

# ENVIRONMENT REPORT 2024

SRT MOVE

Move to Sustainability



· SUMITOMO RUBBER (THAILAND) LTD.

### Introduction

#### Welcome to Sumitomo Rubber Thailand (SRT)'s Environment Report for 2024

At Sumitomo Rubber Thailand (SRT), we are committed to environmental responsibility and sustainability. We recognize the importance of minimizing our environmental impact and contributing to a healthier planet for future generations.

This 2024 Environment Report details our ongoing efforts in various areas, including:

- Real-time air and odorous emission monitoring: We are implementing advanced technologies to monitor air quality and minimize odor generated by our manufacturing processes.
- Sustainable resource management: We are constantly seeking ways to reduce waste, conserve resources, and explore possibilities for upcycling and reusing materials. This includes initiatives like our wastewater returning system for improved oil separation and upcycling, and the use of recovered rainwater.
- Energy efficiency and clean energy solutions: We are committed to reducing our energy consumption and exploring renewable energy sources like solar power generation.
- Waste management and reduction: We prioritize responsible waste management practices and actively seek ways to reduce waste generation throughout our operations.
- Employee engagement and community outreach: We believe that environmental responsibility is a shared journey. We encourage employee participation in sustainability initiatives and partner with local communities for beach cleaning and environmental awareness programs.

This report highlights our progress in each of these areas and outlines our future goals for environmental sustainability. We are transparent in our approach and committed to continuous improvement.

We invite you to explore this report and learn more about how SRT is working towards a sustainable future.

Aurin Wongpichit Environment manager June 30, 2024

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>>>> PROMOTION " JANUARY"

Have you ever heard of SRT-VISON?

## SRT-VISION วิสัยทัศน์บริษัท

ู้ขับเคลื่อนธุรกิจอย่างยั่งยืนสู่การเป็นบริษัททางเลือกอันดับหนึ่งสำหรับผู้มีส่วนได้ส่วนเสียทุกคน" サステナブル経営を推進し、すべてのステークホルダー から1番に選ばれる会社になる Driving sustainable business to be No.1 company of choice for all stakeholders

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Driving sustainable business to be No. 1 company of choice for all stakeholders

SRT Vision is the definition of "what SRT wants to be" that has been developed into a message through discussions by SRT executives last year.

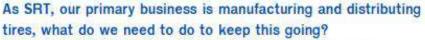
#### MR.MINORU IWANE

PRESIDENT Sumitomo Rubber Thailand

There are two key words in this story, the first half is "sustainable" and the second half is "stakeholders." The word "sustainable" means something that can last forever.

[Stakeholders] means all stakeholders, including customers. shareholders, suppliers, and employees.

So, in other words, our vision is to be a company that is recognized by everyone involved with SRT, including customers, suppliers, and employees, and to continue operating sustainably in the future.





Example 1: If we cannot provide a comfortable working environment for our employees, in the future, no one will want to work at SRT and we may not be able to continue our business. Therefore, maintaining a good working environment is also important



Example 2: If we sell products at a price higher than necessary in an attempt to make a profit, we may lose future customers, so of course we need to listen to our customers' needs.



Example 3: If the production process of natural rubber results from deforestation, we may not be able to buy natural rubber in the future. Therefore, it is important to consider the natural environment.

As the examples presented above show, SRT does not survive on its own. but also with the support of many stakeholders, including us.

I believe that humbly acknowledging this reality and acting on it is the way to gain the trust of our stakeholders, and I would like to work together with everyone to make SRT an even better company.



้ขับเคลื่อนธุรกิจอย่างยั่งยืนสู่การเป็นบริษัททางเลือกอันดับหนึ่งสำหรับผู้มีส่วนได้ส่วนเสียทุกคน" サステナブル経営を推進し、すべてのステークホルダー から1番に選ばれる会社になる

Driving sustainable business to be No.1 company of choice for all stakeholders

To be able to drive a sustainable business We must focus on ESG in order to grow our business sustainably based on 3 important factors: Environment, Society and Governance.



DIRECTOR/FACTORY MANAGER 1.23 Sumitomo Rubber Thailand

ESG is a concept for sustainability that various business groups use as a factor in selecting investments without focusing only on earning monetary profits. But take into account 3 factors:



Environment

Consideration of environmental responsibility

Managing communication relationships with Social partners and related parties such as stores, consumers

Governance Conduct business with transparency and in accordance with the law. There are guidelines for sustainable organizational development. Push and promote equality among employees.

"ขับเคลื่อนธุรกิจอย่างยั่งยืนสู่การเป็นบริษัททางเลือกอันดับหนึ่งสำหรับผู้มีส่วนได้ส่วนเสียทุกคน" サステナブル経営を推進し、すべてのステークホルダー から1番に選ばれる会社になる Driving sustainable business to be No.1 company of choice for all stakeholders



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Our sustainability DNA is in our work every day. Every employee, no matter what field of work they work in, plays a role in the sustainability of the organization.

99

SHUHEI TOMONAGA HR&GA DIRECTOR

By taking responsibility for your own duties to the best of your ability. Work with honesty, transparency, and always take responsibility for decisions made in the work you do. and treat all co-workers equally



Our Sustainability DNA



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### NAOOKI KANEMATS

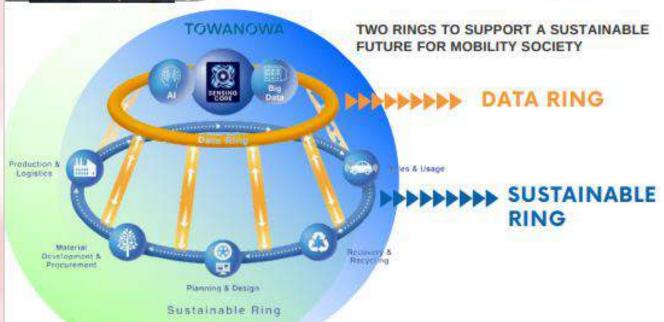
Senior General Manager Sustainability Planning SUSTAINABLE VALUE RING

