-to-fertilizer project in 2021 to reclaim value from waste materials from production processes. Sludge from natural rubber production contains some elements that can nourish soil and trees. When blended with other substances, such as ash and activators, it can be used as fertilizer. After training related persons and testing fertilizer samples, this year we proceeded with using the fertilizer in our pilot rubber plantations and also distributed it to our natural rubber suppliers.

Stages of the Project



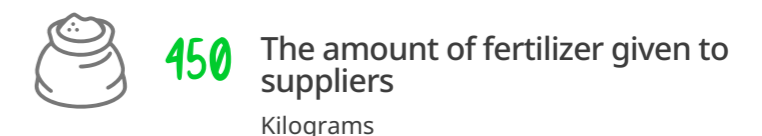
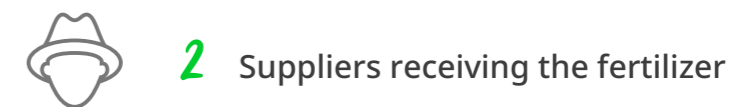
Fertilizer in Pilot Rubber Plantations

Prior to distributing to our natural rubber suppliers, we tested the fertilizer in 2 of our rubber plantations, accounting for 1 rai (0.16 hectares) per each. The trial continued for 3 months to ensure the effectiveness of the fertilizer. Rubber trees need fertilizer only once or twice a year. We used 1 kilogram of fertilizer per rubber tree in the pilot plantations. There are 70 rubber trees in 1 rai. Therefore, the total amount of fertilizer used in the trial was 140 kilograms. Throughout the 3-month period, we closely monitored the fertilized rubber trees and found that the fertilizer worked similar to general fertilizer.



Fertilizer Distribution to Natural Rubber Suppliers

After the trial, we gave out the fertilizer to interested natural rubber suppliers. There were 2 suppliers requested for the fertilizer this year. The distribution of the fertilizer strictly followed the requirements of the Thailand Department of Industrial Works on industrial waste management. Hence, there were detailed records of the fertilizer relocation.



Other Waste Management – Related Activities

Community Waste Sorting Center

Southland Resources Co., Ltd (BJ3) collaborated with the Wangwa District Sub-district Administrative Organization in Rayong to establish a community waste sorting center at the community hall. The activity is aimed at encouraging community members to be aware of the importance of waste sorting and the value of recyclable materials. They can bring different types of recyclable materials, such as plastic and glass objects, to sell at the center on the 15th of every month. The recyclable materials collected at the sorting center would be sold to a recycling plant for proper transformation.

Other than protecting the environment, the program could also provide some income to the locals, which could encourage their participation. We will expand the program to cover more communities in the future to contribute to tackling environmental issues related to waste and unused materials.

The activity started in July. Throughout the year, the quantity of recyclable materials and the incomes from selling them were as follows :



Month	Weight (Kilograms)	Incomes (THB)
July	462.1	3,471
August	238.6	1,050
1 st September	-	-
October	358.4	2,789
November	449.7	3,867
December	227.3	3,058
Total	1,736	14,325



Upcycling Unused Forklift Wheels



Southland Latex (Phattalung) Co., Ltd. (PT) upcycled unused forklift wheels and wood into chairs to use in the factory vicinity. After a certain period of time, the tire tread on forklift wheels will be worn down and need to be replaced. Instead of disposing of the old wheels as waste materials, we combined them with used wood from production processes to build the chair and could **reduce waste disposal by up to about 68 kilograms**.

1. The activity had to pause in September due to flooding in Rayong province.

Air Pollution Management

The management of air pollution is significant to the natural rubber industry since cup lumps, the raw materials for producing block rubber, can produce an undesirable odor. Thus, we ensure that we employ measures to control the odor caused by our operation so that it does not have adverse impacts on surrounding communities.

We adopt measures suitable for each source of odor as well as regularly monitoring odor concentration within and around factory premises and measuring the quality of air emissions on a yearly basis.

Odor Control Measures

The following are our odor control measures based on different odor sources or impacted areas :

Odor sources/ impacted areas	Control Measures
Transportation of cup lumps	Installing cup lump serum tanks on transporting vehicles
Cup lumps storage	Using EM fermented water or wood vinegar to reduce odor
Factory areas (e.g. incoming raw materials areas)	Cleaning Factory areas frequently
Air emissions treatment/filter	<ul style="list-style-type: none"> Cleaning wet scrubbers frequently Measuring the quality of air emissions on a yearly basis
Wastewater treatment ponds	<ul style="list-style-type: none"> Adding air and microorganisms to the wastewater frequently Monitoring pH and BOD on a daily basis
Surrounding communities within 5 kilometers radius	Monitoring odor, using human's olfactory sense



Wet scrubbers



Cup lump storage

Air Pollution Management Performance

We measure the effectiveness of our management of air pollution based on the performance of the following areas :

Complaints on Odor					The record of tank-installed vehicles				
The number of written complaints received each year :					The number of written complaints received each year :				
Year	2019	2020	2021	2022	Year	2019	2020	2021	2022
Case	6	2	0	0	Case	6	2	0	0

Air Emission Test Results

Our emissions of **NO_x**, **SO_x**, and **TSP** are tested every year by qualified third parties to ensure the quality of the air emitted meets the required standard and will not cause harm to the environment.

NO_x | **100% passed** SO_x | **100% passed** TSP | **100% passed**



Key Management Activities on Economic Aspect

Sustainability Performance

NO.	Topics	Targets	Results	Remark
1	Communication of Anti-Corruption Policy to employees	100% (per year)	100%	-
2	Employees trained on Anti-Corruption Policy	100% (per year)	100%	-
3	The Supplier Code of Conduct and the Sustainability and Sustainable Procurement Policy are communicated to and acknowledged by suppliers	100% of active suppliers (once a year per supplier)	100% of natural rubber suppliers and other suppliers	Other suppliers include general suppliers, service providers, and contractors
4	Purchasing Personnel and Relevant Persons are trained on the Supplier Code of Conduct, the Sustainability Procurement Policy, and the Quality Policy	100%	100%	<ul style="list-style-type: none"> General purchasing personnel and natural rubber purchasing personnel They were trained twice in 2022
5	Suppliers participate in Supplier Engagement Meetings(Capacity Building Program)	100% of active suppliers	100% of natural rubber suppliers and other suppliers	<ul style="list-style-type: none"> Other suppliers include general suppliers, service providers, and contractors There were both face-to-face meetings and monthly e-newsletters
6	Suppliers assessed on the sustainability risks (Supplier Self-Assessment Exercise)	100% of active suppliers	100% of natural rubber suppliers and other suppliers	Other suppliers include general suppliers, service providers, and contractors
7	On-time delivery of products	100%	100%	-
8	Quality feedback from customers (complaints)	0 cases	0.47%	Quality complaints from customers (% from total export shipments)
9	¹ Traceable raw material at district level	100%	100%	-

1. District level refers to the district where first tier suppliers receive or collect natural rubber from.
- We also collected data on traceable raw rubber at the point of origin. In 2022, the traceable raw rubber at the point of origin was **0.58%**.
 - Point of origin refers to original rubber plantations which raw rubber comes from. There are 3 sources of raw rubber that we can trace back to the point of origin. Those sources include the Company's own rubber plantations, neighbouring rubber farmers, and short-chain dealers.

