



SET Awards 2024

Sustainability Excellence

Presented by
Sustainability Team

Date
September 03, 2023



Agenda



Company Overview



Strategic Challenges

- Competitive Cost of raw material

- GHG Management

- Employee Development



Q & A

Company Overview

Company Overview

A.J. Plast Products

A.J. Plast Value Chain

Vision, Mission, Core Value



Company Overview

A.J. PLAST

To serve innovation Solutions for the world’s sustainable consumption

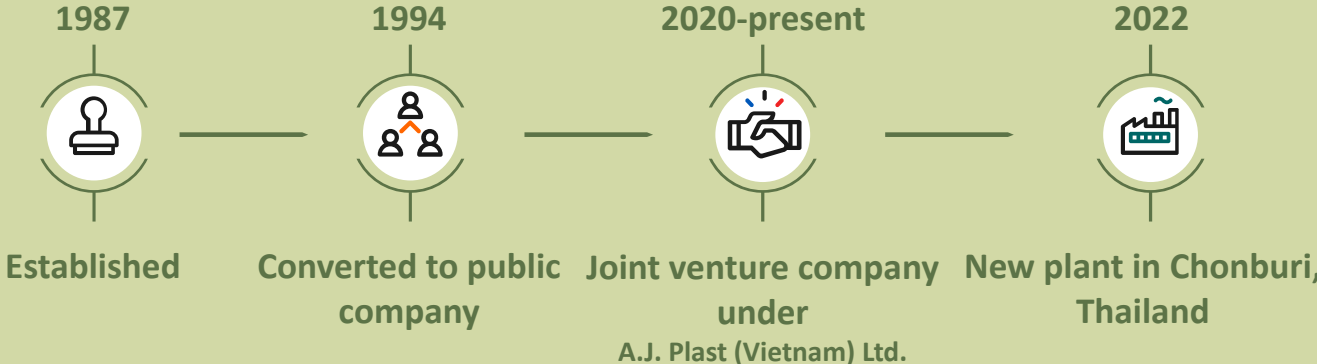


“World Class Film Products for Ultimate Customer Satisfaction”

- A.J. Plast PLC was established in 1987
- Headquartered in Bangkok Thailand
- A high quality **Biaxially Oriented (BO) Films** manufacturer
- The complete flexible packaging solution with **313,500 TPA** production capacity

30 COUNTRIES OF CUSTOMERS

3 PLANTS **2** COUNTRIES



Vision

“To be a leader in plastic film production technology that meets international standards, focus on product development and new innovations environmentally friendly for sustainable development”

Mission

1. Continuously improve product and service quality
2. Being a fair partner with a fair price
3. Operate the business of environmentally friendly plastic film products to create sustainable development.
4. Stakeholders including those involved with the highest responsibility