### **TOWANOWA**



Contributing to the Creation of Joy & Well-Being for a Sustainable Society with an Everlasting (TOWA) Value Ring (WA) in Our Tire Business







TOWANOWA INSIGHT PLEASE STUDY IN MANUAL

'ขับเคลื่อนธุรกิจอย่างยั่งยืนสู่การเป็นบริษัททางเลือกอันดับหนึ่งสำหรับผู้มีส่วนได้ส่วนเสียทุกคน" サステナブル経営を推進し、すべてのステークホルダー から1番に選ばれる会社になる Driving sustainable business to be No.1 company of choice for all stakeholders

## Sexual Harassment

การล่วงละเมิด หรือคุกคามทางเพศในที่ทำงาน

ไม่ควรถูกมองเป็นเรื่องปกติหรือความ ตลกขบขัน เพราะมันเป็นทั้งการกดขี่ การเลือกปฏิบัติ และการละเมิดสิทธิ มนุษยชนอย่างแท้จริง





General Manager Digital Transformation

พฤติกรรมที่เข้าข่ายการล่วงละเมิด หรือ คุกคามทางเพศ Sexual Harassment มีทั้งการกระ ทำทางสายตา วาจา กาย การแลกผลประโยชน์ รวมไปถึง การกระทำอื่น ๆ ที่เกี่ยวข้องกับความลามกอนาจาร

gr@w

Sexual Harassment การล่วงละเมิดทางเพศ หรือการคุกคามทางเพศ

Human Resource Development

PROMOTION " March"

## SRT-VISION วิสัยทัศน์บริษัท

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One thing that we at SRT have done that has enabled sustainable business growth is:

Using clean energy in SRT's production process.



Mr.Chanchai Promjun General Manager Sustaintability Planning





By installing solar cells on the roof of factory 1,2

It consists of more than 40,000 high-efficiency solar panels covering a roof area of more than 100,000 square meters, which will help generate up to 32 million units of electricity per year. [Goal 7: Access to clean energy]





Converting forklifts from combustion engines to electric systems

We converted 44 vehicles to electric last year and plan to convert 56 vehicles this year and another 46 vehicles next year, which will help reduce carbon dioxide emissions to help reduce global warming.





จะขับเคลื่อนธุระกิจอย่างยั่งยืน ต้องกล้าเปลี่ยนแปลง โดยเริ่มจากด้วของเรา

## **Environmental Policy**

Sumitomo Rubber (Thailand) continuously strives to achieve the goal of "helping realize a sustainable society." Let's implement environmental preservation activities to achieve carbon neutrality that is to reduce CO2 emissions from SRI Group 100%(Scope1+2) and response to environment changes to achieve environmental performance by.

#### I. Environmental Preservation Activities

- 1. Promote the low-carbon activities as circular economy concepts and implement the green power such as solar power.
- Aim to be excellence in the environmental management to achieve environmental targets with participation of all employees by activities and creating environmental awareness which lead to "Recycling-Oriented Society".
- 3. Promote the preventive management for environment pollution
- 4. Aware in environmental impacts and take action to prevent chemical contamination, dust, noise, glare to the workplace and environment.
- 5. Prevent environmental risks of company activities such as air pollution, water pollution, soil pollution, waste pollution and ambient noise.
- 6. Prevent odor nuisance by expand odor treatment system.
- 7. Reduce water usage by reuse and recycle water.
- 8. Reduce volatile organic compounds (VOCs).
- 9. Reduce paper usage (A3/A4) among all section.
- 10. Prevent reoccurring environment impact by Yokotenkai system.
- 11. Use new technology to reduce waste generation.

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### **Establish of Environmental Management System.**

- 1. Maintain environmental management system.
- 2. Certify ISO14001:2015 system as global multi-site certification.
- Improve environmental activities continuously regarding to the PDPA cycle.
- 4. Fulfill the compliance obligation, related regulations, needs and expectations of interested parties.
- Reduce the environmental risks and promote environmental development opportunities.
- 6. Enhance of environmental management system by participate with green industrial project.
- Enhance environment communication.
- 8. Promote the knowledge on carbon dioxide emission reduction and carbon neutrality for all employees.
- 9. Promote the knowledge of "Sustainable Development Goals: SDGs" for all employees.
- 10. Promote participation in creating a sustainable and harmonious society with the environment through various environmental protection activities such as afforestation, waste reduction activities, reforestation and biodiversity conservation and protection.

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## **Environmental Targets**

SRT, a company demonstrating a commitment to environmental responsibility, has achieved significant progress toward its environmental sustainability goals according to the latest Key Performance Indicator (KPI) report. The report highlights success in multiple areas, including energy and resource conservation, emissions reduction, and waste minimization.

#### **Environment Target 2023**

No.	Objective	Unit	Target	Result	Status	
1.	Energy saving $ \begin{array}{ll} \textbf{Energy saving} \\ \textbf{- Power consumption} & \textbf{F.1&2} \leq 830 \\ & \textbf{F.3} \leq 483 \\ & \textbf{F.Mold} \leq 8,031 \\ \textbf{- Fuel consumption} & \textbf{F.1&2} \leq 93.1 \\ & \textbf{F.3} \leq 108 \\ \end{array} $	kWh/Ton kWh/Ton kWh/Mold L/Ton L/Ton	F.1&2 ≤ 830 F.3 ≤ 483 F.Mold ≤ 8,031 F.1&2 ≤ 93.1 F.3 ≤ 108	904.53 803.1 2,643.77 97.63 230.17	x x o x x	
2.	Reduce CO <sub>2</sub> from 2022	Ton-CO₂/Ton final compound	-55.0%	-73.35	0	
3.	Reduce water usage Fac.1&2 from 2022	M³ /Ton final compound	-15.0%	-0.11	х	
4.	Reduce water usage Fac.3 from 2022	M³ /Ton final compound	-3.0%	44.70	х	
5.	Reduce solvent from 2022	Kg /Ton final compound		-5.36	0	
6.	Reduce non-valuable waste from 2022	Ton/Ton final compound	-3.0%	22.21	Х	
7.	Reduce valuable waste from 2022	Ton /Ton final compound	-1.0%	12.71	Х	
8.	Reduce Paper Usage (A3/A4)	Ton	-4.0%	1.51	Х	
9.	Grease & Oil of Fac.1	mg/L	<8	7	0	
10.	Grease & Oil of Fac.2	mg/L	<8	6	0	
11.	Grease & Oil of Fac.3	mg/L	<8	<3	0	
12.	Grease & Oil of mold factory mg/L		<8	4	0	
13.	Odor Claim	Time	0	0	0	