Supplier Development

Close engagement with suppliers is a significant approach to promoting a robust and sustainable supply chain. We commit to reaching out to our suppliers and organizing engagement activities with them. Collectively, we can propel the sustainable growth of natural rubber and related businesses.

Supplier Engagement Meetings (Supplier Capacity Building)

The supplier engagement meetings were initiated in 2020 and have been organized on a yearly basis since then. The activity aims to have close engagement with suppliers to foster the sustainability of natural rubber supply chain.

Communication through E-newsletters

We communicated sustainability topics to suppliers using e-newsletters during the intense spread of COVID-19 to comply with the national and local regulations on this matter. This year, we have continued to use the newsletters so that we can approach as many suppliers as possible, whether they are raw material suppliers or other suppliers (general suppliers, service providers, and contractors). The e-newsletters were sent out to suppliers every month.

<p>January</p> <p>Carbon Footprint</p>	<p>February</p> <p>Rubber Leaf Disease</p>	<p>March</p> <p>Natural Rubber Quality</p>
<p>April</p> <p>Energy Conservation</p>	<p>May</p> <p>Health and Safety at Work</p>	<p>June</p> <p>Indigenous Peoples</p>
<p>July</p> <p>High Conservation Values</p>	<p>August</p> <p>OH & Safety for Farming</p>	<p>September</p> <p>Community Water Management</p>
<p>October</p> <p>Biodiversity Management</p>	<p>November</p> <p>Anti Corruption - No Gifts</p>	<p>December</p> <p>New Leaf Disease (Pestalotiopsis sp.)</p>

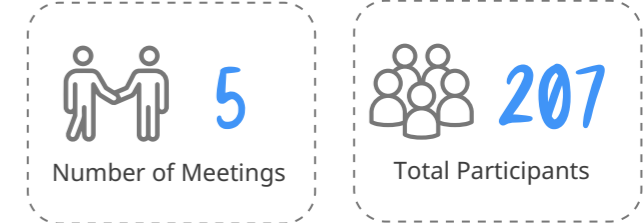


Face -to- Face Meetings

In 2022, the COVID-19 restrictions in Thailand were lifted. We therefore managed to organize face-to-face supplier engagement meetings again. Up to now, two of our factories, **BJ4** and **BJ2**, under Southland Resources Co., Ltd., have held face-to-face meetings with different groups of raw material suppliers.



Face -to- Face Meetings at BJ4



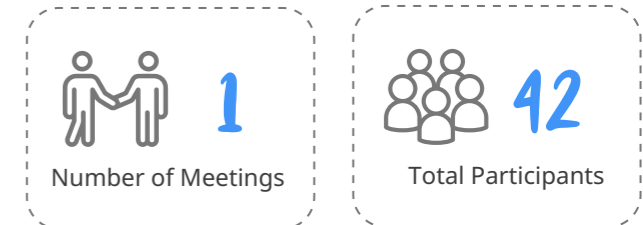
Engagement Topics:

- History of Sustainability
- Trend and driving forces
- Sustainable Development Goals (SDGS)
- GPSNR (Global Platform for Sustainable Natural Rubber)
- The Company's Policies

The supplier meetings in BJ4 were organized four times in April and June. Natural rubber cooperatives in Buengkan province, where the factory is located, requested to visit the factory. Hence, we took this opportunity to organize the meetings to engage with the cooperatives' members, some of whom are also our raw material suppliers.



Face -to- Face Meetings by BJ2



Engagement Topics:

- History of Sustainability
- Sustainable Development Goals (SDGS)
- GPSNR (Global Platform for Sustainable Natural Rubber)
- The Company's Policies
- Rubber cultivation-related topics such as plant nutrients and rubber disease
- Government assistance for rubber framers

BJ2 held a supplier engagement meeting at Koh Sarai (Sarai Island), Satun Province, in July. We also invited Mr. Sommit Suwannapak from the Rubber Authority of Thailand (RAOT), Satun Office, to be one of the lecturers for the event along with our personnel.

There are a many of our suppliers who are farmers in Koh Sarai, where a part of our raw material comes from. Located on the island, there are not many opportunities for the rubber farmers there to engage with rubber processing companies and or other related sectors. We were the first natural rubber processor to visit the natural rubber suppliers at Koh Sarai and organized the engagement activity.

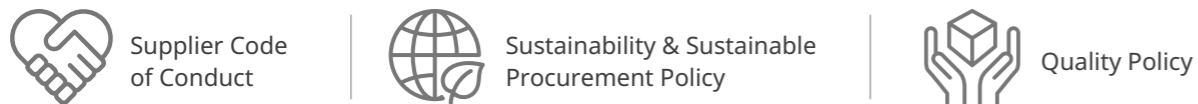
The engagement topics were similar to those discussed at the same events with other groups of suppliers. The topics covered natural rubber-related sustainability issues and the company's policies. As we had the lecturer from RAOT this time, more information about rubber cultivation and government assistance for rubber farmers were also described.

Policy Communication & Acknowledgment

We communicate related policies to purchasing personnel and suppliers on a yearly basis to ensure understanding of and compliance with the policies. And we continued this approach this year after the annual policy review.

Policy Training for Purchasing Personnel

In addition to the annual Compliance Program, in which we communicated all the company's policies to all employees, purchasing personnel had an additional training session on related policies. Since they work closely with suppliers, it is necessary for them to have a clear understanding of those policies so that they can communicate with suppliers effectively. After the training session, the employees needed to take a test on the content of the policies.



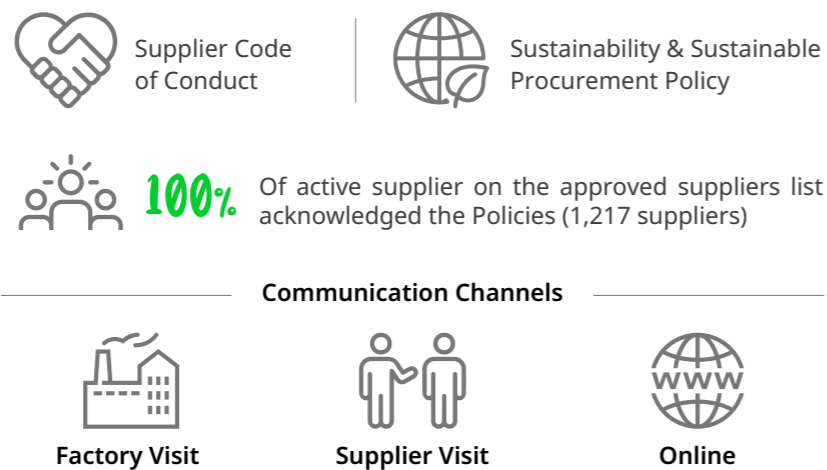
Raw Material Purchasing Department
100% trained

General Purchasing Department
100% trained



Policy Communication and Acknowledgement of Suppliers

Policy communication is one of the efforts that we have been making to drive a sustainable supply chain. We aligned our policies with relevant standards, such as national and international legal requirements, the Global Platform for Sustainable Natural Rubber (GPSNR) policy framework, and our customers' policies, so that we could further communicate those standards to the downstream supply chain.



