



LONGCHEN

recycling technology
for a better life

Disclaimer

- The contents in this presentation and relevant messages issued at the same time were obtained from the company' s internal and external information such as operation results, financial status, business development, etc.
- The company does not release any financial forecast. However, the description involving the company' s opinions on its future operation and industrial development in respect of the company' s finance, business and Q&A made in this presentation could be different from the future actual results. The reasons for such differences may include changes in market demand, price fluctuations, competition behavior, international economic situation, exchange rate fluctuations, upstream and downstream supply chain, and other risk factors which are out of the company' s control.
- The future outlook in this presentation reflects the company' s views on the future to this day. The company will not be responsible to send reminders or make updates for any future change or adjustment in those views.

LCPC applies highly efficient resource utilization as a waste solution

- Highly efficient resource utilization for low carbon paper making and Eco packaging

1kg cartons made of recycled paper produce only 0.8kg CO₂ emission.

Low Carbon Papermaking



Burning the 1kg cartons made of trees, it produces about 6.1kg CO₂ emission.

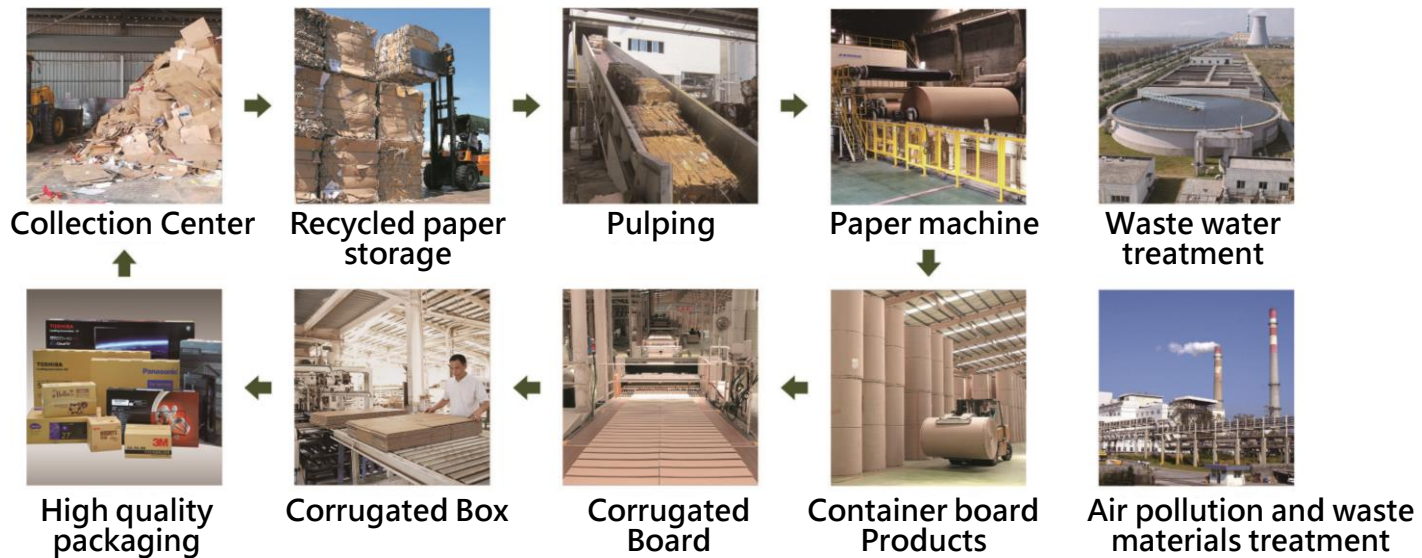
Traditional Papermaking



When pursuing a more modern and enjoyable life, we make every effort to leave our next generation with more resources and a greener living environment.

LCPC manufactures environmentally friendly daily paper products based on a resource recycling model

- Using recycled paper raw material, we exercise an integrated service-based manufacturing approach for low carbon paper making and Eco packaging.
- We can provide enterprise customers with customized, high added value for an all-round product packaging solutions.



LCPC recycles approximate 4.70 million tons of waste paper, which is equivalent to save 66 million trees and reduce 22 million carbon emission for Mother Earth in 2021.