SRT's impressive KPI report underlines its commitment to environmental sustainability. By setting ambitious targets and consistently achieving them. SRT's environmental performance serves as a model for other organizations striving to minimize their impact on the environment, but has yet to meet targets in areas such as energy consumption, water use and waste reduction.

- Energy Efficiency: The energy consumption could not meet the target due to the effect of high ambient temperature, then the air conditioning demand is higher. Also, the air compressor of the 650kW air dryer has a problem. Then the energy consumption could not meet the target.
- Fuel Consumption Reduction: Fuel would refer the natural gas using. Then the consumption of fuel is high by the reason of stream leak and loss at curing process and UT
- Water consumption: While SRT did not meet the water consumption reduction target for Fac. 1&2 the target of -15% was not achieved because the water treatment quality did not meet the requirement of water recycle plants, then the unqualified treated water was discharged or disposed of instead of being sent to the nearest water recycling plant. For the use of water saving Fac3 it could not meet the target because the production volume which is used for KPI index calculation is reduced but still the utility supply is require, then it affect to the KPI of water consumption.
- Waste reduction: The top 2 waste disposal that affect the missing target are oily waste water and
  canteen waste water. For the oily waste it is high volume because of new treaded wastewater could
  not be recycled then SRT will dispose it as waste. For the canteen wastewater, it is related to the
  new high of canteen use after covid19 situation due to employees not bringing food from home
  anymore.
- Paper Reduction Achieved: SRT's commitment to paper reduction is reflected in the achievement of application development, however the paper reduction target could not be met due to the target being too high and the application development time required.

## **Environmental Monitoring**

The SRT factories demonstrated compliance with environmental regulations according to a recent monitoring report. The report, compiled by Department of Industrial Works (DIW), details emissions data collected from each facility.

The report indicates that Sulfur Oxide (SOx) and Nitrogen Oxides (NOx) emissions from all three facilities fell well below regulatory limits. Dust emissions were also within acceptable levels for Facilities 1, 2 and 3

The facilities also underwent wastewater testing, with a focus on the following parameters: PH level, Temperature, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Fat, Oil, and Grease (FOG), The report found that all wastewater parameters from all three facilities met the regulatory standards set by the Industrial Estate Authority of Thailand (IEAT).

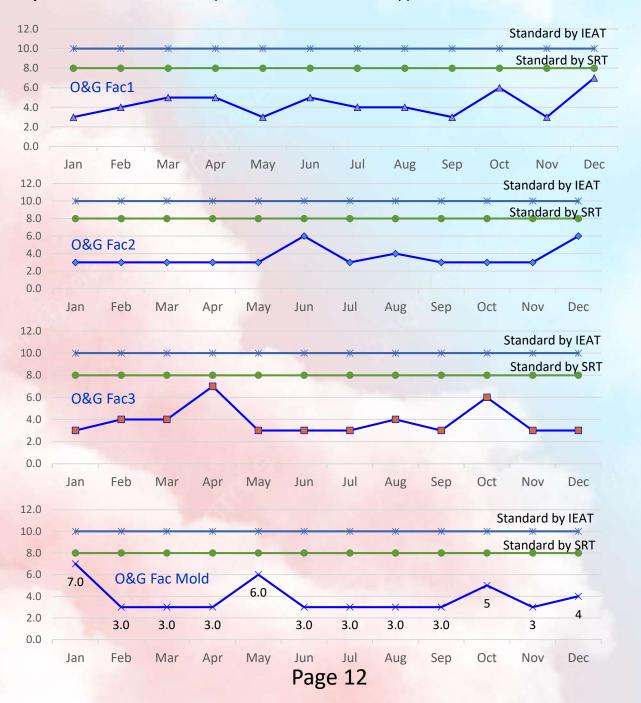
	Facility	itemItem	unitUnit	Regulatory value control	FY2023 Results		
Pollution					Smallest	Maximum	Average
				value control	Min	Max	Ave.
	Boiler @ Fac 2	SOx (Sulfur Dioxide)	PPM	≤ 60	ND	<1	<1
		NOx (Nitrogen Dioxide)	PPM	≤ 200	27	43	35
		Dust as TSP	mg/m³	≤ 400	0.49	2.85	1.67
Emissions to the		CO (Carbon Monoxide)	PPM	≤ 690	ND	28	28
atmosphere	Boiler @	SOx (Sulfur Dioxide)	PPM	≤ 60	ND	ND	0
		NOx (Nitrogen Dioxide)	PPM	≤ 200	23	49	36
	Fac 3	Dust as TSP	mg/m³	≤ 400	1.02	1.52	1.27
		CO (Carbon Monoxide)	PPM	≤ 690	4	74	39
		pH	_	5.5-9.0	7.2	7.8	7.5
		Temperature	•C	≤ 45	30	35	32.5
		TDS Total dissolved solids	mg/L	≤ 3000	376	1028	702
	Factory 1	TSS Total Suspended solids	mg/L	≤ 200	18.1	48	33.05
		BOD	mg/L	≤ 500	11.9	86.6	49.25
		COD	mg/L	≤ 750	56	256	156
		Fat Oil and Grease	mg/L	≤10	<3	7	7.00
		pH	_	5.5-9.0	7.2	7.9	7.55
		Temperature	∘C	≤ 45	28	35	31.5
		TDS Total dissolved solids	mg/L	≤ 3000	395	1150	772.5
		TSS Total Suspended solids	mg/L	≤ 200	11.4	27.8	19.6
Di		BOD	mg/L	≤ 500	9	47.8	28.4
Discharge into central		COD	mg/L	≤ 750	91	242	166.5
wastewater		Fat Oil and Grease	mg/L	≤10	<3	6	6.00
treatment plant	rail	pH	_	5.5-9.0	7.2	7.9	7.55
of Industrail estate		Temperature	•C	≤ 45	27	38	32.50
estate		TDS Total dissolved solids	mg/L	≤ 3000	150	609	379.50
		TSS Total Suspended solids	mg/L	≤ 200	<5	12.9	12.90
		BOD	mg/L	≤ 500	6.2	26.7	16.45
		COD	mg/L	≤ 750	<40	158	158.00
		Fat Oil and Grease	mg/L	≤10	<3	7	7.00
	1-3/1	pH		5.5-9.0	6.7	7.8	7.25
		Temperature	•C	≤ 45	29	34	31.50
		TDS Total dissolved solids	mg/L	≤ 3000	304	797	550.50
	Factory Mold	TSS Total Suspended solids	mg/L	≤ 200	<5	56.4	56.40
	Mold	BOD	mg/L	≤ 500	3.4	69.9	36.65
		COD	mg/L	≤ 750	<40	208	208.00
		Fat Oil and Grease	mg/L	≤10	<3	7	7.00