Supplier Self-Assessment & Supplier Visits

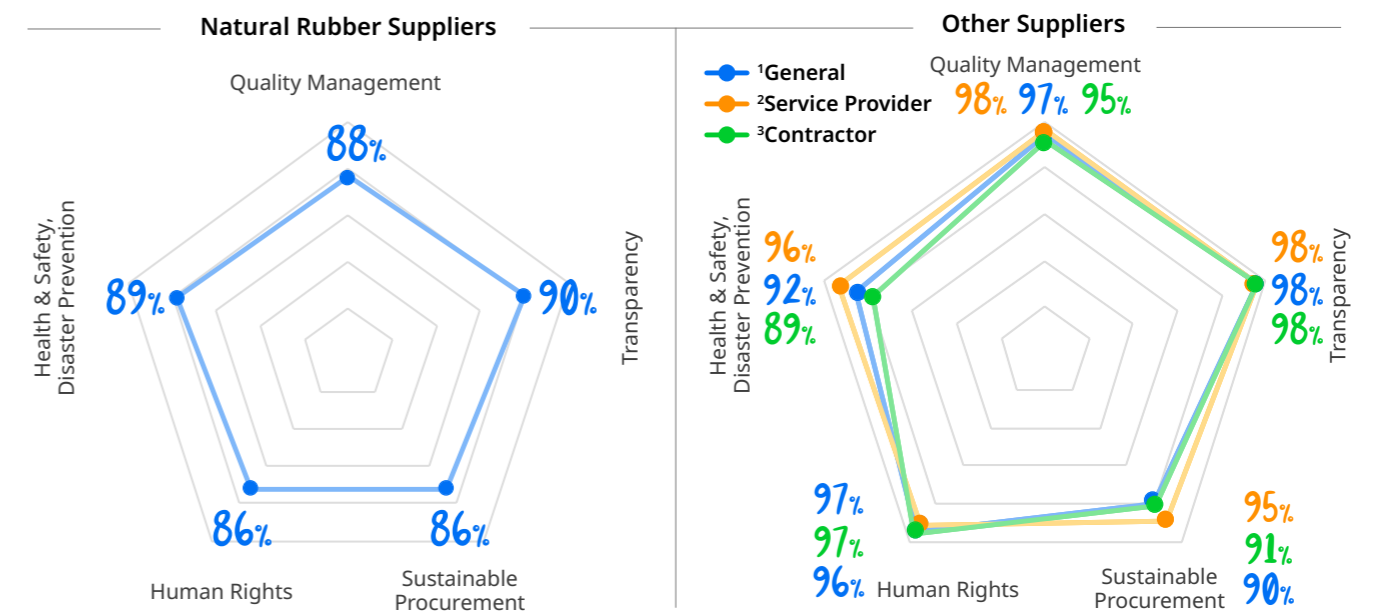
We have been conducting the supplier self-assessment since 2020 to gain an understanding of how our suppliers perform and manage their operational activities. Also, the assessment can reveal sustainability risks in the supplier chain. Throughout the years, there have been some changes and developments in how we carry out the assessment. In addition to the self-assessment, this year we also visited suppliers to conduct the assessment onsite to gain a better insight into their practices in each of the assessment areas, which are **quality management, transparency, sustainable procurement, human rights, health and safety, and disaster prevention**.

About the Self-Assessment

2020	2021	2022
<ul style="list-style-type: none"> Initiated the supplier self-assessment exercise in 5 factories: BJ1, HX, BK, BJ4, and BJ2. Only natural rubber suppliers were required to complete the self-assessment exercise. 35% of active natural rubber suppliers completed the self-assessment exercise. 	<ul style="list-style-type: none"> Carried out the supplier self-assessment exercise in all factories. The supplier self-assessment exercise was applicable for all suppliers—raw material suppliers, general suppliers, service providers, and contractors. 100% of active suppliers completed the self-assessment exercise. Used e-newsletters to share knowledge on the Company's policy and sustainability topics. 	<ul style="list-style-type: none"> Carried out the supplier self-assessment exercise in all factories. The supplier self-assessment exercise was applicable for all suppliers. The self-assessment form (questions) was modified to align with GPSNR principles and other related standards. Used e-newsletters to share knowledge on the Company's policy and sustainability topics. Visited suppliers onsite and conducted the supplier assessment.

Self-Assessment and Onsite Assessment Results

Suppliers needed to achieve 70% of the scores in each assessment area to pass the assessment. This year, all suppliers taking the assessment received over 70% of the scores. Thus, no significant risk was revealed.



1. General suppliers refer to suppliers of other materials other than natural rubber such as chemical suppliers
 2. Service providers refer to external parties who provide different services to the Company. Services are mainly in the areas of laboratory testing and calibration, maintenance work, and work environment inspection such as noise and lighting levels.
 3. Contractors cover contractors of construction work and main machinery

Sustainable Supply Chain

Sustainable Natural Rubber Products

Among the forest products are natural rubber products. Therefore, we place importance on forest sustainability and the no-deforestation commitment, as they are fundamental to natural rubber sustainability. There are internationally recognized standards in place to ensure the sustainable management of forests, from which forest products are derived. We had worked on obtaining **FEFC CoC certification** (chain of custody certification for forest-based products) in Southland Latex (Phatthalung) Co., Ltd. or PT. The factory achieved certification in June 2022.

Furthermore, we are also working to achieve **FSC CoC certification** in one of our STR factories to further emphasize our efforts to promote supply chain sustainability step by step. It is expected that we can obtain the FSC CoC certification within the first half of 2023.

Chain of Custody Certification

Chain of Custody certification ensures the sustainability of forest-based products from the sourcing of raw materials to the distribution of the finished products to the market. The requirements of the certification cover several aspects of standard practices, such as environmental management and health and safety.