A.J. Plast Products

BOPP Film



BOPET Film



BOPA Film



CPP Film

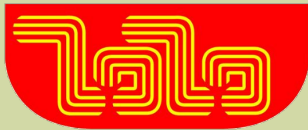


MET Film

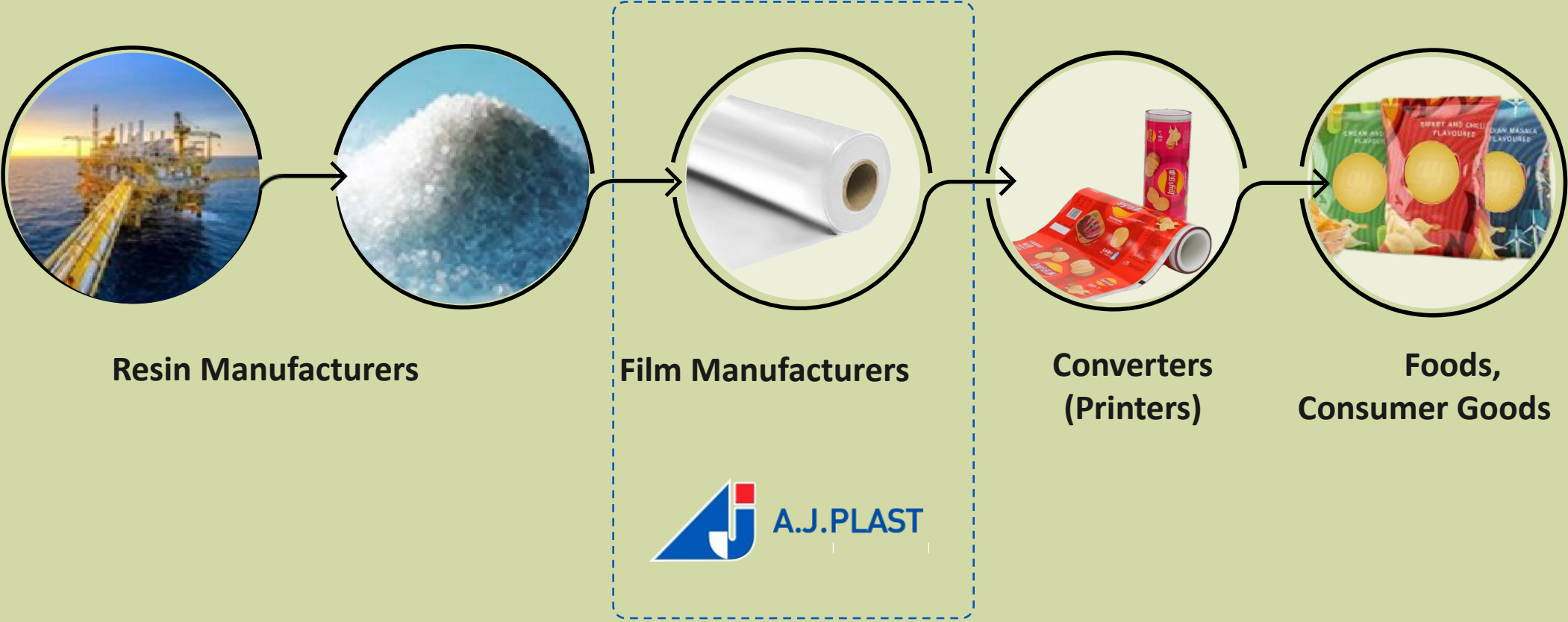


145,452 MT
Product Sold in 2023

7,633 MTHB
Revenue in 2023



A.J. Plast Value Chain



Strategic Challenges

Competitive Cost of raw material
GHG Management
Employee Development

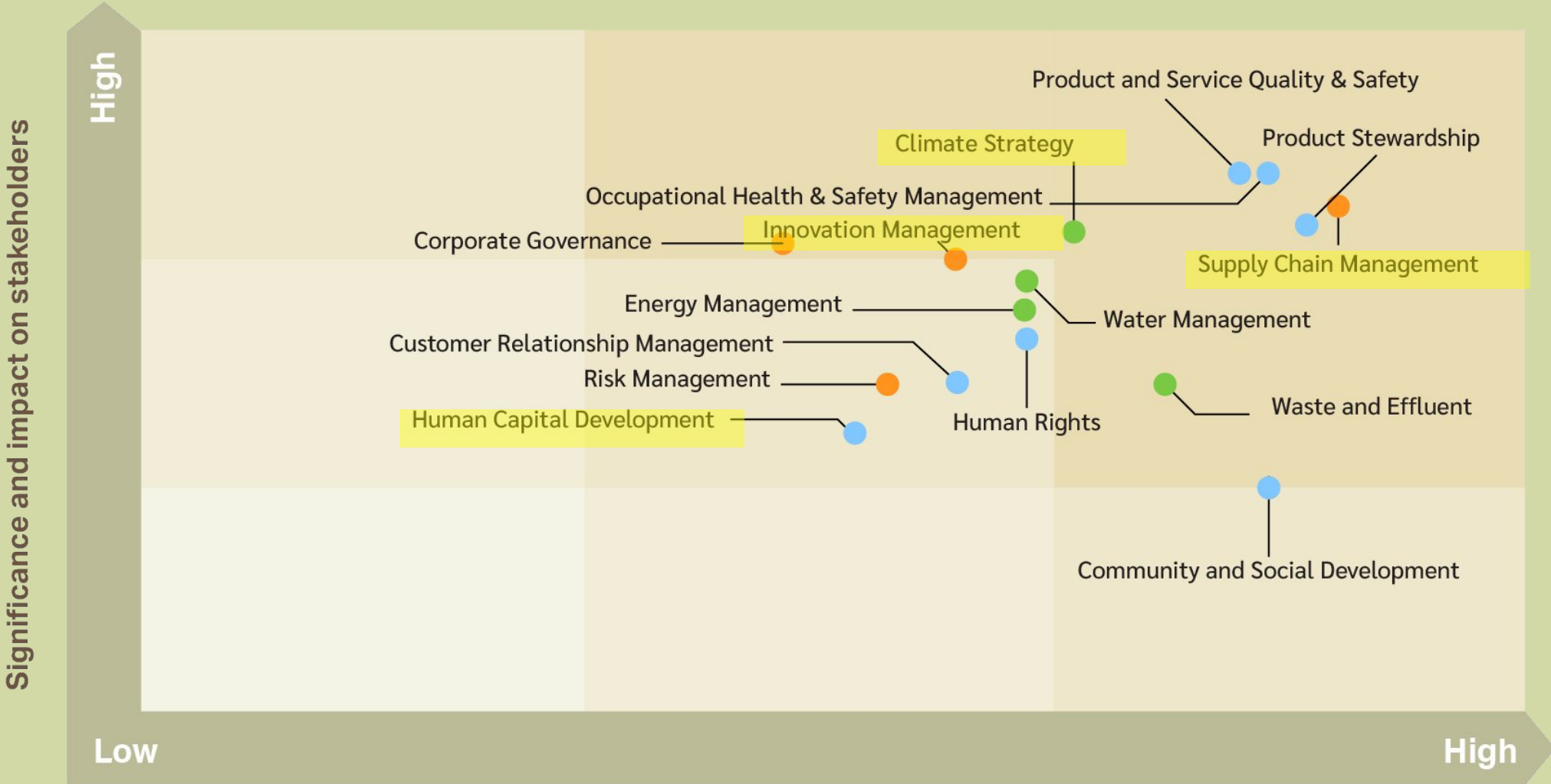


Operational Sustainability Strategy

Continuous and Sustainable Growth	Business Operation with Environmental Responsibility	Potential People and Society Development
<p>High-quality raw material sourcing</p> <p>Responsibly Business Operation</p> <p>Risk Management</p> <p>Innovation Management</p>	<p>Energy Management</p> <p>Water Management</p> <p>Waste Management</p> <p>Greenhouse Gas Management</p>	<p>Employee Well-Being</p> <p>Human Capital Development</p> <p>Human Rights Respect</p> <p>Corporate Citizenship and Philanthropy</p>



Materiality Topic



Significance and impact on corporate business operations

Challenges of Competitive Cost of raw material

Sustainable Supply Chain Management
Geopolitics
Material Supply & Quality
Freight Cost of Import Source



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Risks & Opportunities

Risk Issues	Causes & Impacts	Opportunities	Management