## **Environmental Monitoring**

SRT has the program ensures consistent compliance with regulatory standards and optimal treatment effectiveness. These routine tests consistently confirm that influent wastewater meets all established standards. However, SRT goes a step further by focusing on a critical parameter: oil and grease (O&G).

The Thailand Industrial Estates Authority (IEAT) sets a standard control limit of 10 milligrams per liter (mg/L) for O&G content in influent wastewater. SRT, demonstrating a commitment to exceeding expectations, has established a stricter internal control limit of 8 mg/L.

To achieve this exceptional level of O&G control, SRT has implemented a cutting-edge solution: real-time oil sensors. These sensors provide continuous monitoring, enabling immediate adjustments to the treatment process should O&G levels approach the internal control limit.



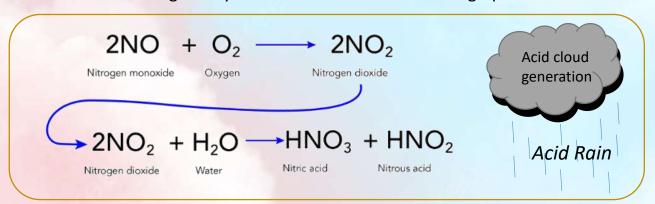
## **Environmental Monitoring**

### Real-time Sensor for The Nitrogen Oxides

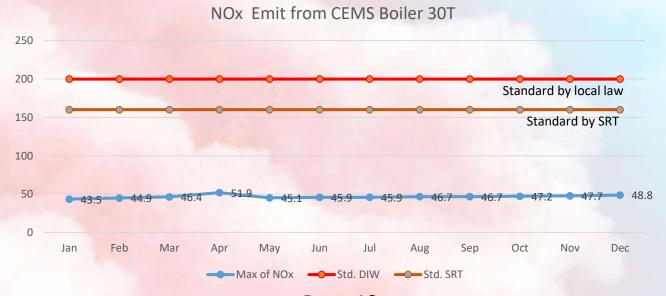
SRT emphasizes its commitment to clean air through continuous online monitoring of Boiler 30t's emissions. This proactive approach ensures the boiler operates within regulatory limits, minimizing air pollution.

In 2023 SRT employs real-time sensors to meticulously track crucial air emission parameters, including:

- 1. Oxygen (O2) Levels: Monitoring O2 levels is vital for efficient combustion. Optimal O2 levels ensure complete fuel burn, minimizing the formation of pollutants.
- 2. Nitrogen Oxides (NOx) Emissions: NOx is a group of air pollutants linked to respiratory problems and acid rain. Real-time monitoring allows for adjustments to the combustion process to keep NOx emissions well below regulatory standards as has shown in the graph.



By continuously monitoring these parameters, SRT can guarantee Boiler 30t functions optimally, preventing the release of air pollutants exceeding established regulations.



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## Real-Time Oil and Grease Monitoring

SRT Takes Wastewater Treatment to the Next Level with Real-Time Oil and Grease Monitoring and Control.

#### **Guarding Against Environmental Impact:**

The state-of-the-art system continuously monitors the levels of oil and grease in the wastewater before it exits the discharge pit. This real-time data allows for immediate intervention and automatic control measures. If oil and grease levels exceed established environmental standards, the system can trigger automated processes to remove these contaminants before discharge.

#### **Advanced Technology, Sustainable Future:**

"SRT prioritizes environmental protection in all aspects of our operations," said Mr. Minoru Iwane, the President at SRT Company. "This real-time oil and grease monitoring system ensures that our wastewater meets all environmental regulations, safeguarding our water resources."



### **Benefits Beyond Compliance:**

Beyond ensuring compliance with environmental regulations, the new system offers additional benefits for SRT. Real-time data can be used to identify potential sources of oil and grease contamination within the company's operations, enabling preventative maintenance and leak detection.

This proactive approach minimizes the risk of accidental spills and further strengthens SRT's commitment to environmental sustainability.

## Air Real-time Monitoring

### SRT's Air Pollution Control with Real-Time Monitoring System

SRT Company is solidifying its commitment to environmental stewardship with the installation of a Continuous Emission Monitoring System (CEMS) on Boiler 30T. This advanced technology allows for real-time monitoring of air emissions, aligning with Sustainable Development Goals (SDGs) and bolstering pollution control efforts.