Sourcing raw materials from Sustainable sources (FM certified plantations)



Producing natural rubber products in accordance with the certified standards' requirements

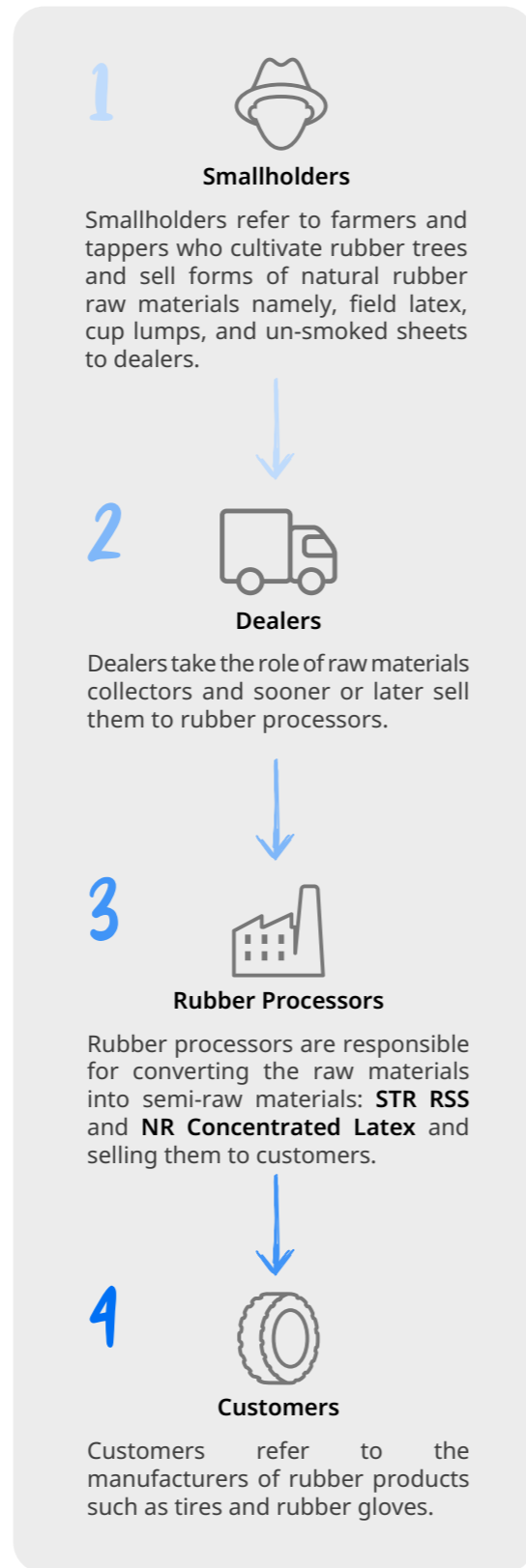


Supplying certified natural rubber products to customers

CoC Certification Achieved
FEFC CoC Certification:
Southland Latex (Phatthalung) Co., Ltd. (PT)

CoC Certification in Progress
FSC CoC Certification: An STR factory

Our Supply Chain Structure



Agroforestry in Rubber Plantation



We are interested in introducing agroforestry to our natural rubber suppliers because of its reported benefits to the natural ecosystem and farmer's livelihood. We have been making an effort to reach out to our suppliers who are rubber farmers, experienced people, and other related parties to see if we can carry out agroforestry in natural rubber plantations.

We visited an agroforestry natural rubber plantation in Krabi province in July to gain first-hand knowledge of how an agroforestry natural rubber plantation actually worked. The plantation owner was **Mr. Boonsong Nubthong**, the former Secretary-General of the **Rubber Farmers Association of Thailand**. With his years of experience in the natural rubber industry and as a rubber farmer himself, he successfully integrated agroforestry into his natural rubber plantation.

The Advantages of Adopting Agroforestry in Natural Rubber Plantations

The plantation visit provided us with broader knowledge and understanding of adopting agroforestry in rubber plantations. According to his experience, Mr. Nubthong would encourage rubber farmers to try adopting agroforestry in their conventional monoculture plantations, suggesting that it is more sustainable in the long run.

We wish to spread the concept of agroforestry in rubber plantations to our natural rubber suppliers through engagement channels and activities. If the suppliers are interested in agroforestry and need our support, we can work collaboratively to promote the sustainability of natural rubber.



Rubber Farmers' Livelihood

Having a variety of crops, plants, and animals in the rubber plantation provides more sources of income to rubber farmers, especially smallholders.

Agroforestry also reduces the risk of being dependent on rubber prices solely. Plus, it helps decrease costs in some aspects. Therefore, farmers' economic well-being and livelihood are more secured.



Healthy Ecosystem

Agroforestry can enrich biodiversity in the rubber plantation, which in turn creates a healthy ecosystem.

Fallen leaves of different plants and manure can help fertilize rubber trees and increase nutrients in the soil.

Mr. Nubthong also revealed that various types of birds were coming back to his plantation because of the suitable environment for them.



Natural Rubber Production

We are informed that agroforestry can increase rubber yields despite the lower density of rubber trees in the plantation if the trees are appropriately looked after. We need to leave more space between each rubber tree and each row so that other plants can have exposure to enough sunlight.

When comparing rubber trees of the same age, those in agroforestry plantations grow bigger than those in monoculture plantation. Thus, they provide higher yields.

Plants and Animals the Plantation

There is a wide variety of plants and animals in Mr. Nubthong's plantation. The following are some examples:



Perennials

Sentang, Bamboo, Champaca, Siamese rosewood, Iron wood, Gurjan, Pacific maple, Teak, Ebony, Blackwood



Fruit trees

Banana, Rose apple, Pomelo, Salak, Jackfruit, Champada, Mango, Durian, Coffee



Vegetables and Herbs

Paco fern, Phak wan pa, Fingerroot, Bitter bean, Baegu leaves



Animals

Chicken, Duck, Stingless bee

Supply Chain Risk Mapping



We use RubberWay that is a risk-mapping solution developed to identify sustainability risks throughout the whole natural rubber upstream supply chain, known to be particularly complex and volatile. RubberWay was designed for processors to enhance transparency in our complex supply chain. This digital solution helps us to empower the various actors (intermediaries, smallholders, plantations) through distinct questionnaires.

RubberWay aids us in ensuring we meet our commitment to sustainable natural rubber in line with the GPSNR reporting requirements. It is also an excellent engagement tool to involve all stakeholders toward their sustainability journey.

Our RubberWay Risk-Mapping

We began our pilot RubberWay risk-mapping in 2018 at 5 of our approved factories. This year, all of our **14 approved factories** conducted the risk-mapping, leveraging the experience from the previous risk-mapping.

The results of each aspect of the risk-mapping—**respecting people, protecting the environment, agricultural training, and commercial transparency**—could help us further improve our practices and drive the upstream supply chain towards sustainability and transparency, as well as contribute to achieving the goals of the Global Platform for Sustainable Natural Rubber (GPSNR).

Our Achievement	2018	2022
Smallholders	1,279 interviews	7,054 interviews
Intermediaries	301 interviews	2,413 interviews
¹ GPS Data	94% of questionnaires completed with GPS data	100% of questionnaires completed with GPS data



We visited our natural rubber suppliers which consisted of **smallholders** and **intermediaries**, to complete the RubberWay questionnaires tailored to each supplier group.

