

Since 1969



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

## 2022 Investor Conference



Ticker: 1455 TT

DEC 15, 2022

INNOVATION / SPECIAL / FUNCTION / INTEGRATION / ENVIRONMENT

# COMPANY PROFILE

- 1969 Company established & DTY 1<sup>st</sup> plant start up
- 1992 DTY 2<sup>nd</sup> plant start up
- 1993 Listed on the Taiwan stock exchange
- 1997 ISO-9001 certified
- 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
- 2007 OHSAS-18000 certified
- 2010 IATF 16949 certified
- 2012 ATY plant, nylon spinning 2<sup>nd</sup> plant start up
- 2013 Nylon polymerization 3<sup>rd</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
- 2021 New polyester recycling granulation plant start up
- 2022 Established 559KW solar power plant

## 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

## Polyester Products

- 5 Polyester Filament
- 6 Polyester DTY/ATY
- 7 Recycled Polyester Chip

Bottle Flake

PTA, EG

7 再生聚酯粒  
Recycled Polyester Chip

Polyester Chip

5 聚酯原絲  
Polyester Filament



6 聚酯加工絲  
Polyester DTY/ATY



Sale Products

## Nylon Products

Vertical Integration

- 1 Nylon Chip
- 2 Engineering Plastic
- 3 Nylon Filament
- 4 Nylon DTY/ATY

CPL

1 尼龍粒  
Nylon Chip



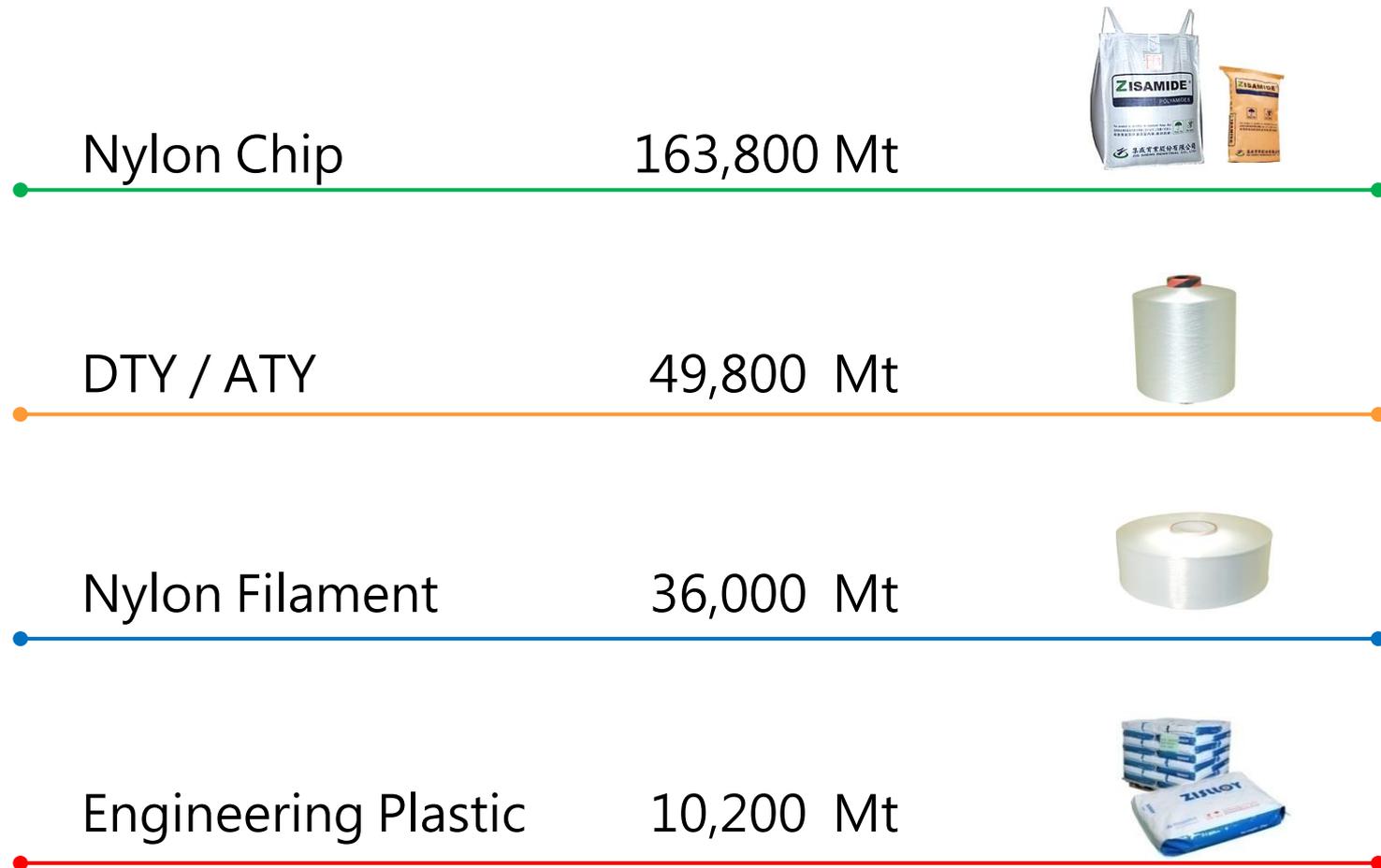
3 尼龍原絲  
Nylon Filament

2 工程塑料  
Engineering Plastics

4 尼龍加工絲  
Nylon DTY/ATY



# PRODUCT ANNUAL PRODUCTION CAPACITY



# PRODUCT SALES BREAKDOWN

Unit : NTD million

Item	2022		2022		2021		2021	
	Q1-Q3		H1		Tot		Q1-Q3	
	Amount	%	Amount	%	Amount	%	Amount	%
 Nylon Chip	3,409	45.3	2,522	46.9	5,120	45.6	3,703	45.7
 DTY / ATY	2,535	33.7	1,789	33.3	3,576	31.8	2,554	31.6
 Filament	1,051	14.0	714	13.3	1,690	15.1	1,217	15.0
 Engineering Plastic	515	6.8	340	6.3	767	6.8	581	7.2
Others	15	0.2	10	0.2	66	0.7	42	0.5
<b>Tot</b>	<b>7,525</b>	<b>100</b>	<b>5,375</b>	<b>100</b>	<b>11,219</b>	<b>100</b>	<b>8,097</b>	<b>100</b>

# SALES BREAKDOWN BY PRODUCTS 2022 Q1-Q3

Turnover : USD 259,000,000 (NTD 7.5 bn)

FX : 29.072

## Fiber Division

## Chemical Materials Division

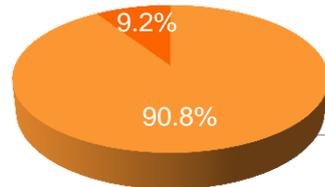


### DTY / ATY

**Domestic 90.8%**

**Export 9.2%**

- Southeast Asia 2.5%
- Middle East 2.4%
- Central Asia 1.8%
- China 1.0%
- Others 1.5%

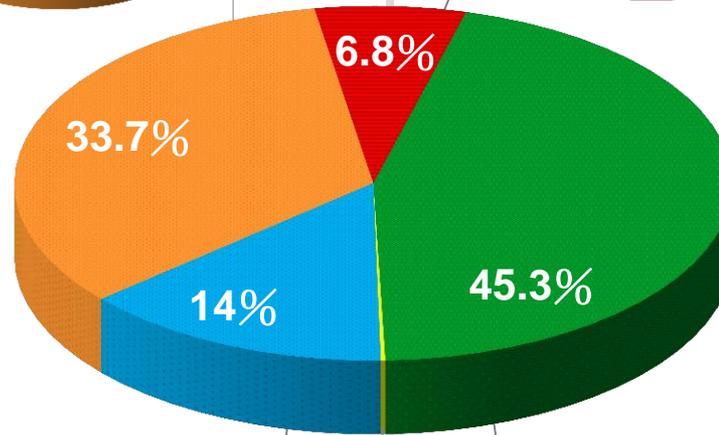
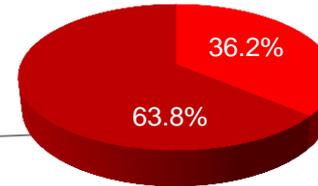