#### Improving air quality control:

Since the CEMS was installed on Boiler 30T in 2016, it has been continuously monitoring and recording the main air pollutants such as nitrogen oxides (NOx). SRT has upgraded the emission gas sensors in 2024 by adding sulphur oxides (SOx) and particulates (CO) to ensure boiler operation control and better air pollution monitoring.



#### **Leading the Way in Environmental Responsibility:**

SRT's adoption of this cutting-edge technology positions them as a leader in environmental responsibility within their industry. This initiative showcases the company's commitment to operating sustainably and prioritizing the well-being of the environment and the local community. By embracing real-time air emission monitoring, SRT paves the way for a cleaner and healthier future for all.



## Sustainable and Odorless

**SRT** is driving towards a greener future by implementing Electronic Nose (E-Nose) technology in its tire rubber compound research and development by PT department. This pioneering approach signifies a significant leap towards sustainable tire production and minimizing odor impact.

"The challenge of tire odor: Traditional tire manufacturing processes often produce unpleasant odors as a result of the various chemicals used in rubber compounds. These odors can cause environmental

problems and disturb surrounding communities.
Then we have applied the E-Nose

for operational control in the production process". said
Mr. Minoru Iwane, The President

of Sumitomo Rubber Thailand.





**Sustainable and Odorless Future**: By leveraging E-Nose technology, SRT is paving the way for a more sustainable future in tire production. Here's how:

- → Reduced Environmental Impact: By optimizing rubber compound formulations, SRT can minimize the use of odorous chemicals. This translates to lower emissions during production and a reduced environmental footprint.
- → Sustainable Products: The development of odorless tire compounds aligns with the growing consumer demand for sustainable products. SRT's commitment to environmental responsibility will resonate with ecoconscious consumers.

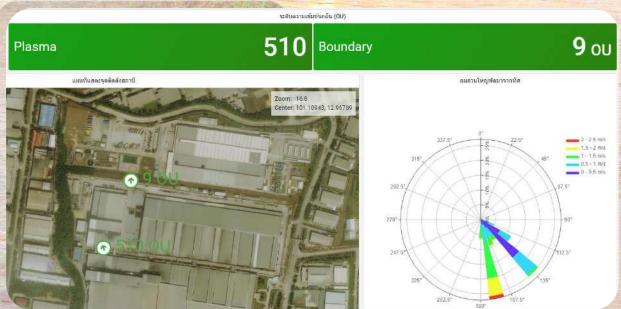
## Sustainable and Odorless

**E-noses** are finding a valuable application in tire manufacturing. They are particularly useful for monitoring odor nuisance.



**SRT**, is making waves in sustainability by implementing Electronic Nose (E-nose) technology for real-time odor monitoring in its mixing processes.

**E-nose** technology can be used to replace human sensory tests and integrate odor results with weather data. They are made up of an array of sensors that can detect different odors. The sensors in an enose can be used to identify and quantify the presence of different chemicals in the air. This innovative approach signifies a significant step towards environmental responsibility and achieving the Sustainable Development Goals (SDGs).



**Beyond Compliance:** While E-Nose technology helps SRT comply with environmental regulations, its benefits extend far beyond. The system provides continuous monitoring, enabling proactive odor management and preventing potential odor pollution incidents.

## Clean Energy Transformation

### SRT to Install World's Largest Rooftop Solar Panel Array

**Rayong, Thailand** — Sumitomo Rubber Thailand (SRT), has announced plans to construct the world's largest rooftop solar panel array for a single facility at its factory in Rayong, Thailand. This ambitious project signifies a major step towards sustainable manufacturing for the company.

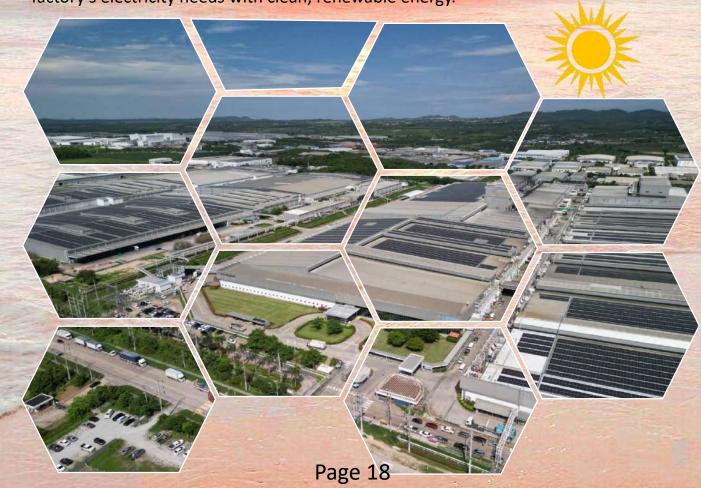
### Sustainable Vision, Tangible Results:

"We are very excited to embark on this landmark project," said Mr Norikatsu Nakata, SRT Director/Factory Manager, Sumitomo Rubber Thailand.

"The world's largest rooftop solar panel array at our Thai facility underscores our commitment to environmental responsibility and achieving carbon neutrality."



**Powering Up with Renewables:** The massive solar installation will comprise over **40,000 high-efficiency** solar panels, sprawling across an impressive **100,000 square meters** of rooftop space. This extensive system boasts a projected energy generation capacity of **22.5 megawatts** (MW), aiming to fulfill 100% of the factory's electricity needs with clean, renewable energy.



## Clean Energy Transformation

### **Renewable Energy Certificates (I-REC)**

SRT Purchases Renewable Energy Certificates to Support Sustainability Goals

In line with its 2023 Sustainability Planning Policy, the Sumitomo Rubber Thailand (SRT) has taken a significant step towards reducing its carbon footprint and supporting the Carbon Neutrality goals of the Sumitomo Rubber Industry group (SRI-G).