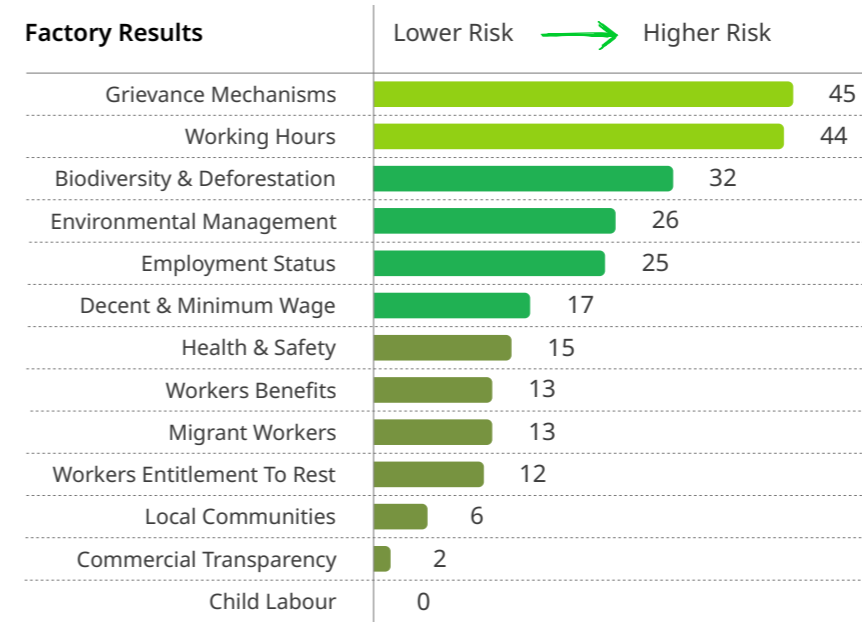
The target for the number of suppliers for each approved factory was based on the amount of production in the previous year.

For this assessment, **100%** of the factories achieved the target (the number of interviews).

1. The number of questionnaires completed with successful GPS capture.

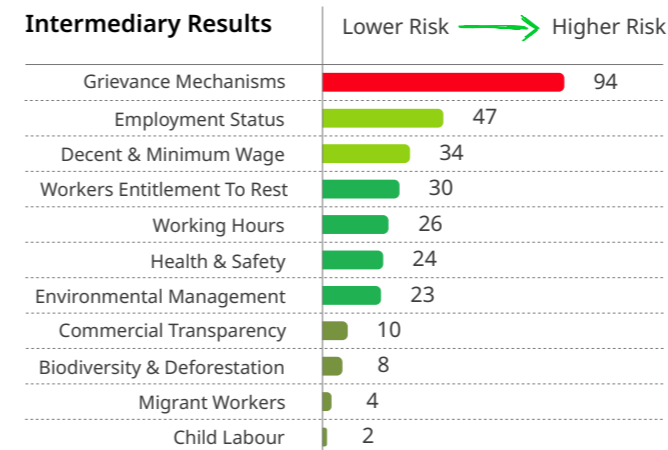
Risk Assessment Results

The following are the overall results of our 2022 RubberWay risk assessment by each category of survey.



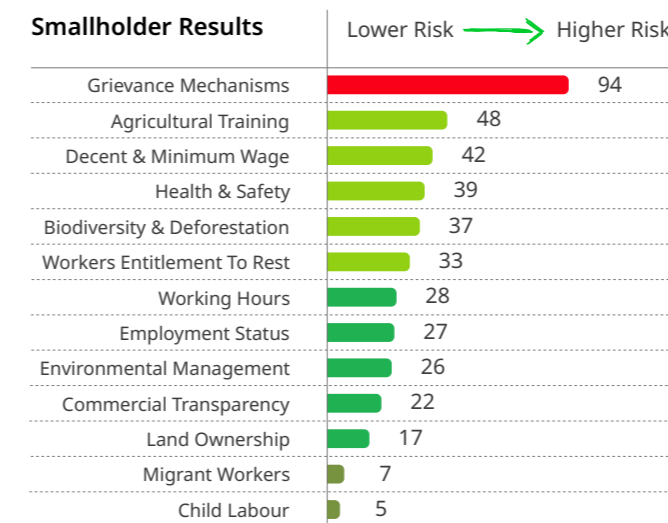
Challenges: The overall survey results revealed that the most challenging areas in terms of the factory part included **grievance mechanisms** and **working hours**. Even though the risks are under control, we have made plans for the mitigation measure to further enhance the performances.

Mitigation Measures: We utilize the Compliance Program as a tool to help align practices with the Company's policies, norms, and principles. The Compliance Program also communicates and trains on topics such as **grievance mechanisms** and **working hours**. We are better informed about the topics that require more attention as a result of the RubberWay risk mapping results. Thus, our response to the results is to pay more attention to the communication and monitoring of these issues in training programs and internal audits.



Challenges: The overall risk mapping results from the intermediary part revealed a significant risk in the topics of **grievance mechanisms** and **employment status**. This suggested that the majority of our natural rubber suppliers, who are intermediaries, lack grievance mechanisms in their operations and structured employment practices.

Mitigation Measures: Creating a sustainable natural rubber supply chain is the shared responsibility of all related players. We can encourage intermediaries to establish grievance mechanisms and develop systematic employment practices whenever we organize **supplier engagement meetings**. Plus, we can communicate about the topic to suppliers using our monthly **e-newsletters**.



Challenges: Similar to the intermediary results, a significant risk for smallholders is also the lack of grievance mechanisms. Additionally, the results suggested the need for agricultural training.

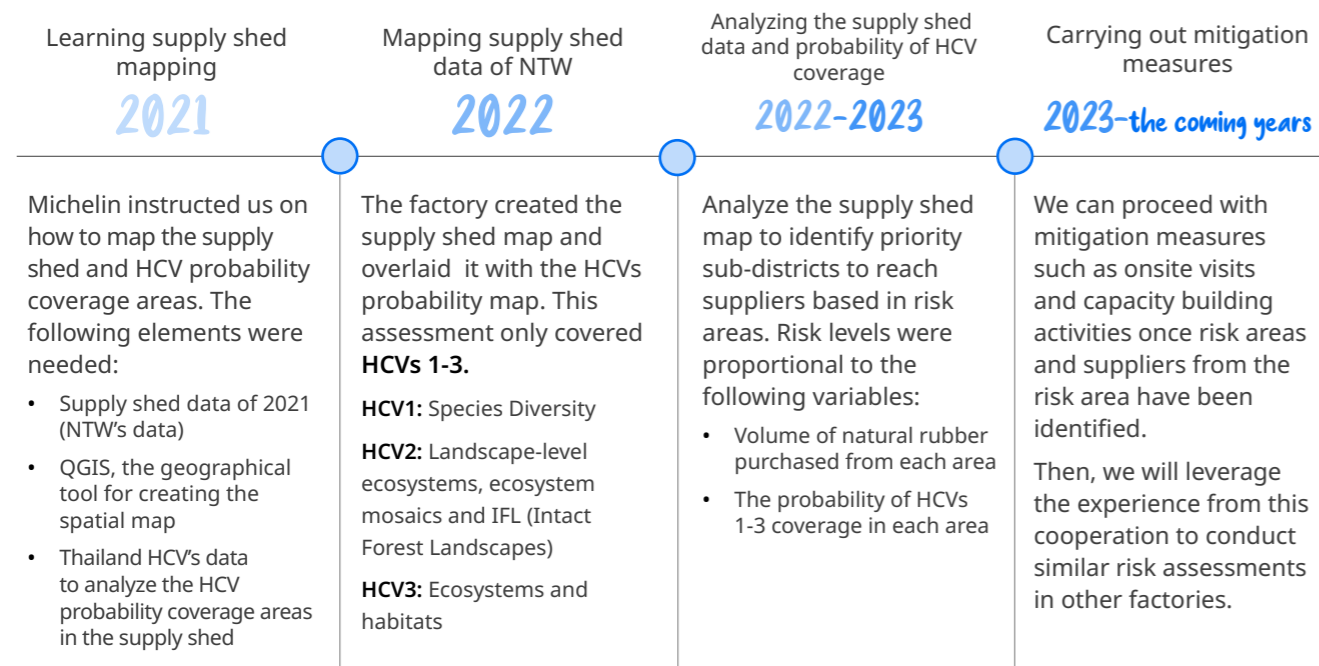
Mitigation Measures: We will adopt the same mitigation measures as those for intermediaries, sharing knowledge through **supplier engagement meetings** and **e-newsletters**. Besides, we will also consider collaboration with third parties to fulfill the need for agricultural training, which might go beyond our expertise.

