

Since 1969



集盛實業股份有限公司  
ZIG SHENG INDUSTRIAL CO., LTD.

## 2023 Investor Conference



Ticker: 1455 TT

DEC 8, 2023

INNOVATION / SPECIAL / FUNCTION / INTEGRATION / ENVIRONMENT

# COMPANY PROFILE

www.zigsheng.com

- 1969 Company established & DTY 1<sup>st</sup> plant start up
- 1993 Listed on the Taiwan stock exchange
- 1997 DTY 3<sup>rd</sup> plant start up
- 2000 Nylon spinning 1<sup>st</sup> plant start up
- 2001 Nylon polymerization 1<sup>st</sup> plant start up
- 2004 “Innovative R&D center” founded.
- 2006 Nylon polymerization 2<sup>nd</sup> plant start up
- 2006 Compounding plant start up
- 2012 ATY plant, nylon spinning 2<sup>nd</sup> plant start up
- 2014 ISO 14001 certified
- 2015 GRS certified
- 2017 Published 2016 CSR report
- 2018 Established 878KW solar power plant
- 2020 New polyester spinning production line start up
- 2022 Established 559KW solar power plant
- 2023 PA66 polymerization plant start trial production

## 10 PRODUCTION PLANTS

### FIBER BUSINESS DIVISION

#### 3 DTY Plants



DTY Plant I  
1969



DTY Plant II  
1992



DTY Plant III  
1997

#### 2 Spinning Plants



Spinning Plant I  
2000



Spinning Plant II  
2012



#### 1 ATY Plant

ATY Plant 2012