LCPC' s Five Core State-of-the-Art Technology

- | | |
|---------------------------------|---|
| ■ Utilization of recycled fiber | <p>1 ton of waste paper can provide 0.87 ton of recycled fiber.</p> <p>Recycling 1 kg of waste paper to made of recycled carton, we can reduce 5.3 kg carbon dioxide emissions for the Earth.</p> |
| ■ Energy-saving manufacturing | <p>1 ton of paper production use 1.2-1.5 ton of steam.</p> <p>1 ton of paper production use 380-430 Kilowatt electricity.</p> <p>Our selected equipment is advancing with the times and implanted with advanced technology.</p> |
| ■ Water-saving manufacturing | <p>A drop of water is reused 13 times in the plant, 1 ton of paper use merely 6 tons water.</p> <p>We continue to develop source management, water reuse and rainwater collection reuse technology.</p> |

Our green production focuses on each of the manufacturing process from raw materials to finished products and ensuring environmental protection, quality and efficiency at the same time.

LCPC's Five Core State-of-the-Art Technology

- Air & water pollution and waste control

Continuous improvement of air pollution control technology to achieve 80% lower SOx emission and 20% lower NOx emission compared to regulatory standards.

Applying state-of-the-art, environmentally-friendly technology that reduces sewage COD to 15% lower than regulatory standards, facilitates waste recycling and sludge reduction. This realizes zero discharge of biological sludge.

- Space utilization

We continue to reduce non-value-added space in our plant, and conduct the process leveling to reduce space requirements.

We process 3.8 tons capacity per square meter every year in our plant.

Our green production focuses on each of the manufacturing process from raw materials to finished products and ensuring environmental protection, quality and efficiency at the same time.