Material Supply & Quality Risk	<ul style="list-style-type: none"> -Raw material market mechanism fluctuation -Raw material price fluctuation -Over supply from other countries and dumping price 	<ul style="list-style-type: none"> -Competitive cost -Product cost control -To gain confidence from customers in delivering products consistently and on time 	<ul style="list-style-type: none"> -Purchase products from ESG suppliers -Sourcing high-quality suppliers and proper price -Supply Chain Management -ESG Risk Assessment
Geopolitics Risk	<ul style="list-style-type: none"> -China and USA trade war -Conflict between Russia and Ukraine -Raw material shortage -Product cost increased 	<ul style="list-style-type: none"> -Increasing the opportunity to expand the customer base -Raw materials are continuously delivered and no shortage 	<ul style="list-style-type: none"> -Supply Chain Management -Supplier ESG screening -ESG Risk Assessment and site visit -Raw material storage to reduce sudden shortage risk
Freight Cost of Import Source Risk	<ul style="list-style-type: none"> -Freight cost fluctuation because of disasters, political stability or epidemics -Product cost increased 	<ul style="list-style-type: none"> -Increase the opportunity to expand local customers' base -Increase the opportunity to purchase from local 	<ul style="list-style-type: none"> -Supply Chain Management -Supplier ESG screening -ESG Risk Assessment