### CHEMICAL MATERIALS DIVISION

#### 3 Nylon Polymerization Plants, 1 Engineering Plastic Plant



Nylon Polymerization  
Plant I, 2001



Nylon Polymerization  
Plant II, 2006



Nylon Polymerization  
Plant III, 2013

# MAIN PRODUCTS

Internal  
use  
product

Sale  
product



## Nylon Products

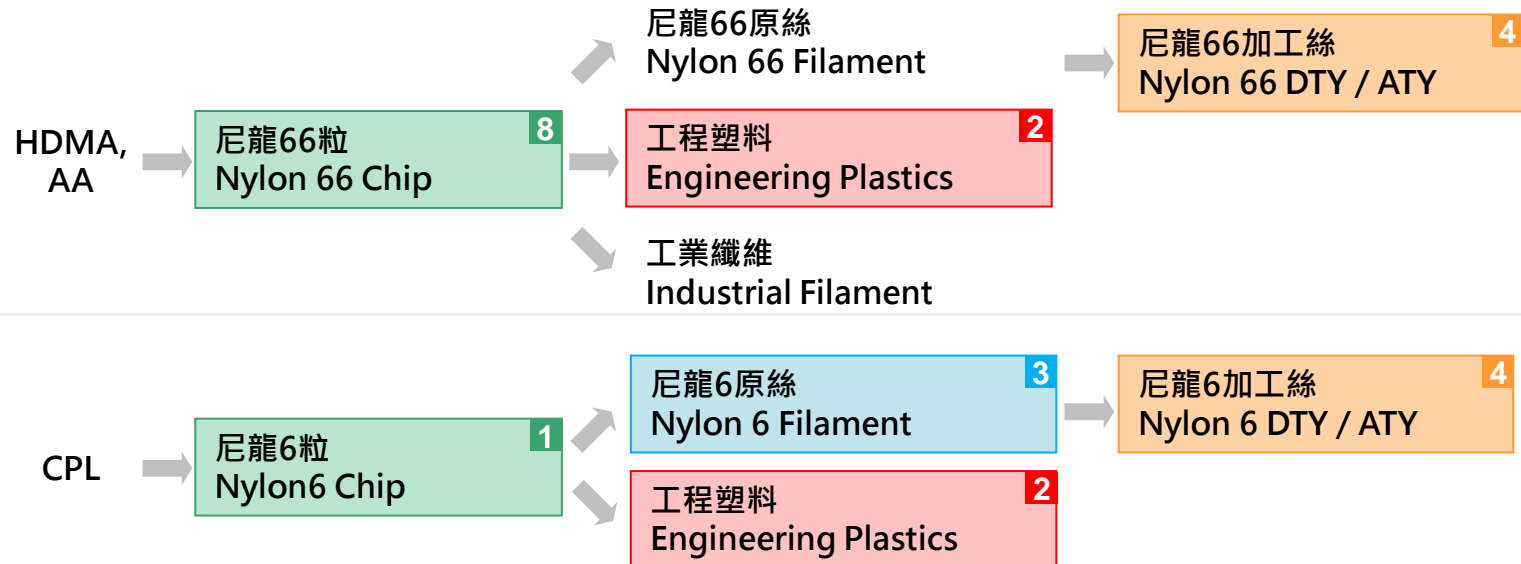
1 Nylon 6 Chip

2 Engineering  
Plastics

3 Nylon Filament

4 Nylon DTY/ATY

8 Nylon 66 Chip

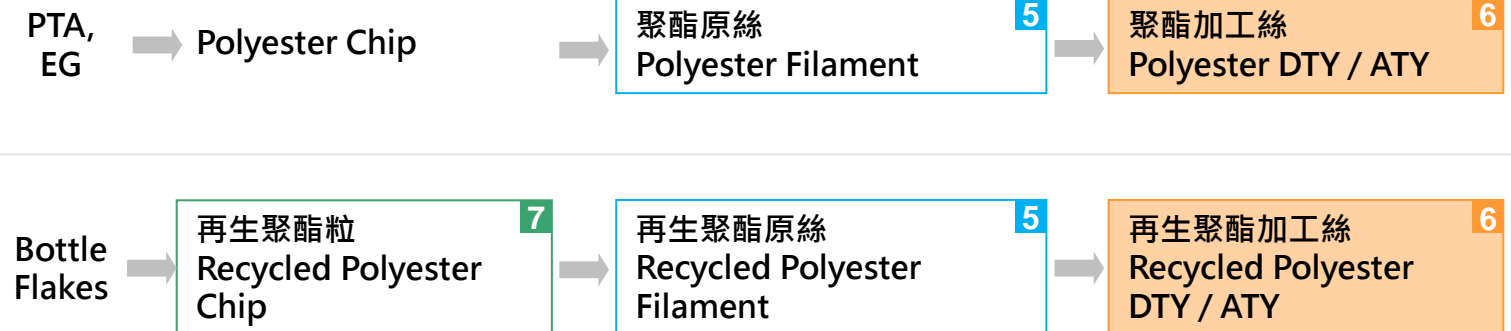


## Polyester Products

5 Polyester  
Filament

6 Polyester DTY/ATY

7 Recycled  
Polyester Chip



# PRODUCT ANNUAL PRODUCTION CAPACITY

Nylon 6 Chip  
Nylon 66 Chip

150,000 Mt  
20,000 Mt



DTY / ATY

36,000 Mt



Nylon Filament

30,000 Mt







Engineering Plastic

10,200 Mt



# PRODUCT SALES BREAKDOWN

Unit : NTD million

Sales Breakdown	2023		2023		2022		2022	
	Q1-Q3		H1		Tot		Q1-Q3	
	Amount	%	Amount	%	Amount	%	Amount	%
 Nylon Chip	2,605	47.7	1,698	48.0	4,091	44.0	3,409	45.3
 DTY / ATY	1,686	30.9	1,085	30.7	3,184	34.2	2,535	33.7
 Filament	800	14.6	512	14.5	1,355	14.6	1,051	14.0
 Engineering Plastic	371	6.8	242	6.8	651	7.0	515	6.8
Others	1	0.0	1	0.0	20	0.2	15	0.2
Tot	5,463	100	3,538	100	9,301	100	7,525	100