Deforestation Risk Analysis

To demonstrate our commitment to a sustainable supply chain and no-deforestation, we collaborated with tire maker Michelin, to conduct a deforestation risk analysis. The analysis employed spatial maps of the areas from which our natural rubber is sourced against High Conservation Values (HCVs) probability maps to analyze the potential deforestation risks in our supply shed. When the supply shed map and the HCVs map are overlaid, we can identify risk areas. Thus, we can prioritize jurisdictions and further proceed with proper mitigation measures in the next step.

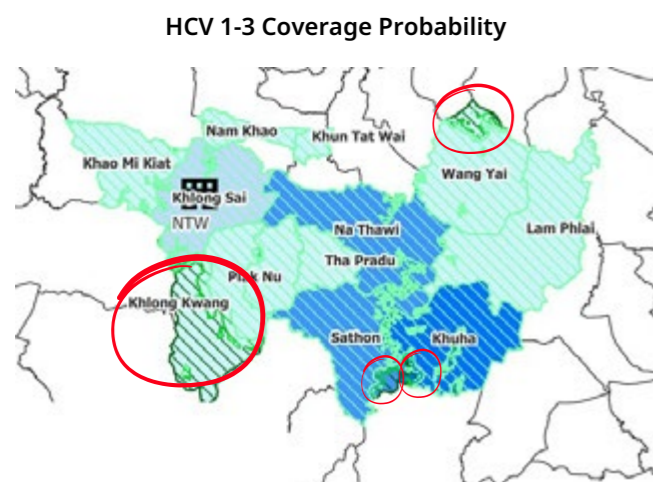
We started the pilot deforestation risk analysis with Southland Latex Co., Ltd. (NTW factory, Na Thawi District, Songkla Province). The factory is located in an area surrounded by a number of forest reserves. Therefore, realizing the probability of HCVs coverage in the supply shed can help foster the sustainability of both the natural environment and the natural rubber supply chain. We were able to map the supply chain at the sub-district level in the assessment. In addition, we will continue to conduct similar risk assessments in other factories.

The Risk Analysis Process & Results



Areas with High Probability of HCVs 1-3 Coverage

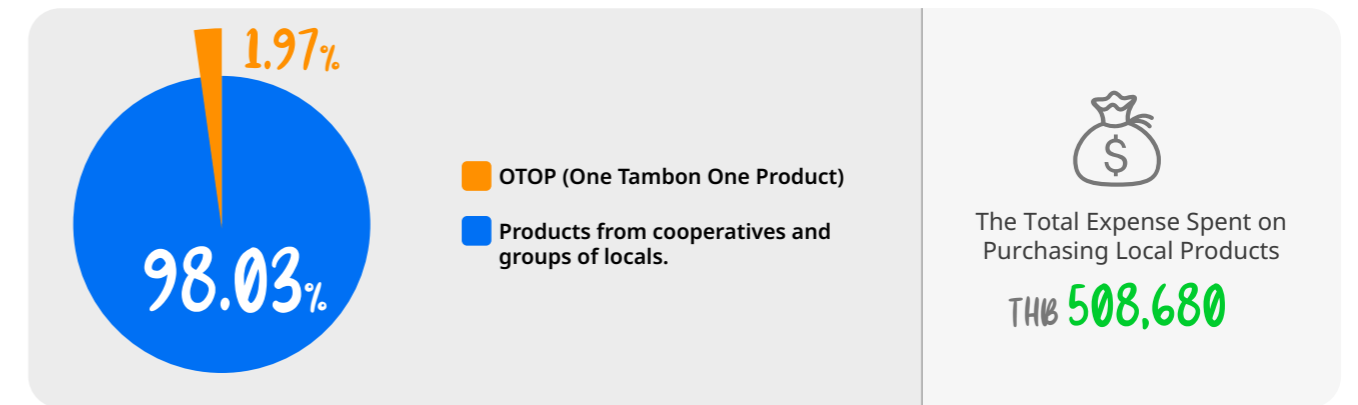
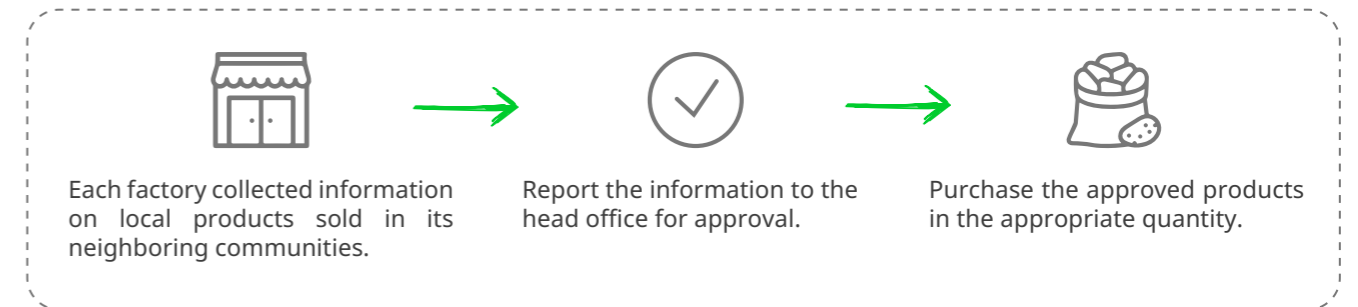
The following are the risk assessment results of HCVs 1-3 with high probability coverage. The results revealed that there were 4 sub-districts with high probability of HCV presence, most of them with generally low coverage. **One sub-district had a high coverage of HCV presence.** Our future plan is to focus on the high-risk areas and adopt mitigation approaches.