Supply Chain Management (SCM)

Vision

“Good business model of plastic film industry in the field of supply chain management”

Supply Chain Management Plan



To Improve Supplier Risk Evaluation Process

- Supplier assessment
- Supplier ESG risk assessment
- New supplier ESG screening
- On-site audit and visit

Engagement and Improvement Process

- Supplier ESG-self assessment
- All new approved vendor needs to conduct ESG self-assessment
- Critical supplier on-site visit
- Conduct on-site visit to critical tier 1
- Following up Improvement plan
- Monitoring critical and high-risk suppliers that need to improve ESG and give correction

Expected Goal

- Sustainable value of supply chain management
- Sustainable supplier relationship management

SCM Strategy



- To Enhance Green Procurement and Initial Innovation for High-Quality Raw Materials
- To Manage Risk
- To Manage Effective Resources
- To Source Raw Materials Considering Ethic, Equality and Respecting Human Rights
- To Integrate Environmental, Social and Governance (ESG)

Supply Chain ESG Risk Process



Target & Performance

Target

- 17% Critical Suppliers on-site visit
- 80% of Critical suppliers acknowledged and signed for code of conduct

Performance

- 33% Critical Suppliers on-site visit
- 100% of Critical suppliers acknowledged and signed for code of conduct

Supply Chain Coordination

PCR-BOPA Film Development Collaborating with BASF



Innovation Development Project for Recycling Plastic Leftovers from Production Process with Ampacet (Thailand) Ltd.



Collaboration in Modern Technology to Increase Production Efficiency with Brückner



Value Added and Circulating Products Development with Suppliers



Challenges of GHG Management

Climate Change
Customer Sustainable Trend
Carbon Tax



Operational Sustainability Strategy

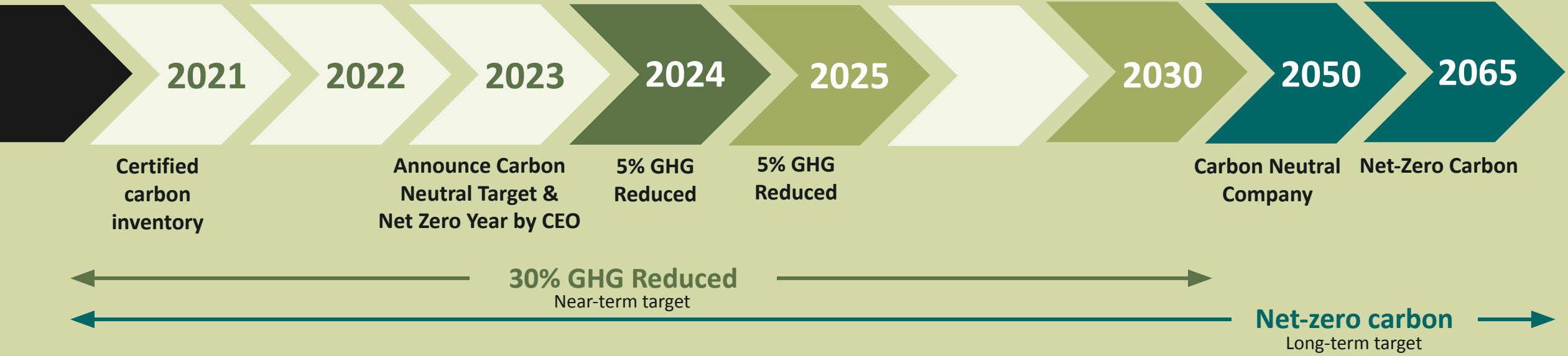
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Risks & Opportunities

Risk Issues	Causes & Impacts	Opportunities	Management
Climate Risk	<ul style="list-style-type: none"> - Climate change from carbon footprint increasing - Global temperature increasing - Natural disaster - Changes of human living behavior cause product cost increased, market changed and may affect business growth 	<ul style="list-style-type: none"> - Flexibility and preparation for climate change - Coordination with stakeholders to reduce carbon footprint - To search and expand new market base 	<ul style="list-style-type: none"> - The strategy and direction of business operations that must be adjusted to keep up with the situation, and environmental friendliness - CFO/CFP - Carbon Neutrality and Net Zero plan - Reduction projects - Standard supporting sustainable operation (ISCC Plus, ISO14001, CEMs)
Customer Sustainable Trend Risk	<ul style="list-style-type: none"> - Market changed for sustainable requirement - Customer need changing from new normal lifestyles 	<ul style="list-style-type: none"> - Circular economy - Sustainable product supporting customer requirement - To expand sustainable market base 	<ul style="list-style-type: none"> - Innovation management - To develop green products - To collaborate with stakeholders - Standard supporting sustainable operation (ISCC Plus, ISO14001, CEMs)
Carbon Tax Risk	<ul style="list-style-type: none"> - Changes in rules, regulations or laws regarding carbon footprint/GHG emission - Product cost increased - Trade Prevention 	<ul style="list-style-type: none"> - Flexibility and preparation for carbon tax 	<ul style="list-style-type: none"> - GHG Management by carbon footprint calculation of organization and products (CFO/CFP) - Reduction projects and green products supporting carbon footprint reduction

Roadmap to Zero Carbon Company



Potential GHG Reduction Measurement in near future

- Solar P.V. projects, cap 5 MWh
- Direct flake dosing (DFD)
- Water reuse project
- Recycled packing materials
- Green products

Reduction Plan for Short term

Scope 1	Scope 2	Scope 3
- Biomass	- Renewable Energy	- Packing Reduction Project
- R22 > R32 refrigerants	- Low-Carbon Electricity	- Bio-based, PIR and PCR Products

Solar Rooftop & Floating Project

Solar rooftop 1 MWh: Rooftop solar power has a capacity per panel of 540 watts, 1,851 panels.