# SALES BREAKDOWN BY PRODUCTS 2023 Q1-Q3

Turnover : USD 177,000,000 (NTD 5.5 bn)

FX : 30.81

## Fiber Division

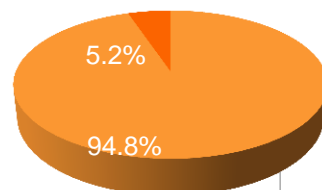
## Chemical Material Division



### DTY/ATY

**Domestic 94.8%**  
**Export 5.2%**

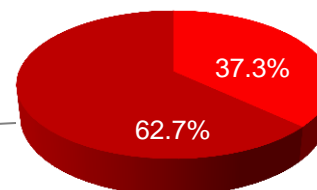
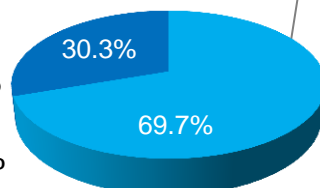
- Southeast Asia 1.9%
- North America 0.9%
- Middle East 0.8%
- China 0.5%
- Others 1.1%



### Filament

**Domestic 69.7%**  
**Export 30.3%**

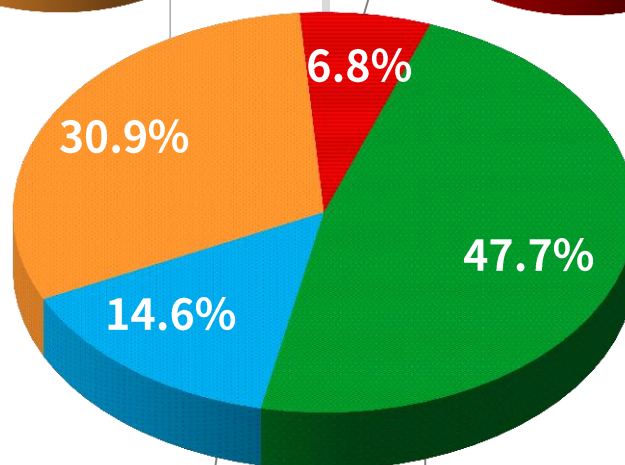
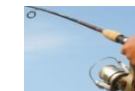
- Central Asia 13.7%
- Southeast Asia 9.6%
- China 4.7%
- Northeast Asia 2.3%
- Others 0.0%



### Engineering Plastic

**Domestic 37.3%**  
**Export 62.7%**

- Southeast Asia 20.0%
- Africa 17.9%
- China 11.7%
- North America 7.1%
- Others 6.0%



### Nylon Chip

**Domestic 24.2%**  
**Export 75.8%**

- Northeast Asia 40.8%
- Central Asia 22.2%
- Southeast Asia 8.3%
- North America 2.2%
- Others 2.3%



# Net Zero Transformation Strategy

## Environment Protection

- Greenhouse gas emissions management
- Carbon emission benefits of green products



## Process improvement

- Replace high-efficiency equipment

## Energy conversion

- Established solar power plant
- Exchange coal into natural gas

## Circular Economy

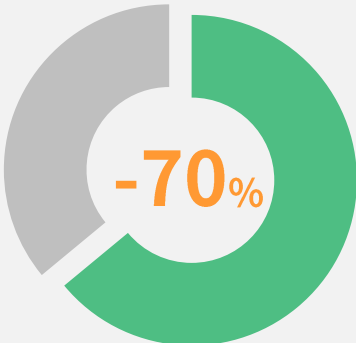
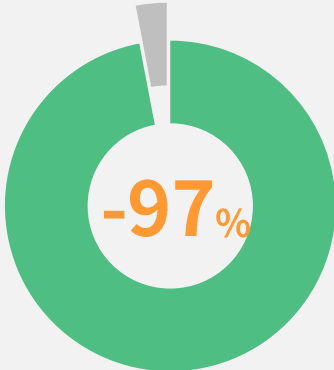
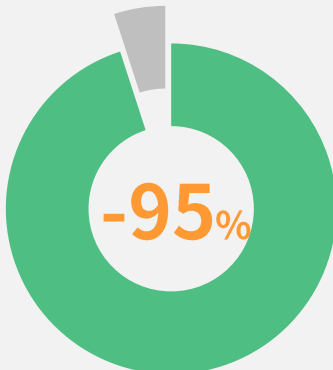
- Green products promotion
- Green certifications
- Sustainable products
- Impelling recycled textile yarn
- Operational goals of green products