### Engineering Plastic

**Domestic 36.2%**

**Export 63.8%**

- Southeast Asia 24.7%
- China 12.3%
- Africa 11.6%
- North America 11.0%
- Others 4.2%

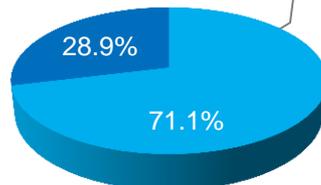


### Filament

**Domestic 71.1%**

**Export 28.9%**

- Central Asia 10.5%
- Southeast Asia 8.2%
- Northeast 4.8%
- China 4.4%
- Others 1.0%



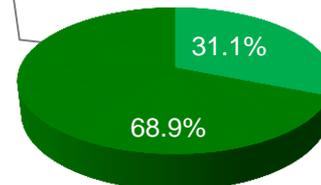
**Others 0.2%**

### Nylon Chip

**Domestic 31.1%**

**Export 68.9%**

- Northeast Asia 32.4%
- Central Asia 15.7%
- Southeast Asia 14.5%
- China 4.1%
- Others 2.2%



# Net Zero Transformation Strategy

## Circular Economy

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- Green products
- Carbon emission comparison of green products
- Proportion of green products
- Green certifications

## Process improvement

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- Replace high-efficiency equipment

## Energy conversion

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- Established solar power plant
- Exchange fuel oil into natural gas