~706 tCO₂eq



~1,400 MWh

Electricity consumption reduced

Solar rooftop 4 MWh: Rooftop solar power has a capacity per panel of 575 watts, 7,410 panels.



~2,799 tCO₂eq



~5,610 MWh

Electricity consumption reduced

Solar floating 1 MWh

- Solar provider in private PPA and collaborating with industrial estate area



~664 tCO₂eq





~1,400 MWh


Electricity consumption reduced

DFD: Direct Flake Dosing

- The system extracts plastic scrap generated from the production process into the recycling process
- It is melted and fused with the main raw material such as plastic resin and injected into sheets through the production process into plastic film

 **20%** virgin resin reduced

 **0.3 kWh/kg** energy saving
recycling rejected film without melting process

 **~ 19,499 tCO₂eq**



Water Reuse

- Rainwater Storage with 10,000 m³ capacity



~5.4 tCO₂eq



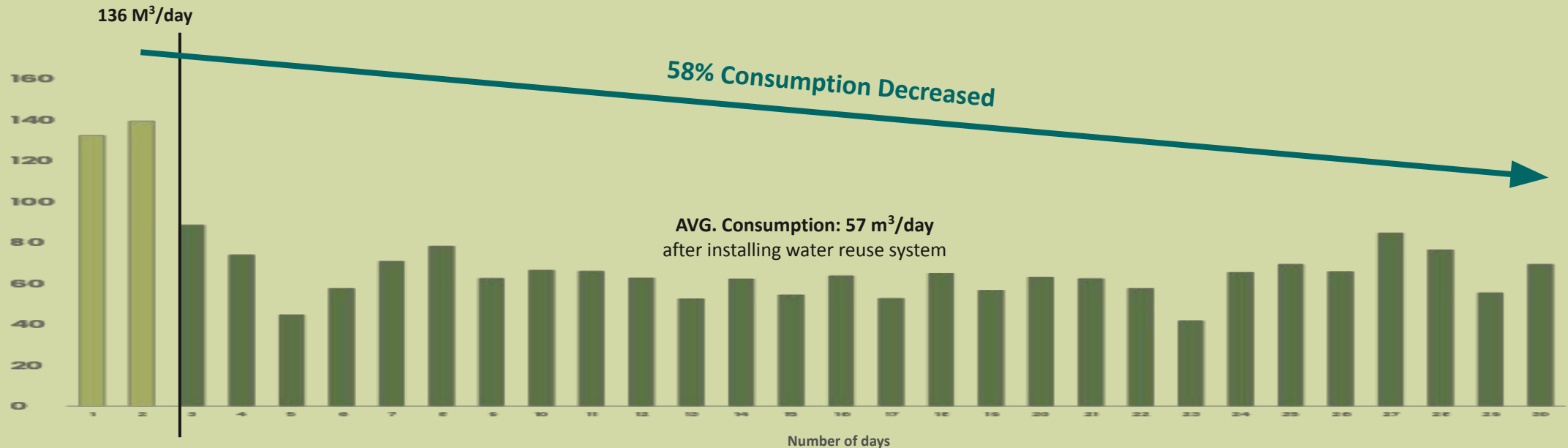
~21,114 m³/year



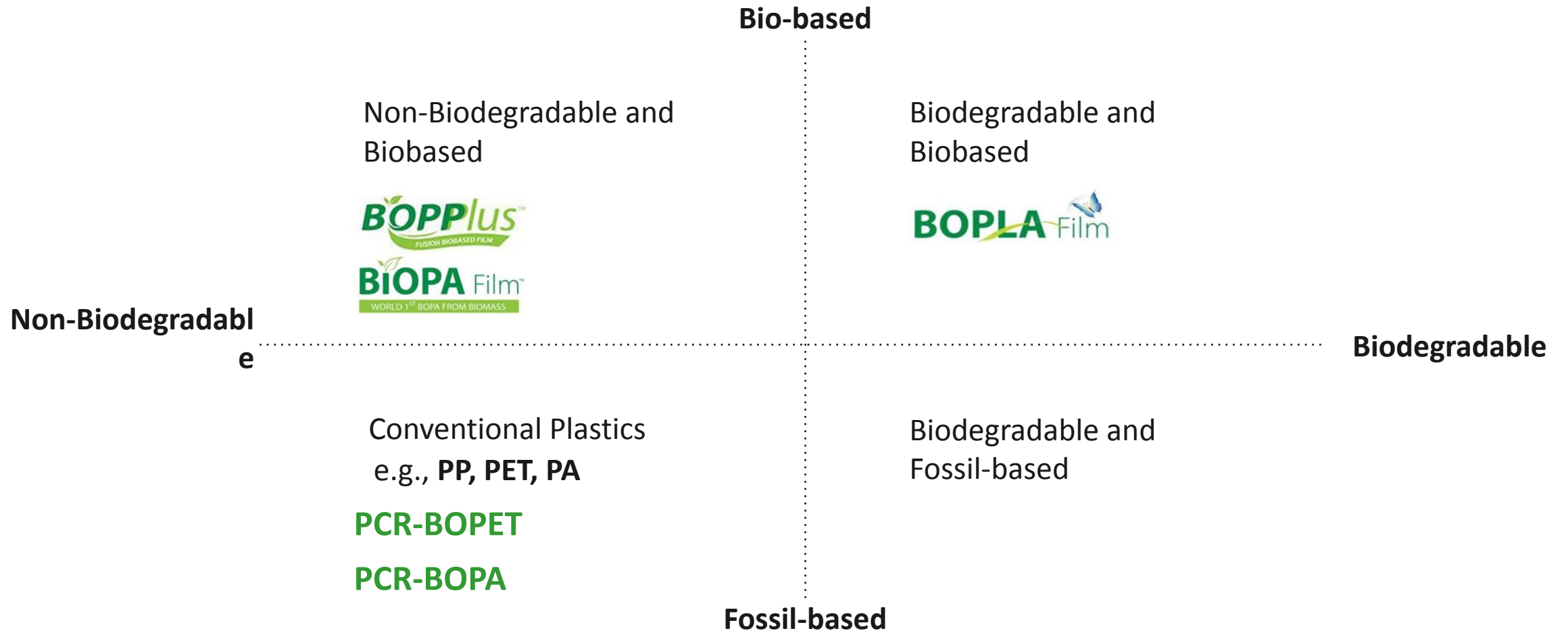
0.5 MTHB/year cost saving

58% water reduced

Water Consumption Reduction



Green Products



Green Products

Bio-Based BOPP Film

- Bio-based PP resin from Sugarcane
- 10% Bio-based for beard packaging
- Product: Beard, Utensil Packaging

Bio-Based BOPA Film

- Bio-based PA resin from Cooking oil
- The world 1st BOPA film by Biomass Balance Polyamide from BASF

Bio-based BOPA film development collaborating with BASF



A.J. Plast successfully produced the BOPA film, made with Ultramid® biomass balance polyamide on May 10, 2016, has the same properties as BOPA film made with conventional polyamide based on fossil raw materials. The use of bio-feedstock helps save fossil resources and reduces greenhouse gas emissions.

Organic waste	Waste oils	Plant oils
		
↓		
Biogas		Bio-naphtha



Green Products

PCR BOPET Film (Post Consumer Recycled)

- Recycled PET film from consumption
- Produced from recycled bottle PET resin



PCR BOPA Film (Chemical recycling) - Recycled PA resin from mixed waste



PCR BOPP Film (Chemical recycling)

- Recycled PP film from consumption
- Produced from recycled PP resin

PCR-BOPP film development collaborating with HMC Polymer



PCR-BOPA film development collaborating with BASF



Green Products

PIR (Post Industrial Recycled) Film

- In-house recycling from waste to raw material (PP, PET, PA)
- Waste from production process
- Back to production process again



Conventional Resin



Film Production



PP/PET/PA Film



PIR Resin



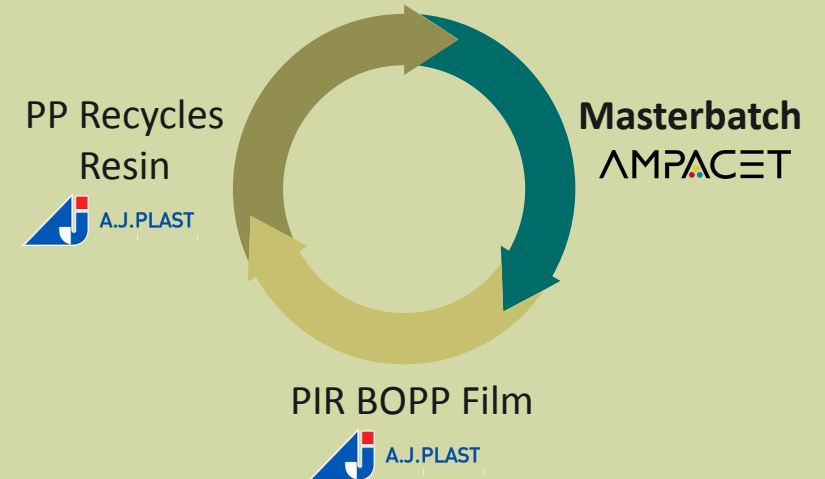
In-house Recycling

PIR PP Tape

- The Adhesive Tape is made from PIR BOPP Film that contain 99% of PIR materials
- Starting trial lot, 10 tons, in 2023

PIR PP Masterbatch

- Masterbatch (raw material) made from PIR resin
- Collaboration with masterbatch supplier