The SRT's Sustainability Planning Policy aims to achieve a minimum CO2 emission reduction of 55%. This initiative combines energy-saving practices with strategic trading agreements. To achieve this, the SRT signed a deal with The Kansai Electric Power Co., Inc. (KEPCO) for the procurement of certified renewable energy credits (I-RECs) which the Source of Renewable Energy could be Biomass, including fuel derived from rubber trees.

#### **I-REC Acquisition**

The initial agreement secured 230,000 I-RECs, as documented in the Agreement on the Trading of Renewable Energy Certificates, which came into effect on February 21, 2023. These I-RECs represent the environmental benefits associated with renewable energy production.

"SRT's actual energy consumption exceeded the initial agreement.
To bridge this gap and ensure its sustainability goals are met, the SRT purchased an additional 10,000 I-RECs". siad Mr. Chanchai Promjun, General Manager, Sustainability Planning, Sumitomo Rubber Thailand.





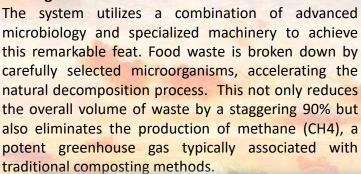
### **SRT's Commitment to Sustainability**

This initiative demonstrates SRT's commitment to environmental responsibility and its dedication to supporting the transition towards a cleaner energy future. By incorporating renewable energy into its operations, the SRT plays a crucial role in achieving Thailand's carbon neutrality targets.

### Food Waste to Compost

**SRT Company** is at the forefront of sustainable food waste management with the implementation of a groundbreaking new technology. This innovative system transforms food scraps from the company's canteen into nutrient-rich compost within a remarkable 24-hour timeframe.

#### **Turning Waste into Resource:**





#### **Environmental and Economic Benefits:**

The resulting compost, rich in organic matter and nutrients, can be used to fertilize gardens and landscaping projects, promoting plant growth and soil health. This creates a closed-loop system, diverting waste from landfills and utilizing it to nourish the environment.







### SRT's Sustainability with "My Cub" Campaign

**SRT Company** is taking a significant step towards a more sustainable future with the launch of its activity "My Cub" campaign. This impactful initiative aims to dramatically reduce single-use plastic cup consumption within the company, generating a positive environmental impact.



Building a Culture of Sustainability by minimizing single-use cups, SRT lowers its carbon footprint associated with plastic production and disposal.

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Kicking the Habit on Single-Use Plastic by reducing our reliance on single-use plastics, we are actively contributing to a cleaner environment and a healthier planet."



Inspiring employees to make environmentally conscious choices throughout their working day. By encouraging employees to use reusable options, SRT has eliminated the use of over 10,000 disposable plastic cups per year.

### **SRT's Sustainable Practices in Paint Management**







SRT, is making significant strides towards sustainability by implementing innovative practices in paint management. This comprehensive approach focuses on optimizing paint and thinner usage, reducing waste, and promoting environmental responsibility.

"Centralizing procurement and sharing by establishing a central purchasing system for paint supplies can eliminate redundancy and ensure that only the necessary amount of paint is purchased for each project". Siad Mr. Chanchai Promjun, General Manager, Sustainability Planning, Sumitomo Rubber Thailand.



Combating Expired Paint: To address the issue of expired paint, SRT has implemented a rigorous inventory management system. This system tracks paint expiration dates and prioritizes the use of older stock before acquiring new ones. Additionally, SRT has partnered with its suppliers to establish a return policy for unused or nearing-expiration paint. This collaborative approach minimizes paint waste and ensures responsible disposal practices.



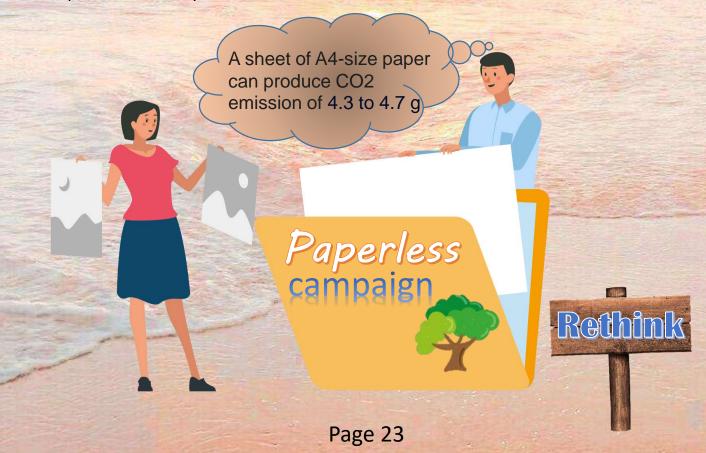
### **Enhancing the Paperless by Increasing the Digital Application**

In a significant step towards environmental sustainability, the DX department of SRT has launched a comprehensive "Paperless" campaign. This initiative is projected to reduce paper usage by a staggering 11,639 sheets per month in 2024, translating into a multitude of environmental benefits.

"We are excited to launch the Paperless campaign," said a spokesperson for the SRT DX department. "By embracing digital technologies and paperless workflows, we are not only streamlining our processes but also taking a significant step towards environmental responsibility". Said Mr. Takeshi Toyoshima, General Manager Digital Transformation, Sumitomo Rubber Thailand.



The traditional reliance on paper for communication and record-keeping can have a considerable environmental impact. Paper production involves deforestation, consumes large quantities of water and ink, and contributes to greenhouse gas emissions. SRT's DX department's commitment to paperless operations directly addresses these concerns.



### Redesign the Waste Oil Recovery System

In a significant development for environmental sustainability, SRT has announced a major redesign of its grease trap separating system. Traditionally, grease traps capture oils, and grease (FOG) from wastewater to prevent pour quality of oil capture in UT wastewater systems.