# Green products

## Waste Recycled

- Reduce waste
- Reuse
- Reduce carbon emissions

## Dope dyed

- Energy saving
- Waste reduction
- Save water

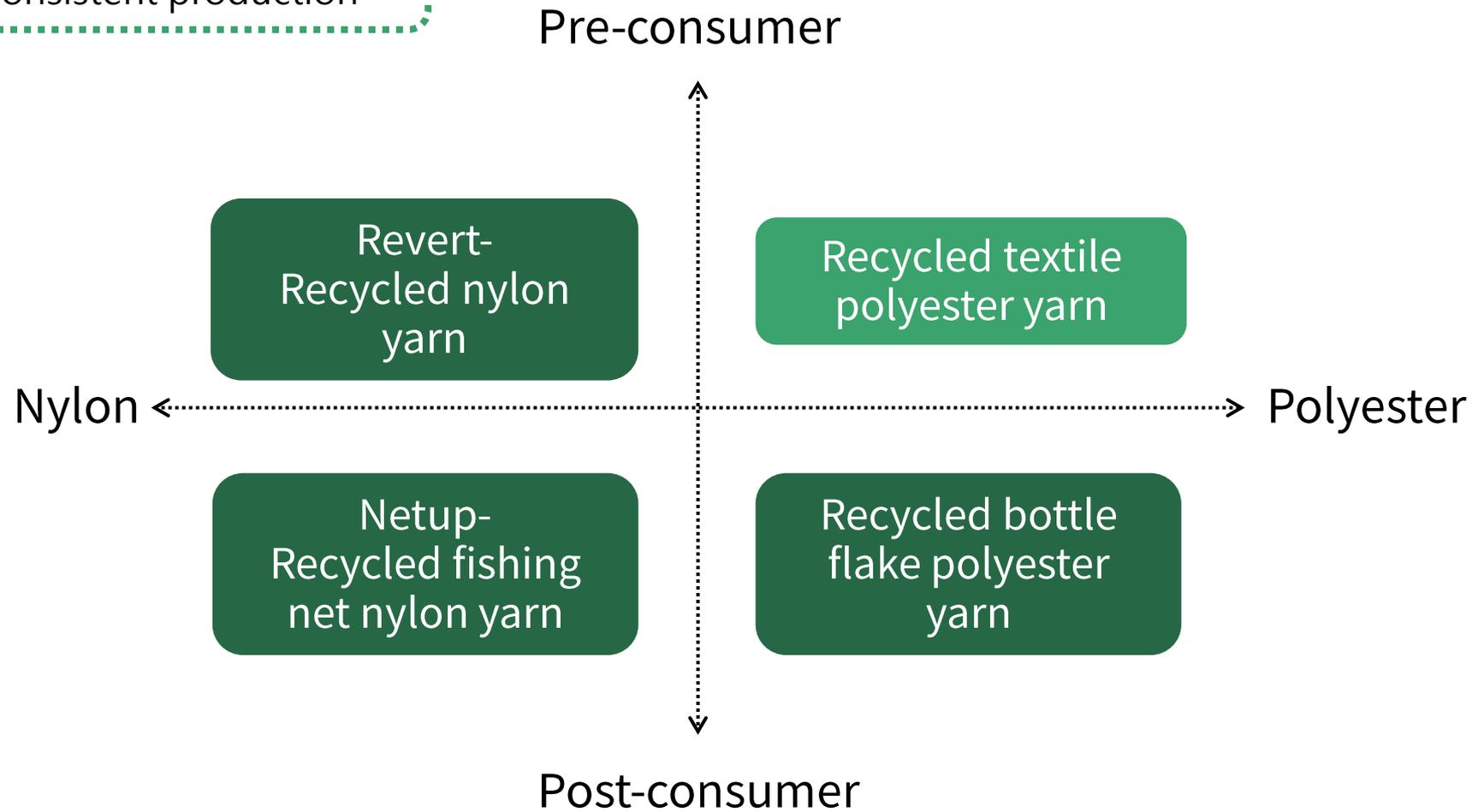
## Bio-based

- Reduce carbon emissions
- No crop sourcing

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

# Green products-Waste recycled products

Chips→POY/FDY→DTY/ATY  
Consistent production





# Green products-Recycled textile yarn

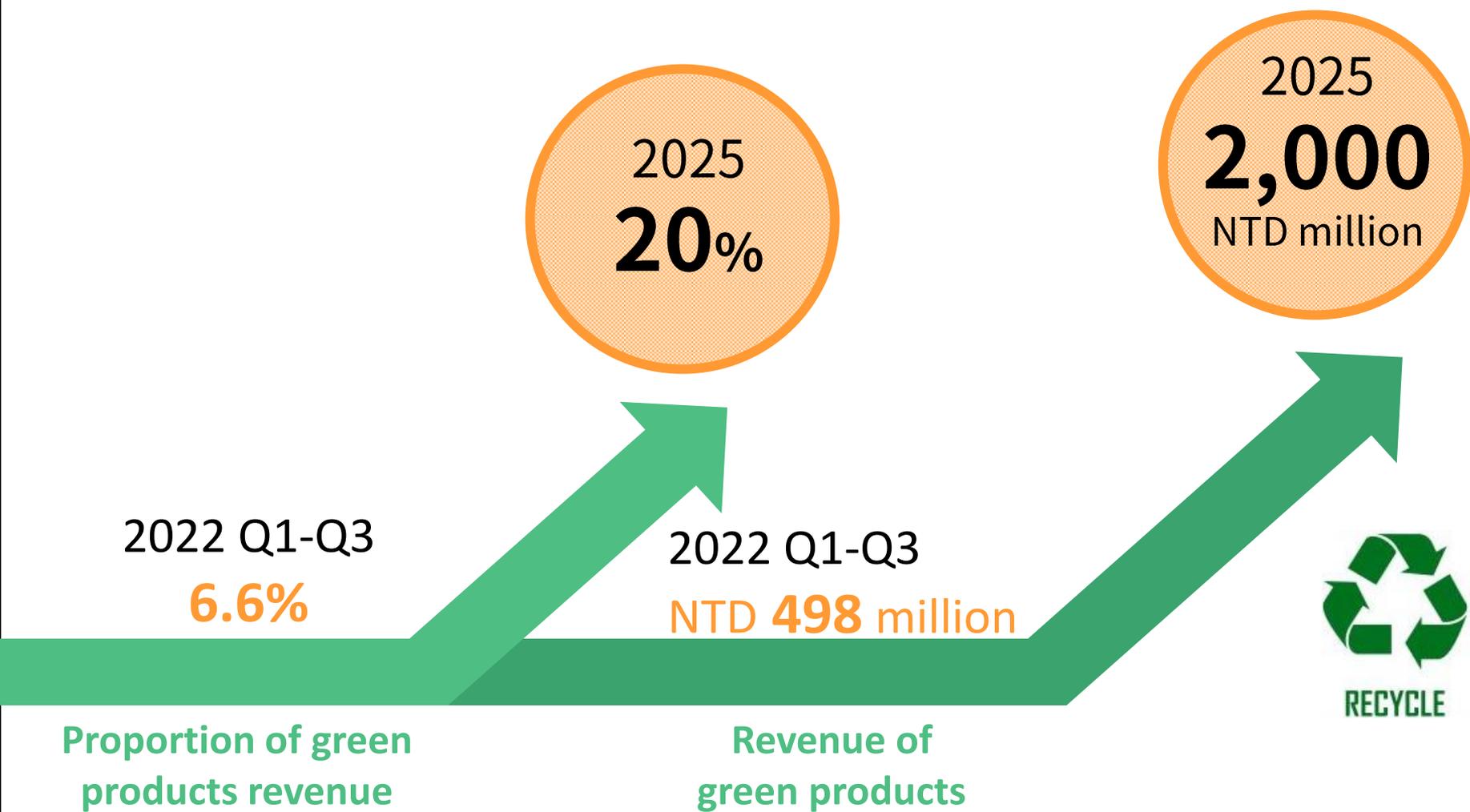


- 👉 2023 output **1,000**Mt
- 👉 Recycled chips reduce carbon footprint up to **95%**
- 👉 Recycled DTY reduce carbon footprint up to **50%**
- 👉 **100%** recycled material

# Green products-Carbon emission comparison

Product	Polyester Chips	Nylon Chips	
Material	Bottle flake	Recycled nylon	Recycled fishing net
Ratio of carbon reduction	<p>-64%</p>	<p>-97%</p>	<p>-95%</p>
		<p>■ carbon emission   ■ carbon reduction</p>	
Annual production	4,649 Mt	552 Mt	
Annual carbon reduction	8,647 Mt CO <sub>2</sub> e	2,295 Mt CO <sub>2</sub> e	
Total annual carbon reduction	10,943 Mt CO <sub>2</sub> e		