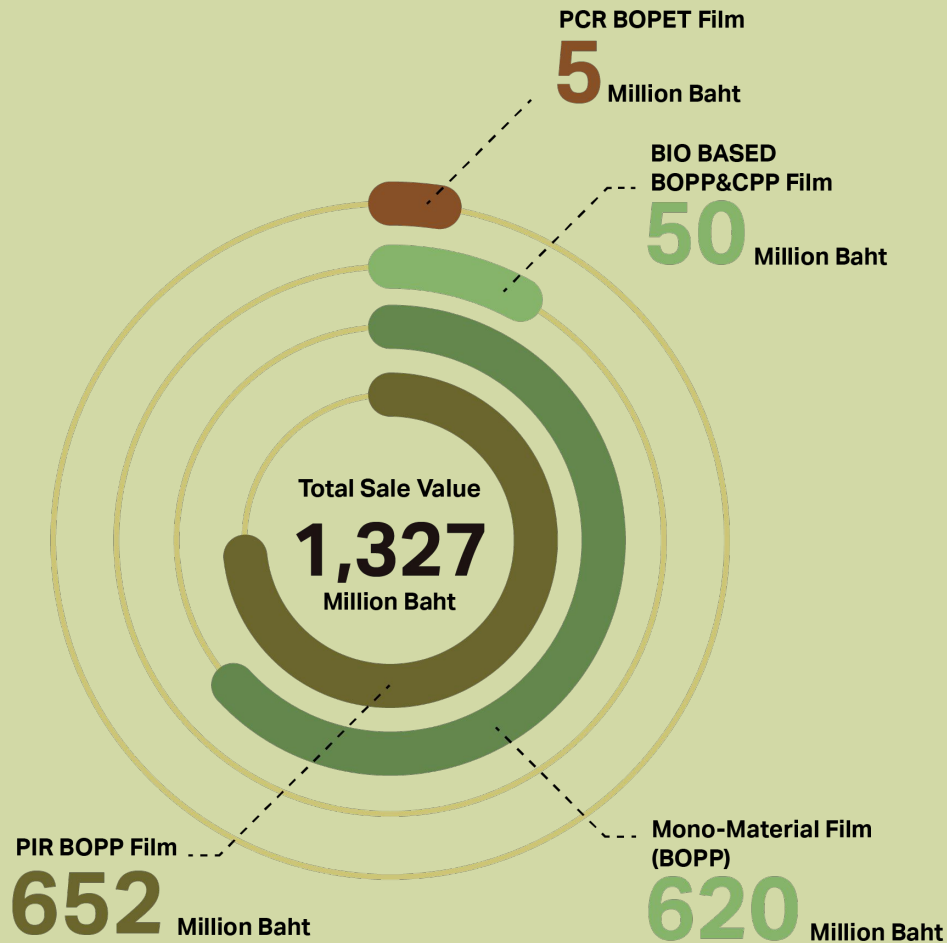
Target

- 5% GHG emission reduction
- 20% Recycled and bio-based material usage increasing
- 1 New green product