"SRT's redesigned system goes beyond this basic function. The wastewater returning system ensures FOG particles remain within the trap for a longer duration, allowing for more efficient oil accumulation". siad Mr. Chanchai Promjun, General Manager, Sustainability Planning, Sumitomo Rubber Thailand. "This increased retention time translates to cleaner separation of oil from the wastewater."





The benefits of SRT's redesigned system are multifaceted. Firstly, it enhances the quality of the recovered oil. By minimizing contamination wastewater, the separated oil is better suited for the upcycling process, where it can be transformed into valuable products like biodiesel or lubricants. Secondly, the improved separation efficiency reduces the environmental impact of FOG disposal. Cleaner wastewater released into the sewage system translates to a healthier ecosystem.

### **SRT Say No to Single Use Plastic Bags**

**SRT Company** is taking a decisive step towards a plastic-free future with the implementation of its "Say No to Single-Use Plastic Bags" campaign in its company canteen. This initiative signifies SRT's commitment to environmental responsibility.

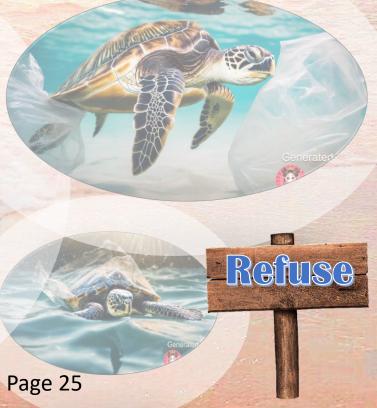
#### Environmental Impact, One Bag at a Time:

"SRT recognizes the detrimental impact of single-use plastics on our environment," said Mr. Shuhei Tomonaga, HR&GA Director, Sumitomo Rubber Thailand. "By eliminating plastic bags from our canteen, we are actively reducing plastic waste and contributing to a cleaner and healthier planet."



Building a Culture of Change: The campaign not only reduces plastic waste but also fosters a culture of environmental awareness among SRT employees and canteen patrons. By encouraging reusable alternatives, SRT inspires individuals to make eco-conscious choices in their daily lives.





The Waste Bank Program

**SRT Company** is taking a significant step towards sustainability with the launch of its innovative "Waste Bank" program.

This exciting initiative goes beyond simply recycling, offering employees a multitude of benefits, including:





Maximizing Recycling Revenue: By collecting and sorting recyclables in a centralized waste bank, SRT can negotiate with recycling companies for higher bulk sale prices.



**Enhanced Material Recovery:** The waste bank system allows for the meticulous separation of recyclable materials. This ensures that each type of waste, from plastic bottles to paper, is recovered efficiently for high-quality recycling.



**Promoting Resourcefulness:** Not all waste needs to be recycled. The program encourages the responsible reuse of certain materials. For example, aluminum lids, often discarded with cans, will be collected and donated to local community programs for creative reuse projects.







## The Magic Pillow

## SRT Upcycles Used Straws into Magic Pillows for Bedridden Patients, Combating Ocean Waste

**SRT** Company is weaving innovation and social responsibility together with its ingenious "Magic Pillow" project. This initiative tackles two pressing issues simultaneously: recovering plastic waste and providing comfort and support to bedridden patients.

A Sustainable Future: SRT's Magic Pillow project serves as a powerful example of how innovation can address environmental concerns and social needs. By upcycling waste and providing comfort to patients, SRT paves the way for a more sustainable and compassionate future.



### Double the Impact:

"The Magic Pillow project embodies SRT's commitment to social responsibility and environmental stewardship," said Aurin Wongpichit, Environmental Manager, Sumitomo Rubber Thailand. "By upcycling plastic waste into these pillows, we not only divert waste from our oceans but also provide much-needed comfort and support to those in need."







## The Magic Pillow

## SRT Upcycles Used Straws into Magic Pillows for Bedridden Patients, Combating Ocean Waste



### **Transforming Waste into Comfort:**

The project focuses on collecting used plastic straws, a significant contributor to ocean pollution. SRT has established collection points throughout its facilities, encouraging employees to responsibly dispose of used straws. These collected straws are then sterilized and processed to create the filling for specially designed "Magic Pillows."

#### **Beyond the Pillows:**

SRT is exploring partnerships with hospitals and rehabilitation centers to distribute the Magic Pillows to bedridden patients. Additionally, the company is looking into collaborating with waste management companies to expand the collection of used straws, maximizing the project's environmental impact.



### Magic Touch for Bedridden Patients:

These pillows offer crucial support for bedridden patients, particularly those suffering from bedsores or requiring leg elevation. The unique straw filling provides gentle but firm cushioning, promoting proper leg positioning and preventing pressure injuries. The breathable nature of the straw filling also helps to regulate temperature and prevent discomfort.



## Beach Cleaning Campaign

### Beach Cleaning Volunteers Combat the Microplastic Pollution

**SRT** is proud to announce its partnership with nine local organizations for a beach cleaning campaign on Friday, July 21st, 2023, at Mea Ramplueng Beach in Rayong, Thailand. The campaign aims to drive several sustainability goals, including reducing microplastics in the food chain, promoting biodiversity, and fostering community engagement.

"We are committed to being a responsible corporate citizen and protecting the environment," said Mr. Naooki Kanematsu; Senior General Manager, Sustainability Planning. "This beach cleaning campaign is a great opportunity to give back to our community and make a positive impact on the environment and the life under water."

**Distance** of the beach will focus on cleaning a 2.8-kilometer stretch of the 12-kilometer-long Mea Ramplueng Beach. A total of 180 participants from nine organizations are expected to participate.

**Microplastics** are a growing threat to the environment and human health. They are tiny pieces of plastic that can enter the food chain when they are consumed by marine animals. Beach cleaning campaigns help to remove microplastics from the environment before they can enter the food chain.

**Biodiversity** is promoted by the beach cleaning campaign. Healthy beaches are home to a variety of plants and animals. By removing trash and debris from the beach, we can help to create a healthier habitat for wildlife.