Rank	Districts	Sub districts	HCVs 1-3 Coverage Probability		
			High	Medium	Low
1	Na Thawi	Khlong Kwang	49.34%	13.39%	37.27%
2	Thepa	Wang Yai	7.29%	5.18%	87.52%
3	Na Thawi	Sathon	4.91%	7.65%	87.45%
4	Saba Yoi	Khuha	2.23%	10.66%	87.11%

Support Local Products

To help drive local economies, we purchase many different local products from communities around our factories. Most of the products were food and consumables, e.g., curry paste, fruits, brooms, coconut leaf brooms, etc. that were normally used in the factories. The products we purchased included OTOP: One Tambon One Product and products from cooperatives and groups of locals. OTOP is Thailand's local entrepreneurship stimulus program aimed at supporting local products of each sub-district, or tambon in Thai.



The Local Products We Purchased

The following are the products which we purchased from local communities in 2022.


<p>Food</p> <p>Most of the foods were different types of curry paste. Other foods included dried fish and cakes.</p>	<p>Consumables</p> <p>Consumables we purchased included brooms, coconut leaf brooms, and handmade baskets.</p>	<p>Wood Vinegar</p> <p>Wood vinegar is used to lessen the odor of the rawmaterials (cup lumps). It can be used together with EM (effective microorganisms).</p>	<p>Organic Fertilizer (IMO)</p> <p>IMO are indigenous micro-organisms that can be used as organic fertilizer. We use it to eliminate odors in different areas of the factory.</p>

Our Achievements

The following are our achievements, which include the EcoVadis assessment result, different awards and recognition for our sustainability development and good governance efforts.

Apart from the achievements obtained in 2022, there are also achievements that many factories obtained in previous years that are also valid now.

More information is available on our website at <https://www.southlandholding.com/new/overview/award.html>.

 Southland Rubber was awarded in **2022** the Silver medal in our third periodic EcoVadis assessment.



NO.	Awards / Endorsement in 2022	Awarded / Endorsed by	Factory Awarded / Endorsed
1	Ecovadis +Silver Medal by EcoVadis CSR assessmet	Ecovadis	Southland Resources Co.,Ltd
2	Thai Labor Standard (TLS 8001-2020) for basic level	Cooperation between the public and private sectors	Southland Rubber Co., Ltd. (YL) Southland Resources Co., Ltd. (BJ3) Southland Resources (Chumphon) Co., Ltd. (FB)
3	CSR-DIW Award	The Department of Industrial Works of Thailand	Southland Resources (Trang) Co., Ltd. (FC) Southland Latex Co., Ltd. (NTW) Unimac Rubber Co., Ltd. (LS) Southland Resources Co., Ltd. (BJ1) Southland Resources Co., Ltd. (BJ2) Southland Resources Co., Ltd. (BJ4)
4	CSR-DIW Continuous Award	The Department of Industrial Works of Thailand	Southland Rubber Co., Ltd. (HX) Southland Latex Co., Ltd. (BK) Southland Latex (Phatthalung) Co., Ltd. (PT) Uni rubber Co., Ltd. (TSU)
5	The Good Labor Practices	The department of Labor Protection and Welfare	Southland Resources Co., Ltd. (BJ2) Southland Rubber Co., Ltd. (HX)
6	The Good Labor Management System of Crisis	The department of Labor Protection and Welfare	Southland Latex Co., Ltd. (BK) Southland Resources Co., Ltd. (BJ1) Southland Resources Co., Ltd. (BJ2)
7	Prevention and Solution to Drug Problems in an Establishment	The department of Labor Protection and Welfare	Southland Resources (Chumphon) Co., Ltd. (FB) Southland Rubber Co., Ltd. (HX) Southland Resources Co., Ltd. (BJ3) Southland Resources (Chumphon) Co., Ltd. (FB) Southland Resources (Trang) Co., Ltd. (FC)
8	Green Industry Level 3	The Department of Industrial Works of Thailand	Southland Rubber Co., Ltd. (YL) Southland Latex Co., Ltd. (BK) Unimac Rubber Co., Ltd. (LS) Uni rubber Co.,Ltd
9	The Excellent Establishment on Labor Relations and Welfare Award	The department of Labor Protection and Welfare	Uni rubber Co.,Ltd
10	Good Workers Following the Sufficiency Economy Way	The department of Labor Protection and Welfare	Uni rubber Co.,Ltd

GRI Index

GRI Standard	Disclosure Number	Disclosure Title	Page	Comment
GRI 102: General Disclosures				
1. The organization and its reporting practices				
GRI 2-1		Organizational details	3,6-7	
GRI 2-2		Entities included in the organization's sustainability reporting	3,7	
GRI 2-3		Reporting period, frequency and contact point	3	
2. Activities and workers				
GRI 2-6		Activities, value chain and other business relationships	6,58	
GRI 2-7		Employees	6,27	
3. Governance				
GRI 2-12		Role of the highest governance body in overseeing the management of impacts	3,10,15,16	
GRI 2-13		Delegation of responsibility for managing impacts	15	
GRI 2-14		Role of the highest governance body in sustainability reporting	3	
GRI 2-15		Conflicts of interest	11,14	
GRI 2-16		Communication of critical concerns	14	
4. Strategy, policies and practices				
GRI 2-22		Statement on sustainable development strategy	4-5	
GRI 2-23		Policy commitments	10,20	
GRI 2-24		Embedding policy commitments	11-13,56	
GRI 2-25		Processes to remediate negative impacts	14	
GRI 2-26		Mechanisms for seeking advice and raising concerns	14	
GRI 2-28		Membership associations	-	Founding member of Global Platform for sustainable Natural Rubber (GPSNR), Thai Latex Association, Thai Rubber Association, Thai National Shippers' Council, The federation of Thai industries
5. Stakeholder engagement				
GRI 2-29		Approach to stakeholder engagement	8-9	

GRI Standard	Disclosure Number	Disclosure Title	Performance in each reporting year/Comment			unit	Page
			2020	2021	2022		
GRI 205: ANTI-CORRUPTION (2016)							
GRI 205-1		Operations assessed for risks related to corruption	Information Unavailable	Information Unavailable	100% (Through Internal audit)	Percent	14
GRI 205-2		Communication and training about anti-corruption policies and procedures					10,14
		-percentage of governance body members who have been communicated and trained on anti-corruption policies	Information Unavailable	100%	100%	Percent	14
		-percentage of employees who have been communicated and trained on anti-corruption policies	Information Unavailable	100%	100%	Percent	
GRI 205-3		Confirmed incidents of corruption and actions taken	No confirmed incident of corruption during 2020	No confirmed incident of corruption during 2021	No confirmed incident of corruption during 2022	case	14
GRI 206: Anti-competitive Behavior							
GRI 206-1		Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No legal actions for anti-competitive behavior, anti-trust, and monopoly practices during 2020	No legal actions for anti-competitive behavior, anti-trust, and monopoly practices during 2021	No legal actions for anti-competitive behavior, anti-trust, and monopoly practices during 2022	case	-

