

Since 1969



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

## 2023 Investor Conference

Ticker: 1455 TT



**INNOVATION / SPECIAL / FUNCTION / INTEGRATION / ENVIRONMENT**

# 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

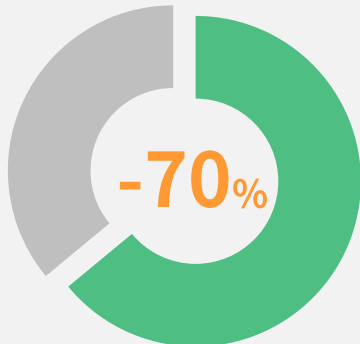
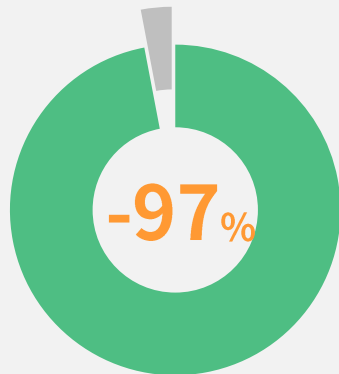
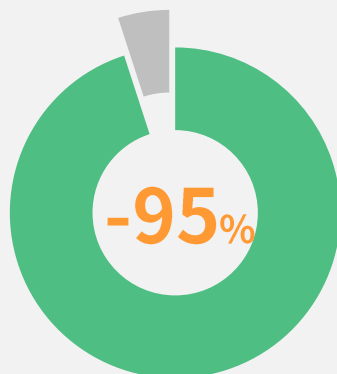
## Circular Economy

- 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.

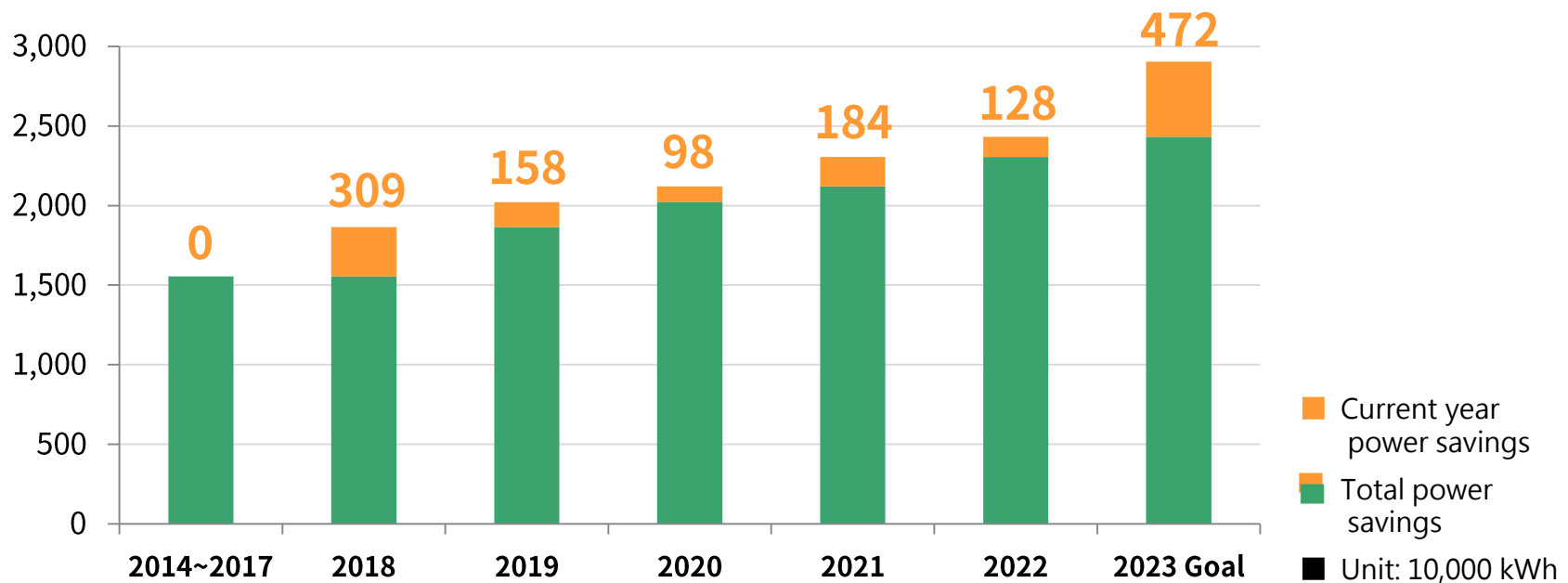
# Carbon emission benefits of green products