# Proportion of green products



Proportion of green products revenue

Revenue of green products



RECYCLE

# Green Certifications



Global recycled standard



OEKO-TEX



Carbon footprint  
of products  
ISO 14067:2018

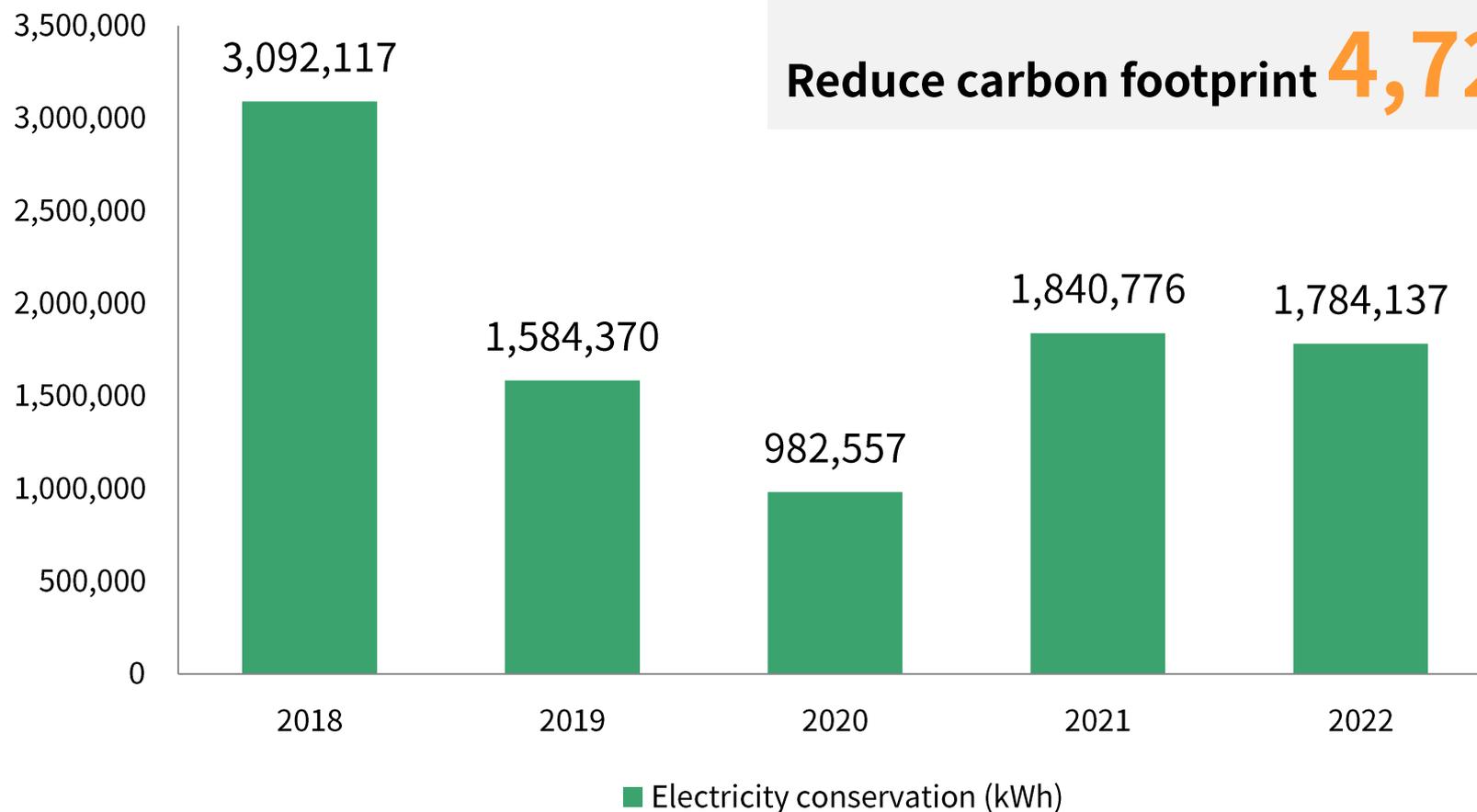


# Process improvement

2018-2022

Save **928** million kWh

Reduce carbon footprint **4,725** Mt





# Energy conversion

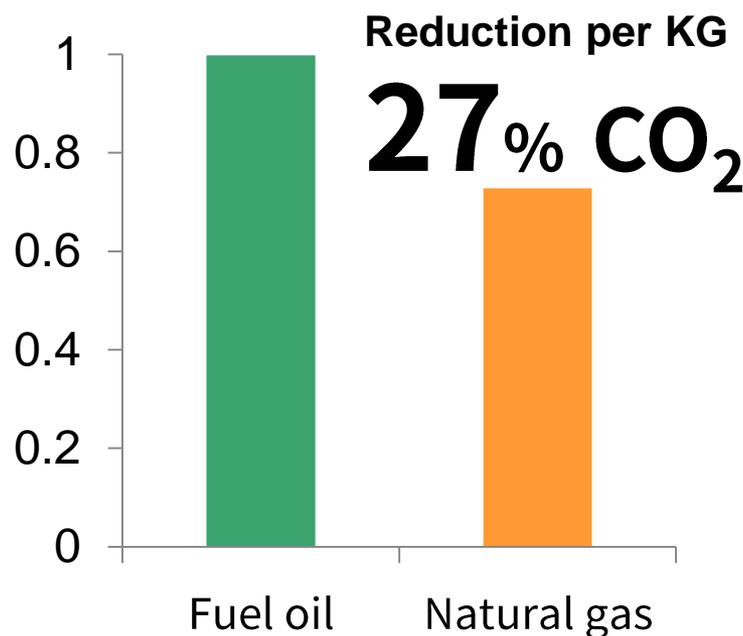
☞ Regenerate solar power has reached 3368 KW.