# Greenhouse gas emissions management

2012	Introducing ISO 14064-1, conducting a greenhouse gas emissions inventory, and obtaining annual certification.
2013	Implementing the ISO 14001 Environmental Management Systems, conducting regular audits to ensure effectiveness.
2014	The Guanyin Factory has passed third-party impartial verification and undergoes regular audits for validation.
2022	In the second quarter, initiate product carbon footprint inventory. In the third quarter, completed ISO 14067 third-party verification (by BSI - British Standards Institution). The verification scope includes general nylon chips, recycled nylon scrap chips, and recycled nylon fishing net chips.
2024	Planning to complete carbon footprint inventory and third-party verification for nylon chips and engineering plastic products.



# Carbon emission benefits of green products

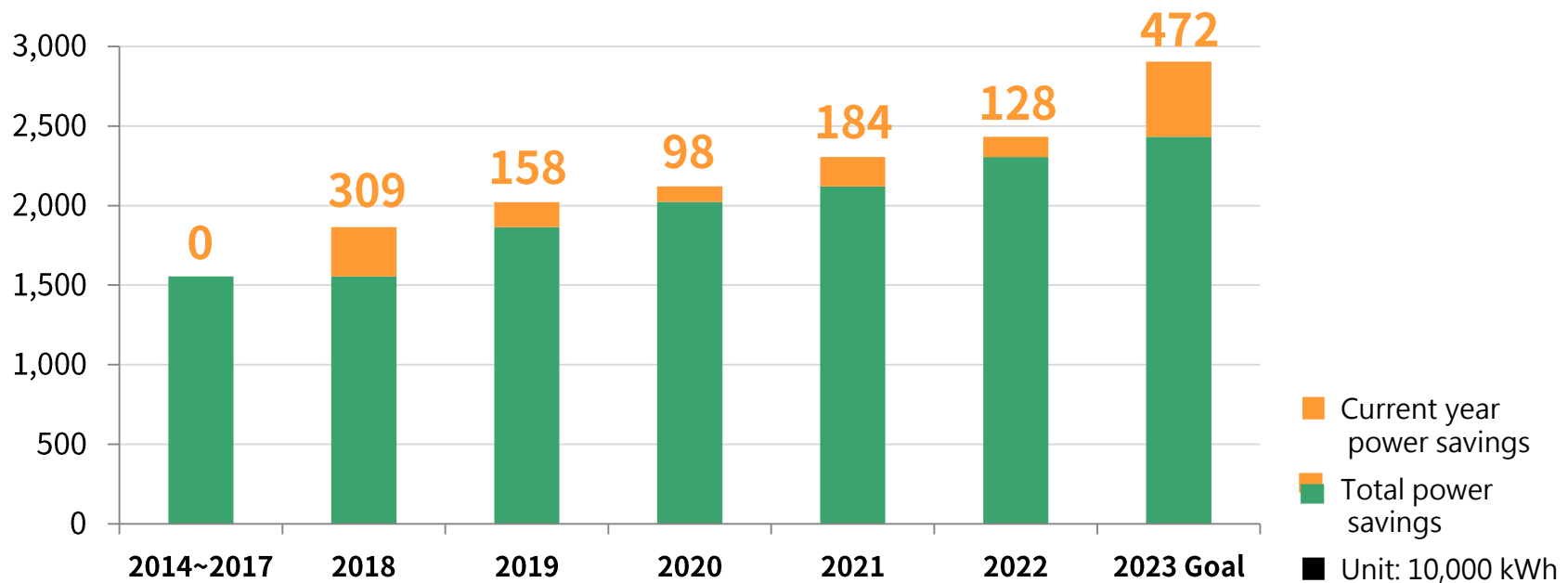
Product	Recycled Polyester Chips		Recycled Nylon Chips	
Material	Bottle flake		Recycled nylon	Recycled fishing net
Ratio of carbon reduction				
			<div><div></div> carbon emission</div> <div><div></div> carbon reduction</div>	
Annual production	4,841 Mt		210 Mt	
Annual carbon reduction	9,246 Mt CO <sub>2</sub> e		888 Mt CO <sub>2</sub> e	
Total annual carbon reduction	10,135 Mt CO <sub>2</sub> e			