Product	Recycled Polyester Chips		Recycled Nylon Chips	
Material	Bottle flake		Recycled nylon	Recycled fishing net
Ratio of carbon reduction	 <p>-70%</p>		 <p>-97%</p>	 <p>-95%</p>
			<div><div></div> carbon emission<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.

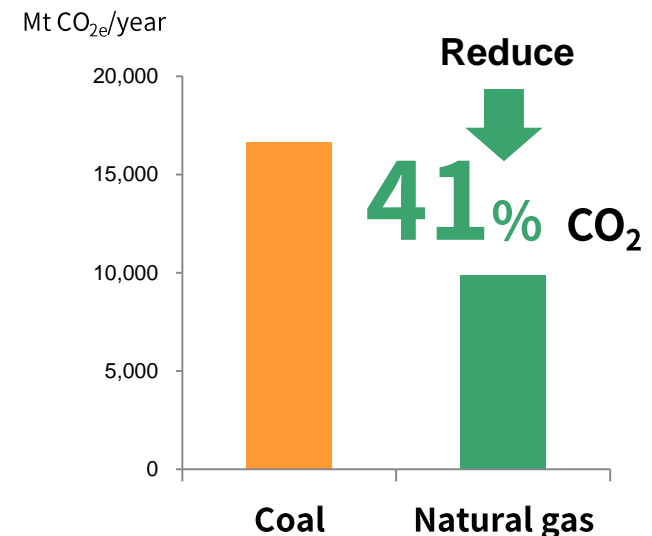
☞ Regenerate **solar power** has reached 3368 KW.

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.