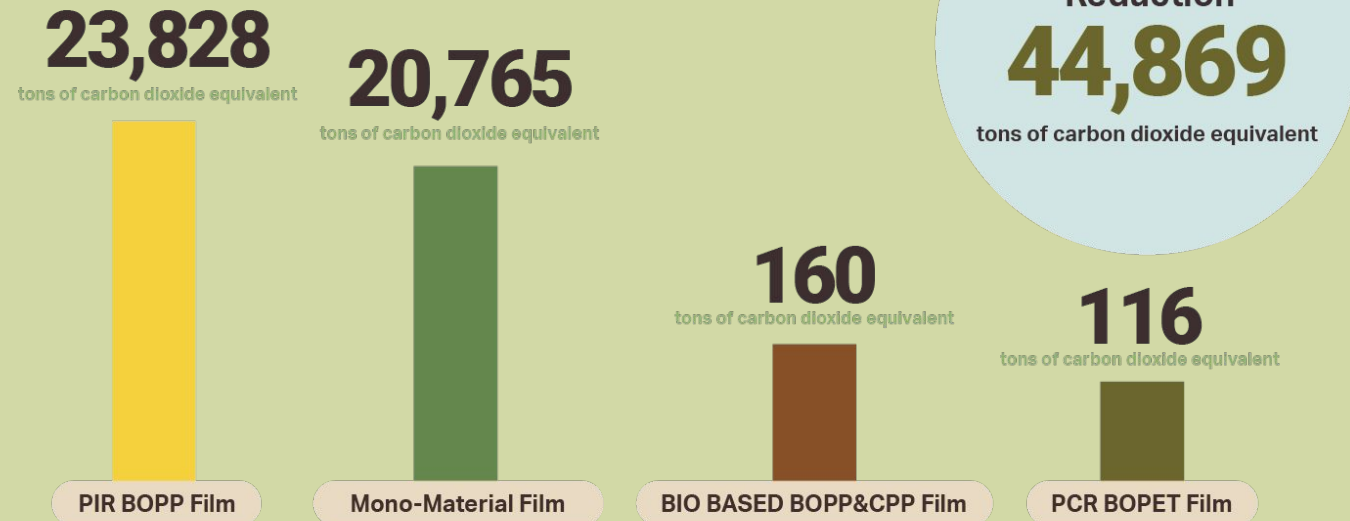


Performance

- 40% Recycled and bio-based material usage increasing
- 14 New green product

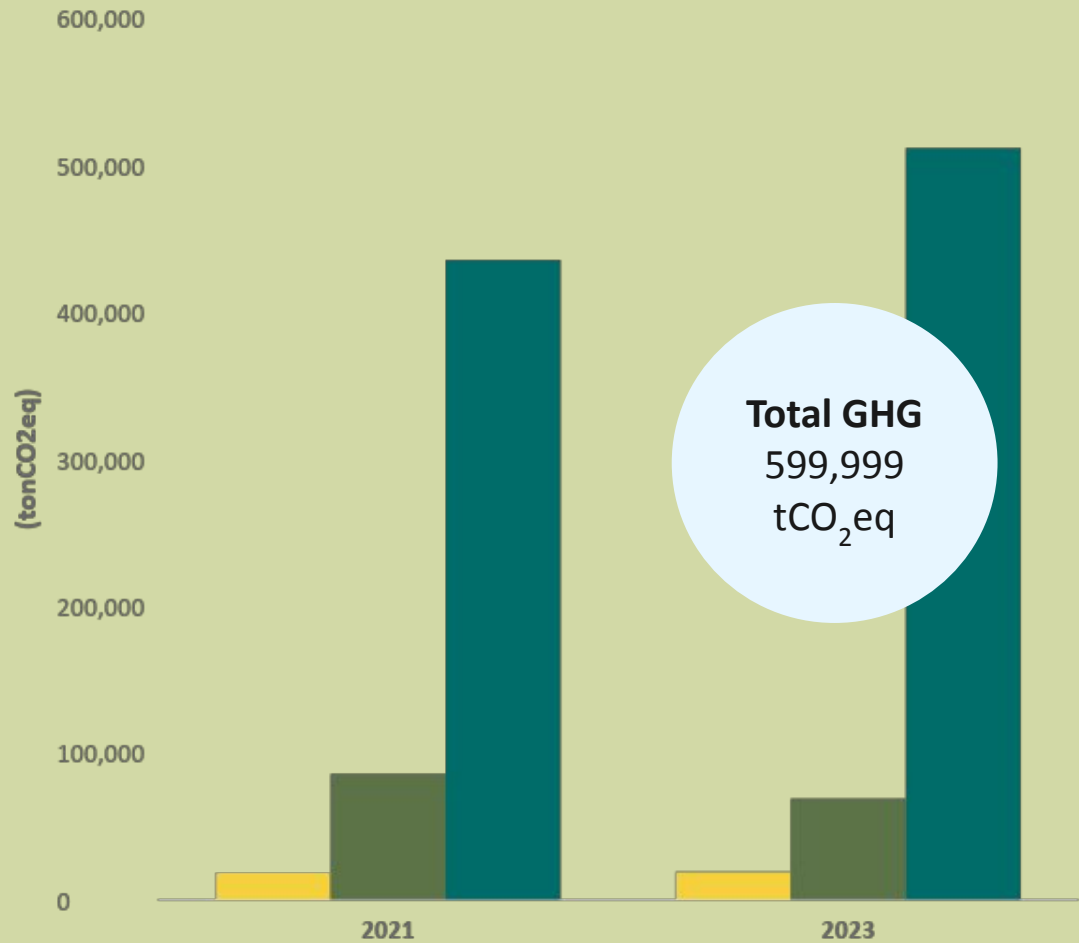


The Amount of Carbon Footprint Decreases of Green Products

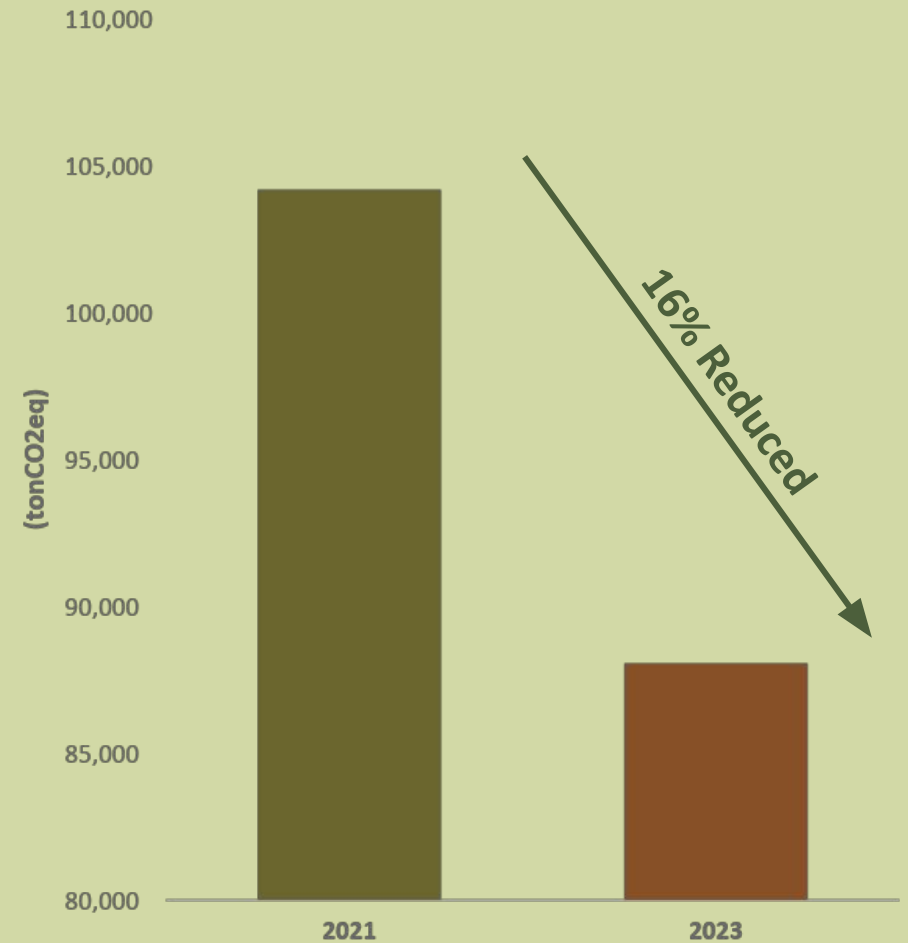


Performance

Total GHG Emission



GHG Direct Emission



Challenges of Employee Development

Employee Training
Employee Engagement



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Risks & Opportunities

Risk Issues	Causes & Impacts	Opportunities	Management
<p>Personnel Skill Development Risk</p>	<ul style="list-style-type: none"> -Employee with limited abilities and expertise -To unable using various skills and expertise -Cost increased for business operation 	<ul style="list-style-type: none"> - To create employee with expertise and be able to pass on skills, knowledge, and understanding to coworkers - To drive and develop employees with knowledge and abilities Raise the level of knowledge of all employees - Employee engagement 	<ul style="list-style-type: none"> -Training need analysis -Training plan -Activities to promote the development of employee skills
<p>Engagement Risk</p>	<ul style="list-style-type: none"> -Employee resignation increased -Work efficiency decreased -No appreciation of skill development and not meeting expectation 	<ul style="list-style-type: none"> - Flexibility in work - Technology usage increased - Increase the efficiency of automation systems 	<ul style="list-style-type: none"> -Happy & Engagement Survey -Activities and project supporting happy employee (Happy People, Happy Workplace) -Annual performance evaluation