In 2022, the generation of electricity has reached **368** million kWh.

Total power generation **871** million kWh.

☞ Exchange fuel oil boiler into **low-carbon emission natural gas**.

Annual reduction up to **2,523** Mt CO2 Eq emissions.



# INCOME STATEMENTS

Unit : NTD million

Item	2022		2022		2021		2021	
	Q1-Q3		H1		Tot		Q1-Q3	
	Amount	%	Amount	%	Amount	%	Amount	%
Operating Revenue	7,525	100	5,375	100	11,219	100	8,097	100
Gross Profit	353	4.7	467	8.7	1,222	10.9	1,034	12.8
Operating Expenses	376	5.0	263	4.9	574	5.1	415	5.1
Operating Profit	(23)	(0.3)	204	3.8	648	5.8	619	7.6
Non-operating Income & Expenses	(116)	(1.5)	(85)	(1.6)	356	3.2	302	3.7
Profit Before Income Tax	(139)	(1.8)	119	2.2	1004	9.0	921	11.4
Tax (Exp) Gain	38	0.5	(72)	(1.3)	(84)	(0.7)	(79)	(1.0)
Profit after Income Tax	(177)	(2.4)	47	0.9	920	8.2	(842)	10.4
EPS ( NTD )	<b>(\$ 0.33)</b>		<b>\$ 0.09</b>		<b>\$ 1.73</b>		<b>\$ 1.58</b>	

# FINANCIAL INDEX

Unit : NTD million

Item	2022 Q3	2021	2020	2019	2018
Receivables	8.90	16.08	12.43	11.70	23.64
Inventory	23.63	22.47	10.82	16.42	24.15
Fixed assets	45.85	47.15	47.36	47.47	48.57
Total assets	97.10	107.8	89.27	96.19	114.58
Long short-term loans	17.10	17.60	11.60	11.84	21.39
Capital	53.17	53.17	55.00	61.18	61.18
Liabilities ratio	31.1%	32.2%	26.9%	25.1%	33.6%
Current ratio	145.1%	156.0%	147.7%	167.4%	156.1%
Book value per share (NTD)	12.6	13.7	12.3	11.8	12.4

# FUTURE PROSPECT

## 1. Nylon Chip

- 1) In order to broaden product area, a new set of polymerization equipment has been invested to produce nylon 66 chips, about 20,000 metric tons production capacity each year. In 2023, it is expected to be put into production in the fourth quarter which will increase the overall operating performance of nylon chips.
  
- 2) Exploit the advantages of multiple production lines to meet customer requirements by producing differentiated and high value-added products.

# FUTURE PROSPECT

1. Nylon Chip
  
- 3) It is expected that the price of raw materials of chips - CPL will remain stable in the first half of next year. We have actively obtained raw materials with favorable prices to enhance market competitiveness
  
- 4) Expand sales in European and American markets

# FUTURE PROSPECT

## 2. Engineering Plastic

- 1) It is expected that inventories of customers will be gradually cleared in first quarter of next year (2023), and the order can resume progressively.
- 2) We develop markets and customers persistently this year (2022), the region including Europe, America, New Zealand, Australia and Southeast Asia etc. It is expected that sales will increase rapidly from the second quarter of next year (2023) and drive profitable growth.

# FUTURE PROSPECT

## Nylon Products

### 3. Filament and DTY

- 1) It is expected that downstream demand will rally gradually from the second quarter of next year (2023), and the rate of overall equipment utilization is expected to go up, which will drive up profits further.
  
- 2) Comply with the trend of global carbon reduction, strengthening the sales of green products in order to meet customer requirements.

# FUTURE PROSPECT

## Nylon Products

### 3. Filament and DTY

- 3) Enlarge the sales of special specific products to increase profits.
- 4) Continue to develop new products and strengthen cooperation with brand customers to increase market share.
- 5) Expand the Southeast Asian market, actively develop potential customers to broaden overseas sales

# PRODUCT THAT CONTAINS ZIG SHENG MATERIALS

## • FIBER DIVISION



## • CHEMICAL MATERIALS DIVISION



# THANKS