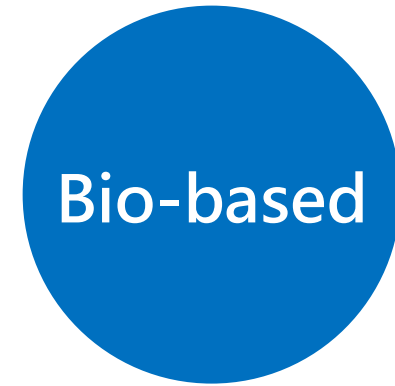
## Green products promotion



- Reduce waste
- Reuse
- Reduce carbon emissions



- Energy saving
- Waste reduction
- Save water



- Reduce carbon emissions
- No crop sourcing

- Operating
- Advanced goals

# Green Certifications



Global recycled standard



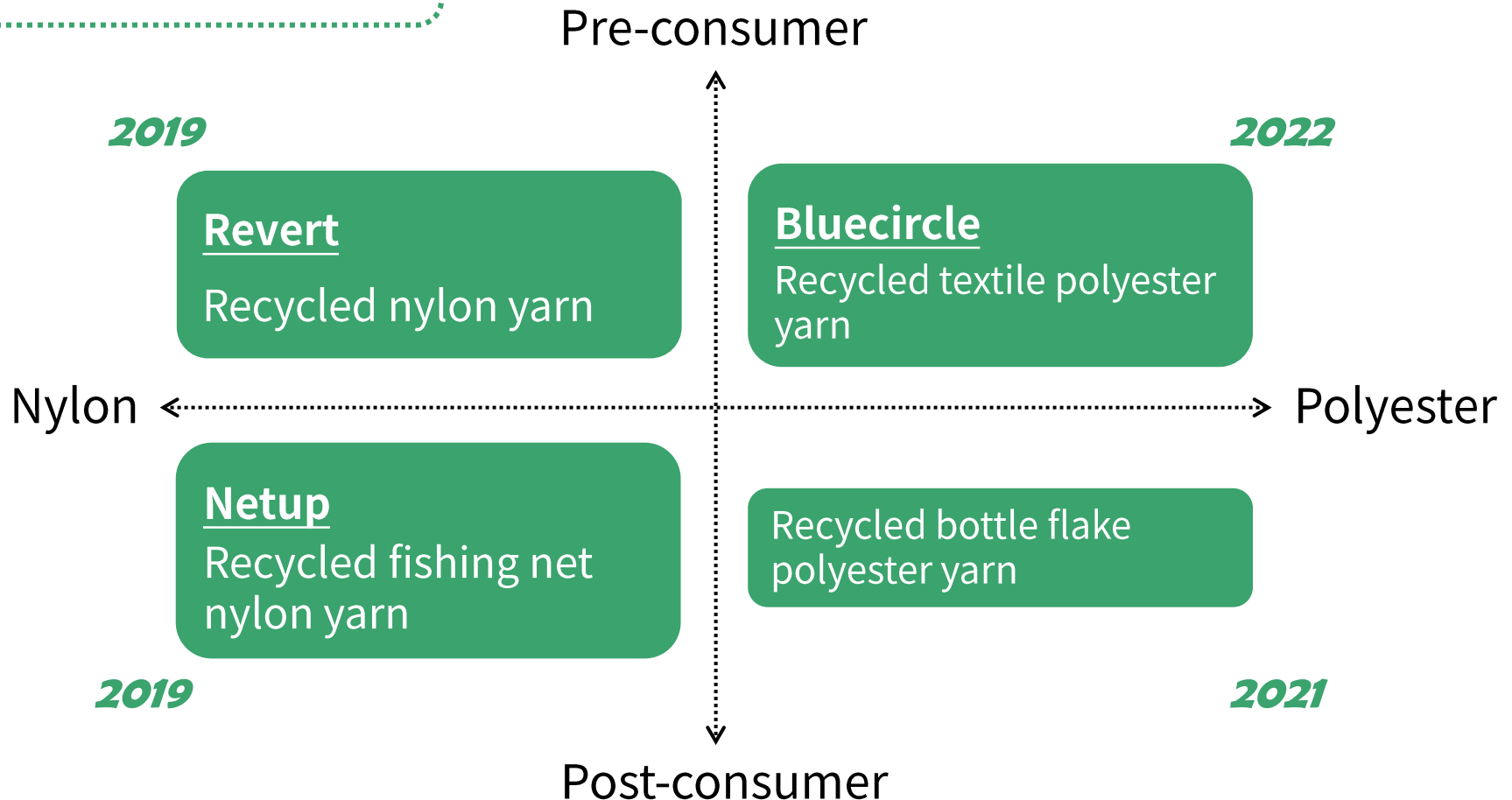
OEKO-TEX



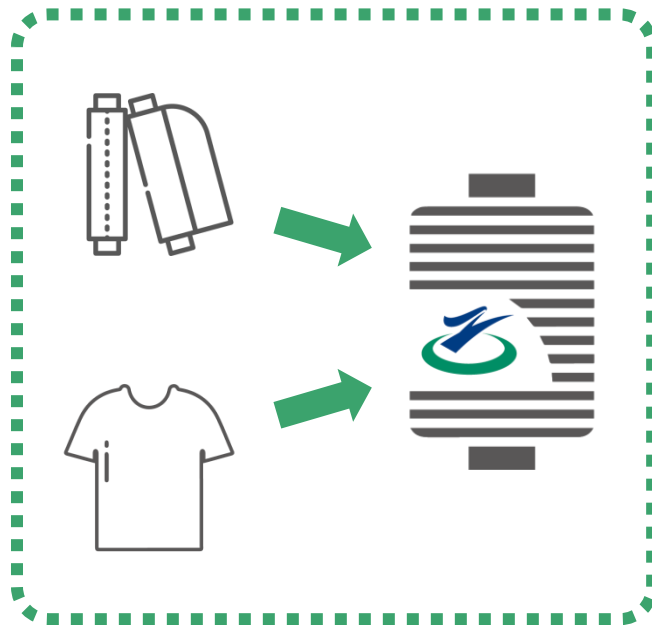
Carbon footprint  
of products  
ISO 14067:2018

# 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