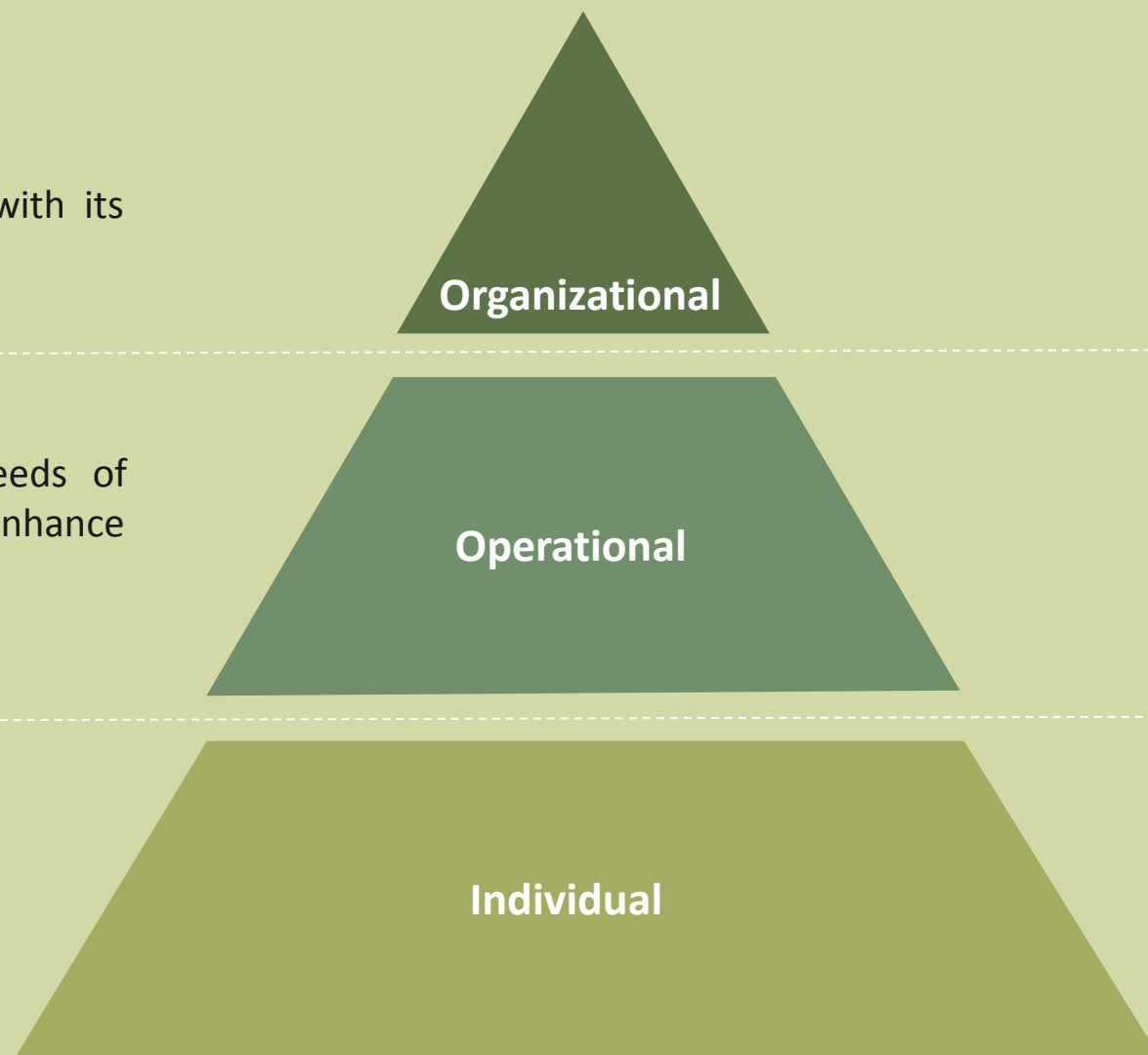
Employees Training

Training Needs Analysis

Involves assessing the specific skill gaps and learning requirements within A.J. Plast to align training programs with its strategic goals.

Focuses on evaluation the training and development needs of different departments or teams within an organization to enhance their efficiency and effectiveness.

Identifies the unique skills, knowledge, or performance gaps of individual employees, enabling personalized training plans.



Employees Training

Training Plan

- To achieve the target of developing employee competency sheets and strengthening employee engagement in the organization.
- Moreover, there is a process of analyzing training needs and identifying employee potential development programs based on roles and responsibilities according to job positions and performance assessment to develop an annual training and skill development plan that promotes career advancement.
- The Company has established the following framework for the development of human resources in various areas and the development of an annual training plan.
- There are 33 training courses in 2023

Employees Training

Training safety knowledge for all employees



Training in class



Online training

Employees train knowledge with E-learning has a Google form of training documentation and self-assessment tests to measure knowledge after training.



Employees Training Target & Performance

Target



10 Hours/person/year
of training employees



100% ESG training course
for employees and newcomers

Performance



14 Hours/person/year
of training employees



100% ESG training course
for employees and newcomers

18%



of all training courses

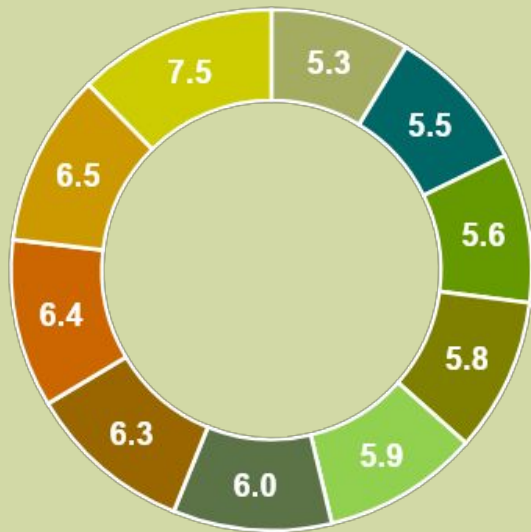
20%









of ESG training courses

Employees Engagement

Happinometer Survey



-  Happy Relax
-  Happy Money
-  Happy Family
-  Happy Society/Happy Work Life
-  Engagement
-  Happy Body

Happinometer Result



68.15%
"Happy"

"Happinometer 9 Health Recommendations"

of Thai Health consist

- Happy Body, Happy Relax, Happy Heart, Happy Soul, Happy Family, Happy Society, Happy Brain, Happy Money and Happy Work Life.

Employees Engagement

Target



75% engagement level
of employees

Result



66% engagement level
of employees

Happy People, Happy Workplace

5 dimensions concentration which will relate to

Happy People, Happy Workplace activities;

Happy Relax, Happy Body, Happy Money, Happy Family, Happy Society & Happy Work Life

Happy People, Happy Workplace

- Beat Plastic Pollution

- Fit For Work



Happy People, Happy Workplace

Social contribution activities

- Mangrove forest cultivation activities with local communities to reduce GHG Emissions
- Blood donation activities for the Thai Red Cross Society





Thanks you

Questions & Answers