GRI Standard	Disclosure Number	Disclosure Title	Performance in each reporting year/Comment			unit	Page
			2020	2021	2022		
GRI 302: ENERGY (2016)							
GRI 302-1		Consumption within the organization	264,477.48	219,534.75	230,210.07	Mwh	38
		Fuel	118,905.36	91,093.43	96,454.02	Mwh	
		Electricity	145,572.13	128,441.32	133,756.05	Mwh	
GRI 302-3		Energy intensity	0.353	0.315	0.338	Mwh/Ton of production	38
GRI 303: WATER AND EFFLUENTS (2018)							
GRI 303-2		Management of water discharge-related impacts	Wastewater treatment system	Wastewater treatment system	Wastewater treatment system	100% (All operating unit)	41-42
GRI 303-3		Water withdrawal	759,313.50	919,045.11	682,137.27	m ³	41
GRI 303-4		Water discharge	0.00	0.00	0.00	m ³	41
GRI 303-5		Water consumption	22,603,661.65	19,354,438.15	21,561,012.72	m ³	41
GRI 304: BIODIVERSITY (2016)							
GRI 304-2		Significant impacts of activities, products, and services on biodiversity					
		-Activity	Nature in the factory	Nature in the factory	Nature in the factory, Biodiversity survey	-	43-47
		-Tree Planted	22,027.00	18,272.00	13,789.00	Trees	43
		-Species	113	117	86	Species	43
GRI 305: EMISSIONS (2016)							
GRI 305-1		Direct (Scope 1) GHG emissions	43,806.99	35,852.76	38,174.91	Ton CO ₂	38
GRI 305-2		Energy indirect (Scope 2) GHG emissions	87,139.47	76,884.97	79,936.45	Ton CO ₂	38
GRI 305-4		GHG emissions intensity	0.174	0.162	0.173	Ton CO ₂ / Ton of production	38
GRI 305-7		Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Pass	Pass	Pass	-	51
GRI 306: WASTE (2020)							
GRI 306-3		Waste generated	592.00	456.00	676.20	Tons	48
GRI 306-5		Waste directed to disposal	465.23	383.98	416.55	Tons	48
GRI 307: ENVIRONMENTAL COMPLIANCE (2016)							
GRI 307-1		Non-compliance with environmental laws and regulations	0	0	0	Case	-

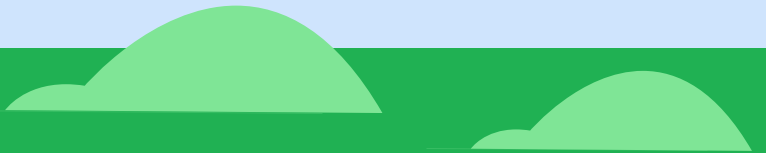
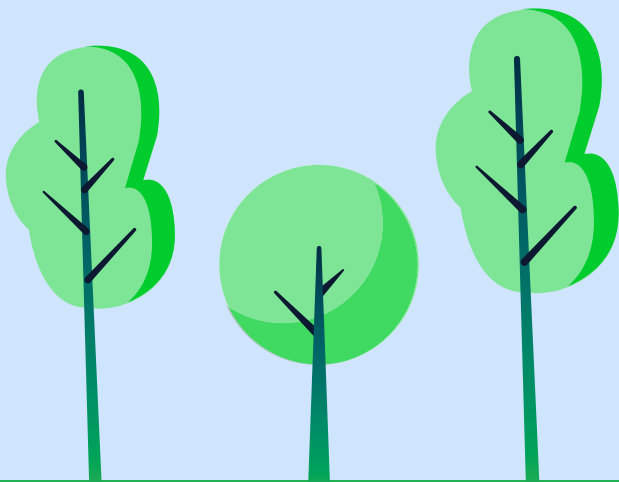
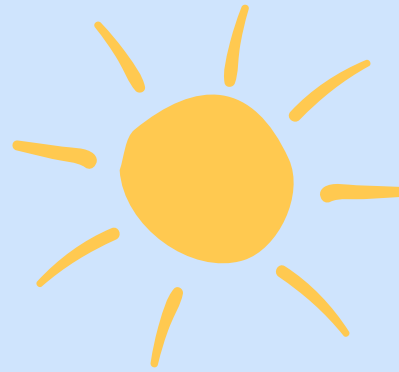
1. In 2022, we deducted rainwater from the water withdrawal. In previous years, rainwater was included.

GRI Standard	Disclosure Number	Disclosure Title	Performance in each reporting year/Comment			unit	Page
			2020	2021	2022		
GRI 403: OCCUPATIONAL HEALTH AND SAFETY (2018)							
GRI 403-1		Occupational health and safety management system	OHSAS 18001/ ISO 45001 14 certified	ISO 45001 14 certified	ISO 45001 14 certified	Factory	6,19
GRI 403-5		Worker training on occupational health and safety	11.01	12.68	13.18	Average training hour per person per year	28
GRI 403-9		Work-related injuries					
		- IFR	7.4	2.19	1.07	-	
		- LTIFR	4.98	2.19	1.07	-	19,22
	- ISR	518.26	703.98	14.67	-		
GRI 404: TRAINING AND EDUCATION (2016)							
GRI 404-1		Average hours of training per year per employee	17.50	33.51	35.17	Average training hour per person per year	28
GRI 404-3		Percentage of employees receiving regular performance and career development reviews	100% (on a yearly basis)	100% (on a yearly basis)	100% (on a yearly basis)	Percent	27
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY (2016)							
GRI 405-1		Diversity of governance bodies and employees					
		-Male employees	53%	42%	55%	Percent	27
		-Female employees	47%	58%	45%	Percent	
		-Employee with disabilities	53	53	43	Person	
GRI 406: NON-DISCRIMINATION (2016)							
GRI 406-1		Incidents of discrimination and corrective actions taken	No incident of discrimination occurred during the reporting period	No incident of discrimination occurred during the reporting period	No incident of discrimination occurred during the reporting period	Case	-
GRI 412: HUMAN RIGHTS ASSESSMENT (2016)							
GRI 412-1		Operations that have been subject to human rights reviews or impact assessments	Information Unavailable	100%	100%	Percent	20-21
GRI 412-2		Employee training on human rights policies or procedures	100%	100%	100%	Percent	
GRI 413: LOCAL COMMUNITIES (2016)							
GRI 413-1		Operations with local community engagement, impact assessments, and development programs	228 Activities	72	90	Engagement activities with local communities	31-35
GRI 413-2		Operations with significant actual and potential negative impacts on local communities	Mangement Approach	Mangement Approach	Mangement Approach	-	
GRI 418: Customer Privacy							
GRI 418-1		Substantiated complaints concerning breaches of customer privacy and losses of customer data	No Substantiated complaints during 2020	No Substantiated complaints during 2021	No Substantiated complaints during 2022	Case	-



Southland Rubber

Think Good, Better Will Follow



Sustainability Report

2022

Southland Rubber Co.,Ltd.

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<https://www.southlandholding.com>