## Process improvement

2014  
|  
2023

Save **2,905** million kWh

Reduce carbon footprint **14,382** Mt



# Energy conversion

☞ Introduced into "ISO 50001 Energy management system" in 2018.

Digitized monitoring effectively enhances energy efficiency.

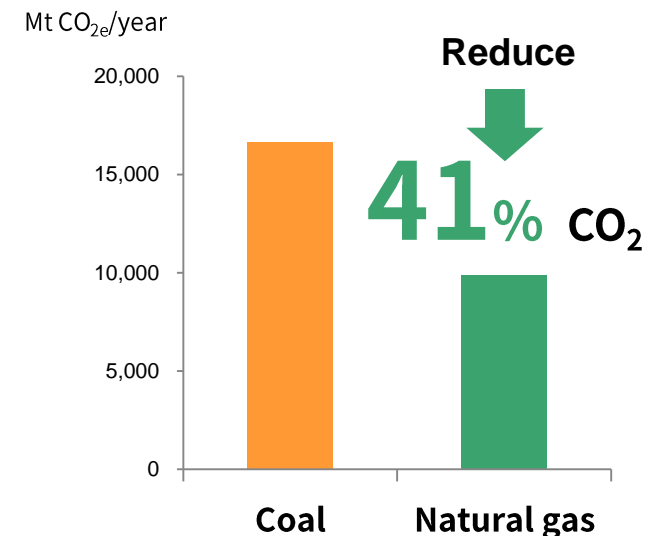
☞ Regenerate **solar power** has reached 3368 KW.

From Jan-Oct 2023, the generation of electricity has reached **358** million kWh.

Total power generation **1,339** million kWh.

☞ Exchange coal into low-carbon emission **natural gas**.

Annual reduction up to **4,695** Mt CO<sub>2</sub> Eq emissions.



