



tpbi

SET Awards 2024

Sustainability Excellence

September 3, 2024



Sustainability Strategy

Transform for a better future

Promote circularity through end-of-life

Build sustainable future value

Innovate for more sustainable packaging and beyond

“to deliver
sustainable packaging
and recycle solutions
for better life and society”

Fundamental: Corporate Governance / Business Ethics / Risk Management / Human rights / Compliance with law

Scaled Growth



- **Core Business:** Secure volume by managing fluctuating demand and ramp-up requirements.
- **Growth Segments:** Continue driving momentum in high-growth areas to capitalize on business opportunities.
- **New Business:** Accelerate the closing of new businesses to boost sales revenue and volume.

Operational Excellence



- **Efficiency and Outputs:** Enhance operational efficiency and output quality
- **Cost-saving program:** Implement initiatives to reduce costs
- **Synergies:** Leveraging synergies across business units and entities to benefit from economy of scale.

Green Initiatives



- **Green products:** Develop new business opportunities focusing on green products.
- **ESG:** Drive ESG targets across all operations.



Strategic Challenges



Climate Action



Circularity



**Sustainable packaging
innovation & technology**

1.1 Key Opportunity & Challenges

Opportunities



- Climate-related risk management
- Improving efficiency
- Using clean energy
- Investing in climate-smart products and services
- Accessing new climate-related markets
- Energy monitoring and control technology
- Green logistics



Challenges

- Unclear direction from government and relevant organizations
- Poor reputation of plastic manufacturer
- Cost pressure
- Operational inefficiencies
- Support from supply chains

1.2 Strategy & Goal



Strategy

- Lower emissions from production process
- Increase revenue of low-carbon & green packaging products
- Reduce greenhouse gas emissions in value chain
- Waste management
- Partnership with society

TPBI's journey to circular economy way with net zero

Lay Fundamentals (2021-2025)

Goals

- CFO and CFP certified
- Certified by CEMS, GRS standards, and ISCC is underway
- Decarbonizing
- Aim to achieve 30% of green products for our portfolio by 2025

Implement and expand (2026-2050)