**Community** engagement is an added benefit of the beach clean-up campaign as it is a great way to encourage community involvement. By working together to clean the beach, participants can connect with each other and learn more about the importance of protecting our environment.

## **Biodiversity Conversation**

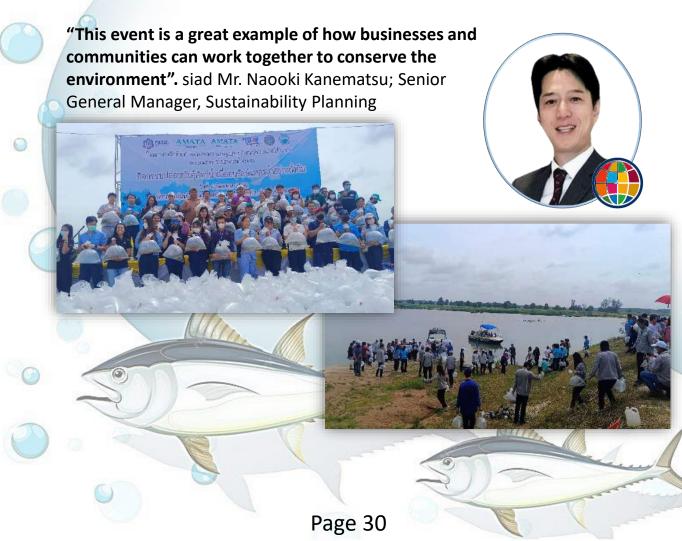
### **SRT Promote a Balanced Ecosystem of Aquatic Animals**

SRT partners with Amata City Industrial Estate, Rayong, Thailand to release 150,000 fish into the Dok Krai River in support of biodiversity conservation.

Amata City Rayong Industrial Estate, held a conservation event on 4 August 2023. The event focused on the conservation of water sources and the release of aquatic animals.

The event was organized by Amata City Rayong and involved 350 volunteers, including 10 SRT volunteers. A total of 150,000 fish were released into the Dok Krai reservoir.

Releasing fish into the reservoir helps to replenish aquatic animal stocks and promote a balanced ecosystem. It is a common practice in Thailand where many people view releasing captive-bred life as a way to make merit.



## Circular Economy Awards

### 2024 SRT as the Country CE Model

In 2023-2024, SRT emerged as a frontrunner in Thailand's pursuit of a circular economy, a model that prioritizes resource efficiency and minimizes waste. SRT's commitment to sustainability is evident in its collaborative efforts with the Thailand Greenhouse Gas Organization (TGO) and the implementation of several exemplary circular economy projects.

The circular economy stands in stark contrast to the traditional linear model of "take, make, dispose." It emphasizes keeping products and materials in use for as long as possible, extracting the maximum value from them before they reach the end of their lifespan. This approach offers significant environmental and economic benefits, including resource conservation, reduced pollution, and job creation.





### SRT's dedication to circularity is exemplified by several innovative projects:

- 1. Recovery of Poly Sheet: SRT has implemented a system to recover and reuse poly sheets, a commonly used material in production. This reduces reliance on virgin materials and minimizes waste disposal.
- Return of Rubber Compound: A program for the return of used rubber compound allows for its reprocessing and reintegration into new products. This extends the lifespan of valuable resources.
- 3. Recycling of UT Wastewater: SRT has established a system to treat and recycle wastewater generated during curing process. This not only conserves water but also minimizes the environmental impact of wastewater disposal.
- **4. Rainwater Recovery:** By collecting and reusing rainwater, SRT demonstrates a commitment to sustainable water management. This reduces reliance on treated tap water and promotes resource conservation.
- 5. Solar Power Generation: The installation of solar power systems at SRT facilities harnesses renewable energy, reducing dependence on fossil fuels and contributing to Thailand's greenhouse gas reduction goals.

SRT's collaboration with TGO further strengthens its commitment to a sustainable future. TGO works to promote greenhouse gas mitigation strategies, and by implementing these circular economy projects, SRT actively contributes to Thailand's national climate goals.

## Waste Management Awards

### SRT's Best Waste Management Award as Platinum Level

SRT has been lauded for its exceptional waste management practices, receiving the prestigious **Best Waste Management Award** at the ceremony organized by IEAT, Amata City Industrial Estate. This recognition highlights SRT's commitment to environmental responsibility and its leadership in implementing sustainable waste management solutions.





**SRT's win** is testament to its commitment to a circular economy approach. The details of the company's waste management practices aren't explicitly visible in the image, but the award likely recognizes initiatives such as

- Environmental Management System (ISO14001:2015) and environmental and pollution control compliance.
- Resource recovery: SRT may have implemented program to recover and reuse materials such as poly sheets and rubber compounds, minimizing reliance on virgin materials and reducing waste disposal.
- Waste Management: SRT has implemented proper waste management including 3R's and zero waste to landfill.
- Waste water treatment: The company could use a system to treat and recycle wastewater generated during operations, conserving water resources and minimizing environmental impact.
- Sustainable water management: Initiatives such as rainwater harvesting could be in place, demonstrating SRT's commitment to water conservation.

## The Executive Task Force on Sustainability Sumitomo Rubber Thailand



Mr. Minoru Iwane,
The President



Mr Norikatsu Nakata, SRT Director/ Factory Manager



Mr. Shuhei Tomonaga, HR&GA Director,



Mr. Naooki Kanematsu; Senior General Manager, Sustainability Planning



Mr. Takeshi Toyoshima, Gerneral Manager Digital Transformation



Mr. Chanchai Promjun, General Manager, Sustainability Planning



### SUMITOMO RUBBER (THAILAND) LTD.

7/232 Moo. 6 Soi Pornprapa (Amata City Rayong Industrial Estate) Tambol Mabyangporn, Amphur Pluakdaeng, Rayong 21140

Tel: 038-953-000, 033-060-160

€.

Fax: 038-953-021, 038-953-028