## Green products promotion



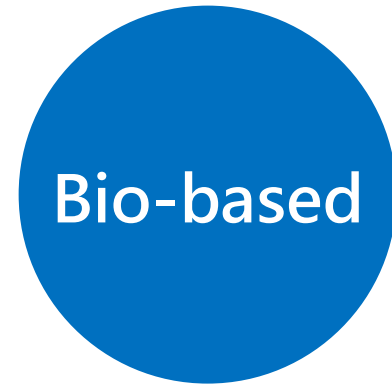
Sustainable

- Reduce waste
- Reuse
- Reduce carbon emissions



Dope dyed

- Energy saving
- Waste reduction
- Save water



Bio-based

- Reduce carbon emissions
- No crop sourcing

- Operating
- Advanced goals

# Green Certifications



Global recycled standard



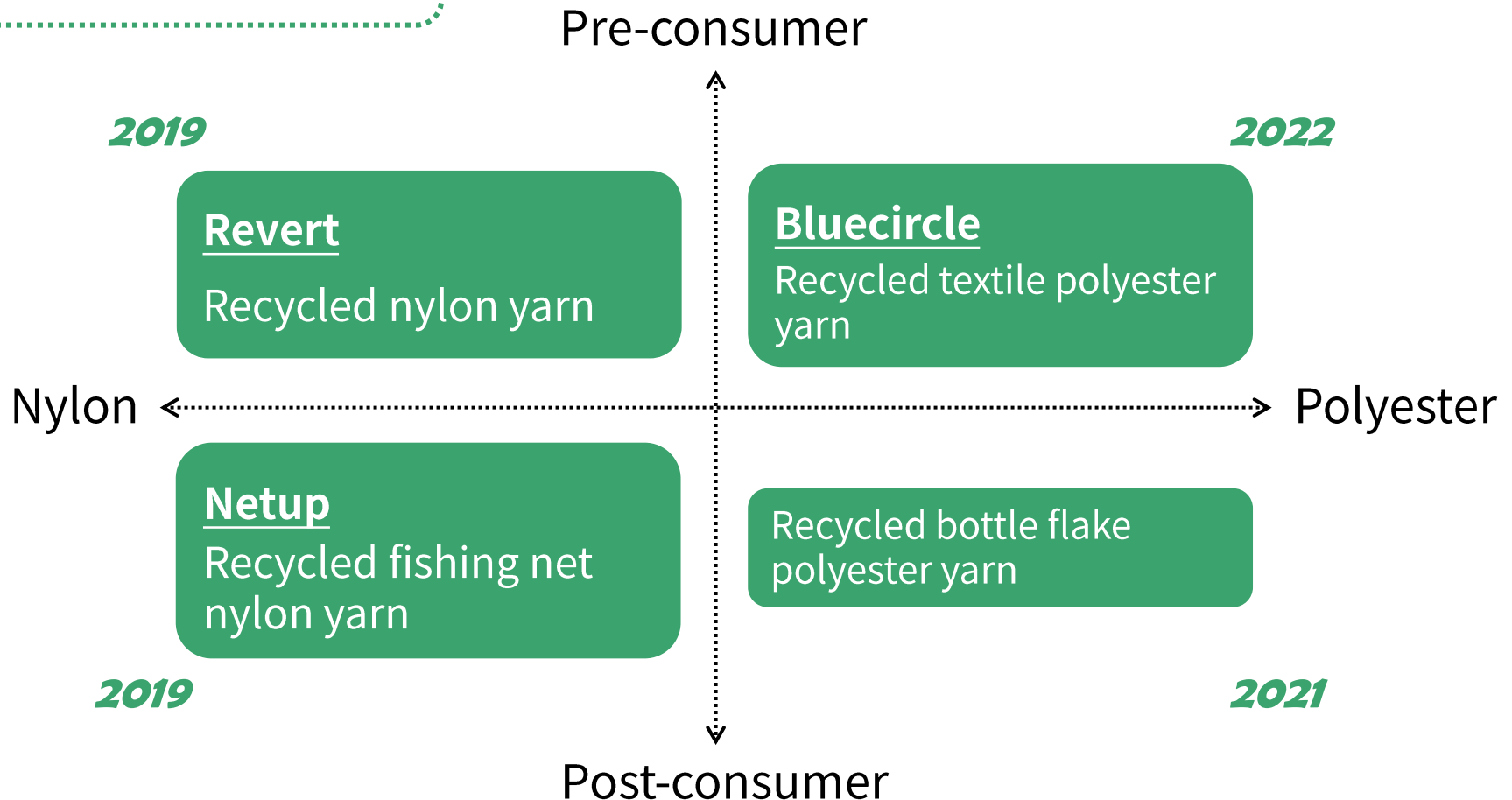
OEKO-TEX



Carbon footprint  
of products  
ISO 14067:2018

# Sustainable products

Chips→POY/FDY→DTY/ATY  
Consistent production



# Impelling recycled textile yarn

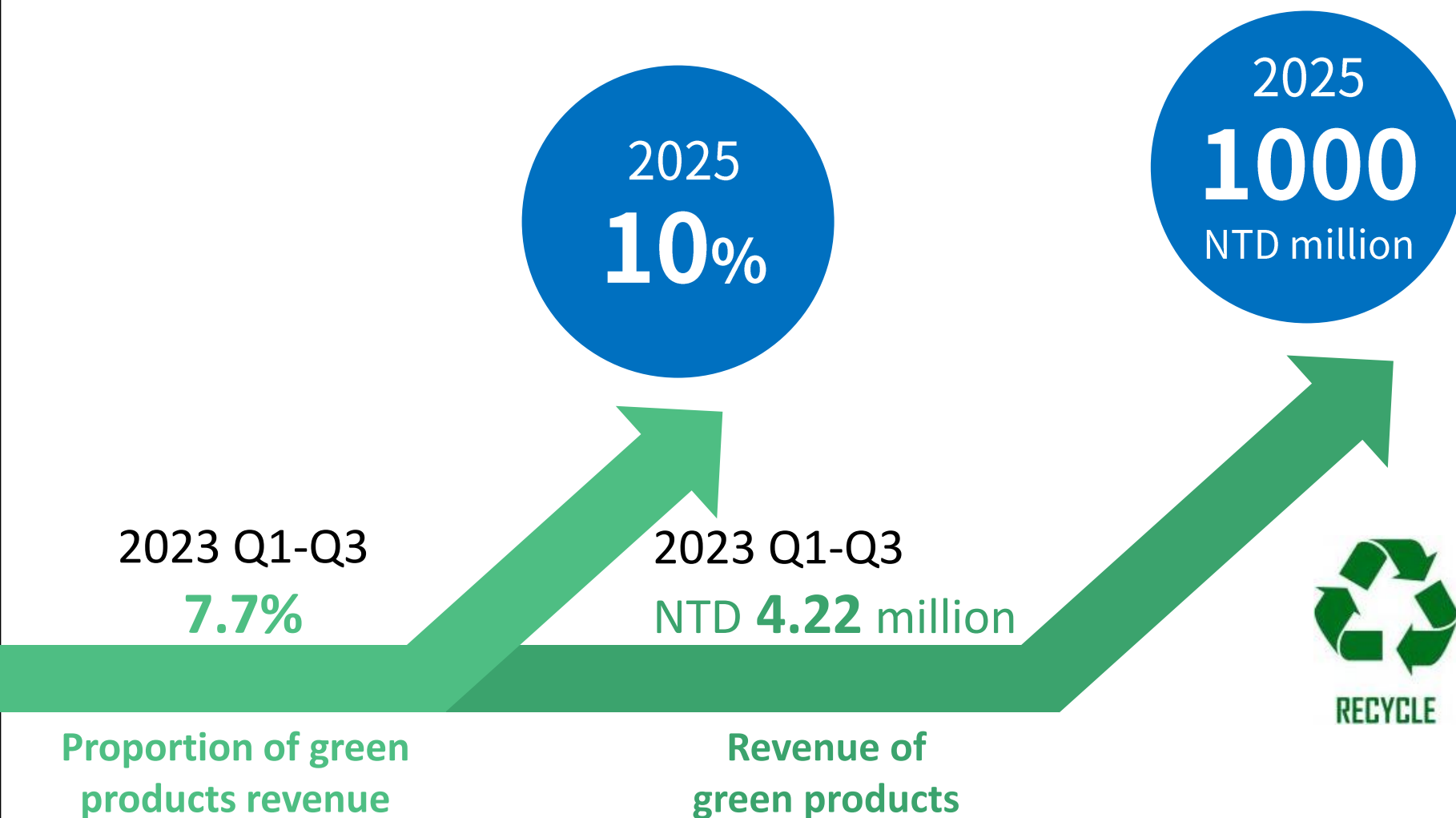


👉 Recycled chips reduce carbon footprint up to **95%**

👉 Recycled DTY reduce carbon footprint up to **50%**

👉 **100%** recycled material

## Operation goals of green products





# INCOME STATEMENTS

Unit : NTD million

Item	2023		2023		2022		2022	
	Q1-Q3		H1		Tot		Q1-Q3	
	Amount	%	Amount	%	Amount	%	Amount	%
Operating Revenue	5,463	100	3,538	100	9,301	100	7,525	100
Gross Profit	(203)	(3.7)	(112)	(3.2)	214	2.3	353	4.7
Operating Expenses	(290)	(5.3)	192	5.4	459	4.9	376	5.0
Operating Profit	(493)	(9.0)	(304)	(8.6)	(245)	(2.6)	(23)	(0.3)
Non-operating Income & Expenses	165	3.0	91	2.6	(41)	(0.4)	(116)	(1.5)
Profit Before Income Tax	(328)	(6.0)	(213)	(6.0)	(286)	(3.1)	(139)	(1.8)
Tax (Exp) Gain	53	1.0	24	0.7	4	0	(38)	(0.5)
Profit after Income Tax	(275)	(5.0)	(189)	(5.3)	(282)	(3.0)	(177)	(2.4)
EPS ( NTD )	(0.52)		(0.36)		(0.53)		(0.33)	