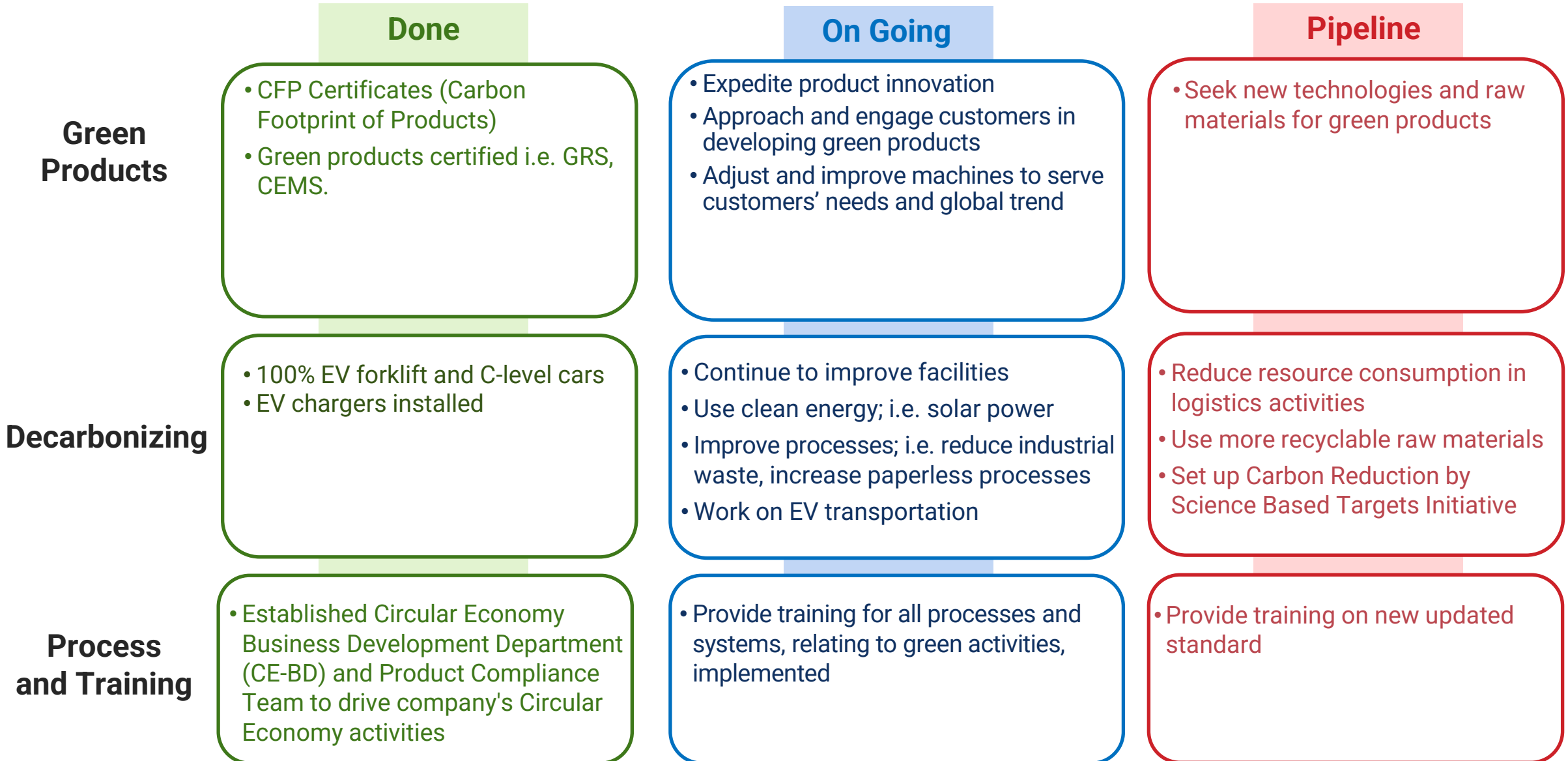
Goals

- Reforestation
- Aim to get Carbon Credit via T-VER
- Use renewable energy at least 35% in our production process by 2030
- Implement green procurement by 2035
- Aim to achieve Carbon Neutrality by 2050

Achieve target (2051-2065)




- Aim to achieve GHG Net zero by 2065 with sustainable projects along the journey

1.3 Progress & Improvement



1.4 Comparative Result (H12024 VS 2023)



Environment Management (per ton of output)

| | | | |
|-----------------------------------------------------------------------------------|-------------------|---|-----|
|  | Water usage | ↓ | 4% |
|  | Electricity usage | ↓ | 5% |
|  | Hazardous waste | ↓ | 25% |

Climate action

| | | | |
|-----------------------------------------------------------------------------------|------------------|---|-----------------------------------|
|  | Carbon reduction | ↓ | 29% |
|  | Decarbonization | ↓ | 5.4% TonCO ₂ eq/Ton FG |

Supply chain management

| | | | |
|-------------------------------------------------------------------------------------|------------------------|--|----------|
|  | ESG assessment program | | 100% |
|  | Green procurement | | On track |

Strategic Challenges



Climate Action



Circularity



**Sustainable packaging
innovation & technology**

2.1 Key Opportunity & Challenges

Opportunities



- New revenue streams for circularity business related
- Resource efficiency due to waste reduction and smaller environmental footprints
- New markets or New customers which focus on sustainability
- New technologies or New schemes for waste collection systems



Challenges

- The restrictions and regulations on using recycled plastics are inconsistent and unclear
- Cost Pressure
- Consumers' awareness
- Varieties of Sorting, recycling and reuse schemes in Thailand

2.2 Strategy & Goal



Strategy

- Design for product circularity
- Enhance mass awareness of circularity to public
- Safeguard the environment from PCR waste

Short term (2021-2026)

Goals

- 60% of products can be recyclable, reusable or compostable
- Zero waste to landfill: 25%
- No. of partners: Sales of new PCR related products

Long term (2027 - 2035)

Goals

- 100% of products can be recyclable, reusable or compostable
- Zero waste to landfill: 100%
- No. of partners Sales of new PCR related products

2.3 Progress & Improvement



2.4 Comparative Result

Sales



Green products: 21% of total sales



Green certificates:

GRS



CEMS



GECA



PITH



CFO



CFP



Circular economy implementation



PCR materials used: > 3,000 ton in 2023



Recycle hub: ↑ 3 Recycle hubs



PCR waste collected: ↑ 240%



Strategic Challenges



Climate Action



Circularity



**Sustainable packaging
innovation & technology**

3.1 Key Opportunity & Challenges



Opportunities



- New technologies that require less carbon footprint to recycle plastic waste
- Shifting from rigid to flexible packaging for more convenience Eco-friendly raw material such as solvent-free and water-based technology, compostable material
- Partnership and collaboration along supply chain for better solutions.