# FINANCIAL INDEX

Unit : NTD million

Item	2023 Q3	2022	2021	2020	2019
Receivables	12.37	8.25	16.08	12.43	11.70
Inventory	16.44	18.81	22.47	10.82	16.42
Fixed assets	47.25	45.48	47.15	47.36	47.47
Total assets	97.71	91.83	107.80	89.27	96.19
Long short-term loans	22.50	15.30	17.60	11.60	11.84
Capital	53.17	53.17	53.17	55.00	61.18
Liabilities ratio	35.9%	28.2%	32.2%	26.9%	25.1%
Current ratio	184.5%	149.6%	156.0%	147.7%	167.4%
Book value per share (NTD)	11.8	12.4	13.7	12.3	11.8

# FUTURE PROSPECT

## Nylon Chip

- 1) Last year (2022), we invested in a new nylon 66 chip production line, which will be put into trial operation before the end of this year. Next year, after entering the stage of mass production, the nylon products will be more diversified, which can add new momentum to the overall operation for the company.
- 2) Use the advantage of multiple production lines to develop differentiated products in order to enhance competitiveness.
- 3) Increase the sale of overseas market. Except the customers in Northeast Asia is expect to remain stable, the Southeast Asian and Indian markets will continue to grow in the future, and strengthen the development of European and American markets.
- 4) Actively develop the suppliers of raw material to stabilize the source of raw materials.

# FUTURE PROSPECT

## Engineering Plastic

- 1) The high inventory of customers has decreased, and the company has adopted strategies of distribution for market and diversification for product. The order has gradually grown up since the fourth quarter of this year.
- 2) It is expected that the orders from original customers will gradually resume next year, and the new one in developing market will continue to grow. It is estimated that next year's profits will return to previous years' levels.

# FUTURE PROSPECT

Fiber Division

Filament

DTY

- 1) Since the fourth quarter of this year, the downstream customer' s demand for textured yarn has significantly rebounded, and the machine has been nearly fully loaded. The prospect for next year is expected to be optimistic.
- 2) Enhance cooperation with brand customers and continue to develop differentiated products to increase profits.
- 3) In response to market trends, strengthen promoting green, environmental protection and special specifications products to meet customer requirements.
- 4) Continue to increase process capabilities of polyester filament production, which will significantly improve product quality, reduce costs and develop differentiated products. It can supply the needed products for our own textured yarn and make the most of vertical integrated synergy.
- 5) Expand overseas markets and strengthen the development of customers in Southeast Asian.

# PRODUCT THAT CONTAINS ZIG SHENG MATERIALS

## • FIBER DIVISION



## • CHEMICAL MATERIALS DIVISION



# THANKS