Challenges

- Technology gaps for product properties to be equivalent to existing products
- Inconsistency of relevant restrictions and regulations on using recycled plastics
- Insufficient supply ability
- Investment pay off unlikely justified

3.2 Strategy & Goal



Strategy

- Design for recycling
- Develop recycled resins to promote the use of green material
- Use less material for products' better performance (Downgauging)
- Co-develop products with brand owners to meet consumer's expectation

Short term
(2024 - 2026)

Long term
(2027 - 2035)

Goals

- Sales of Mono-material
- Commercialize new formulations
- Collaborate with global customers to launch innovative projects in the pipeline

Goals

- Sales of Mono-material
- Commercialize new formulations
- Collaborate on innovative projects in the pipeline
- Launch innovative products with customers

3.3 Progress & Improvement

Sustainable Packaging

Innovation & Technology

Done

- Commercialized new products with new formulations

- Completed collaborated projects with global customers and launched innovative products

On Going

- Promote the use of Mono-material to brand owners to increase sales of green products
- Leverage business synergies or complementarities

- Collaborate with partners to use our existing blown film machines to produce Mono-material

Pipeline

- New products/formulations
- Develop competitive recyclable materials and products
- Enhance company's capabilities to drive greater innovation

- Conduct a feasibility study for investing in new machines or technology for Mono-material production
- Co-develop projects with global customers

3.4 Comparative Result

Sustainable packaging



Mono-material sales:



200%

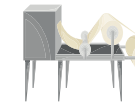


New materials

innovation & technology



New project collabs



New technologies



PCR resin for Industrial Pallets

APPENDIX



Founded : 1987

2023 Revenue : 5.2 Billion THB

Group Employees : 2,000



Consumables : Rayong



HQ & Factories : Sampran



Flexibles : Sampran



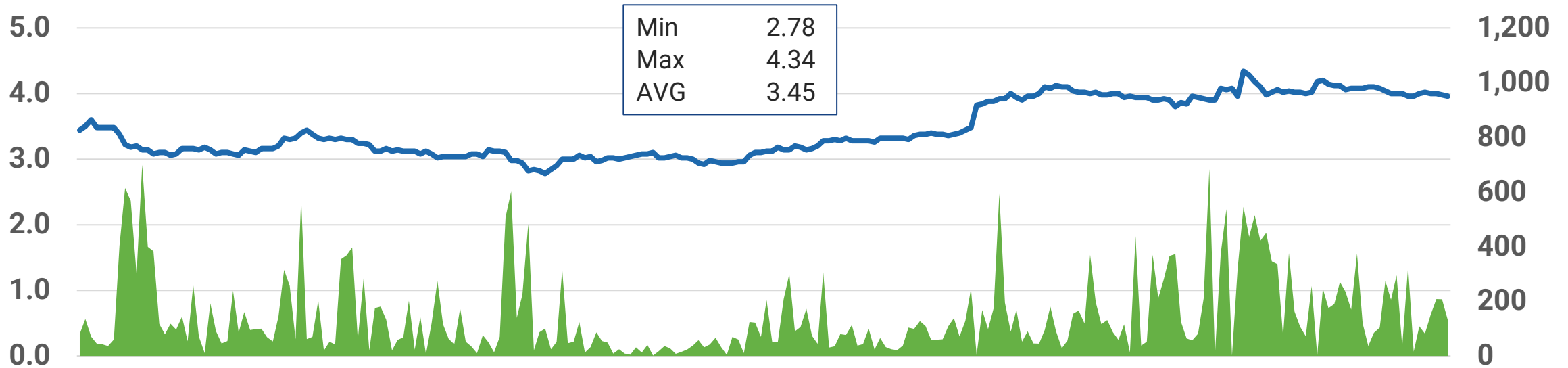
Paper : UK



About TPBI



Think Circular,
Think Sustainable.



ESG Rating:
AA



Corporate Governance:
5 stars



Sustainability Award:
Commended Sustainability Awards

| | |
|----------------------|------------------------------------------------------------|
| Number of Shares: | 416.88 M. Shares |
| Paid-up Capital: | 416.88 M.THB |
| Par Value per Share: | 1 THB/Share |
| Dividend policy: | At least 50% of NP |
| Shareholders: | 66.0% Borrisuttanakul family 6.5% BBLAM 27.5% Others |

Consumables



- Garbage bags
- Loop-handle / Die cut bags
- Zipper bags/ Resealable bags
- Mail Order bags / Liner bags
- Biodegradable / Compostable bags
- Fruit & Vegetable bags
- LLDPE food bags
- Vest carrier / T-shirt bags
- Piping bags
- Post Consumer Recycled products

Flexibles



- Lamination Film
- Barrier Film
- Stretch hood/ Shrink film
- Packaging for frozen food, Ready-to-Eat food and snacks
- Digital printing for short productions
- Mono-material packaging

Paper



- Flat & Satchel bags
- Wicket bags
- Block Bottom bags
- Stand on Shelf bags
- Paper Tape Handle bags
- Die-cut SOS bags

Global Trading



- PP Woven Reusable bags
- Jute Reusable bags
- Insulated bags
- Paper boxes and trays
- All products from Consumables, Flexibles, and Paper divisions.



tpbi

T o t a l
P A C K A G I N G
S o l u t i o n

Innovative Quality Packaging