LCPC

History and Strategy

1. Company History
2. Paper Collection Centers
3. Low Carbon Paper Mill
4. Eco Packaging Plants

Company History

○ 1961

The first industrial paper product was produced

○ 1978

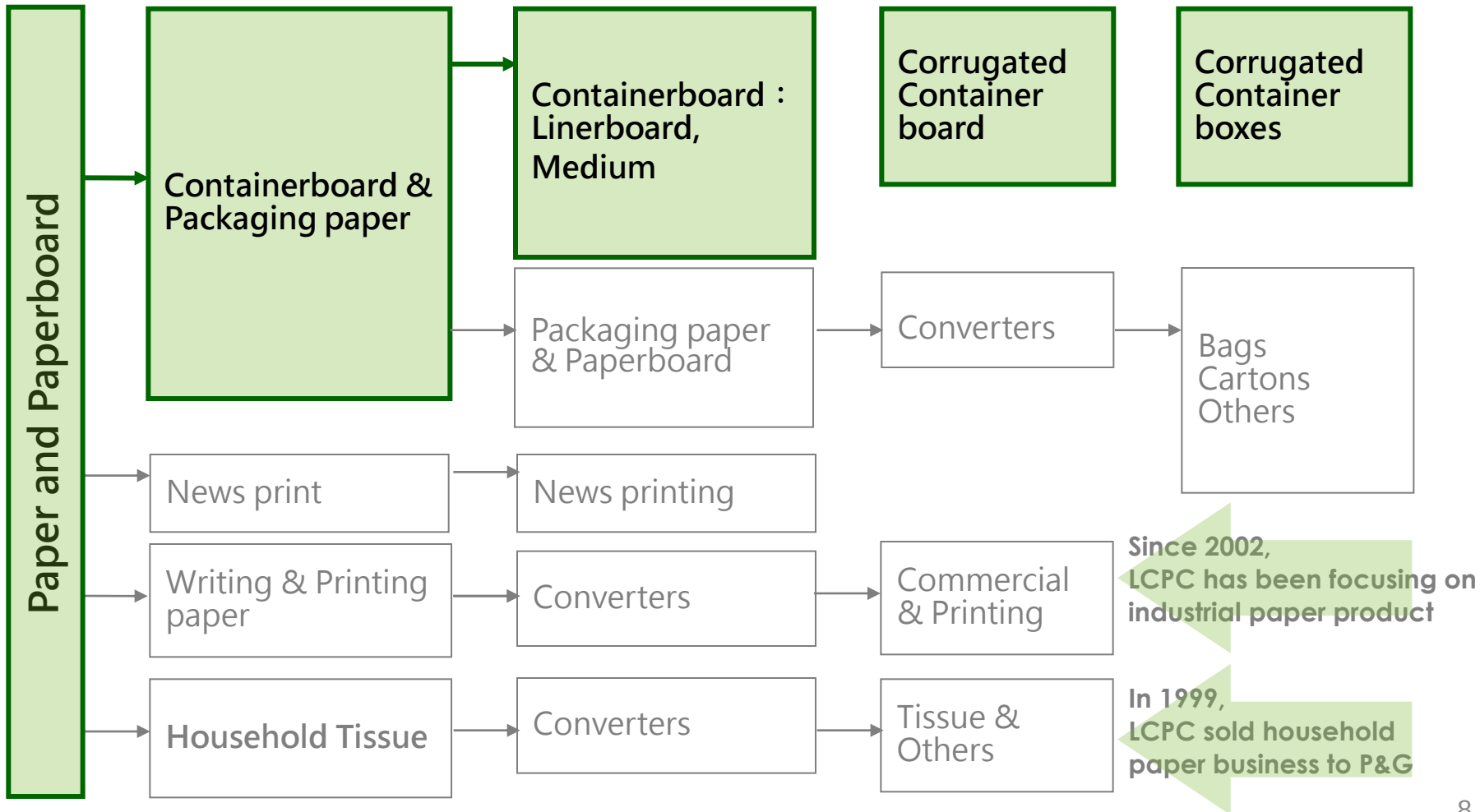
LCPC was founded

○ 2003

The first year of LCPC focused on industrial paper product

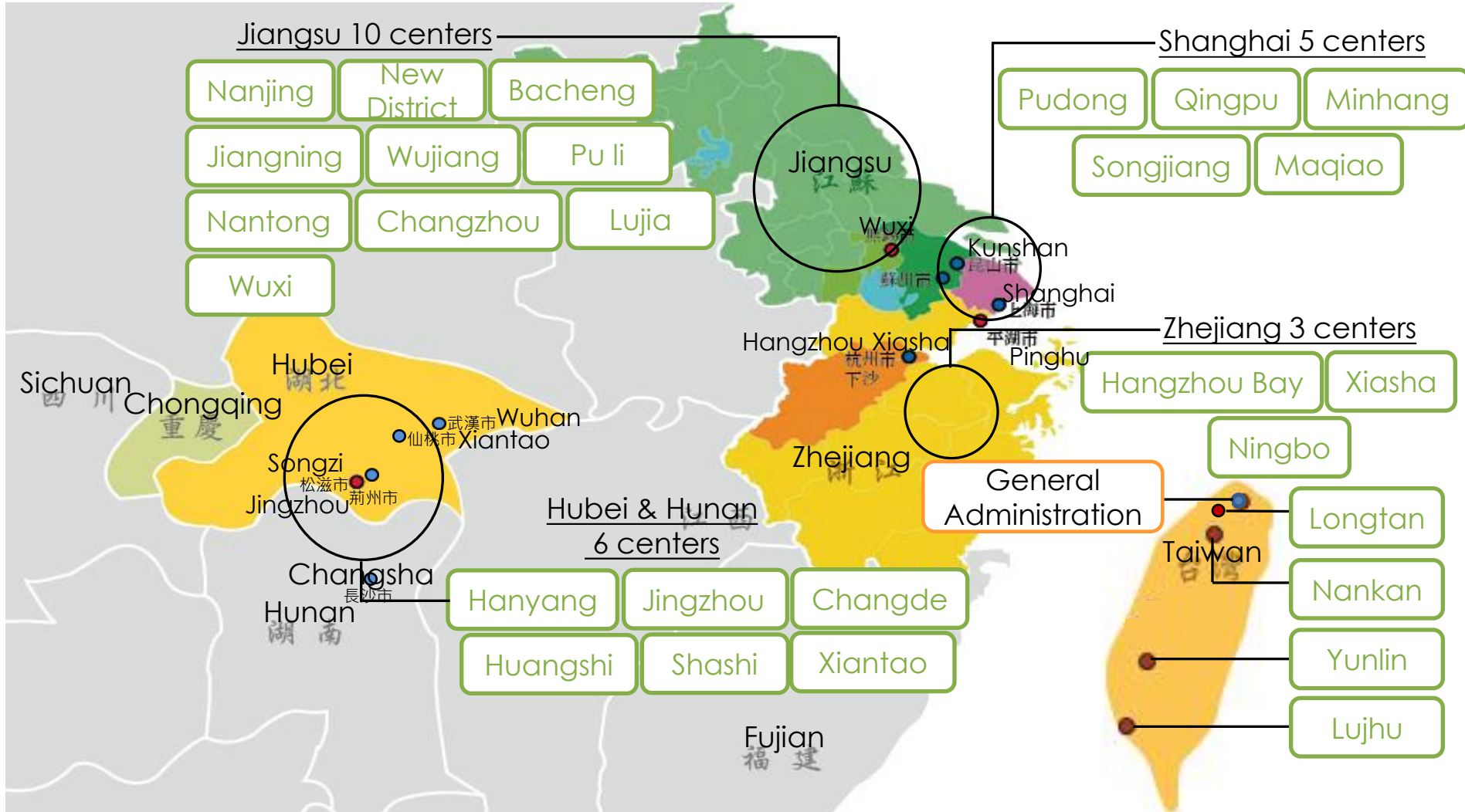
○ 2021

Achieve five-year plan of carbon emission reduction



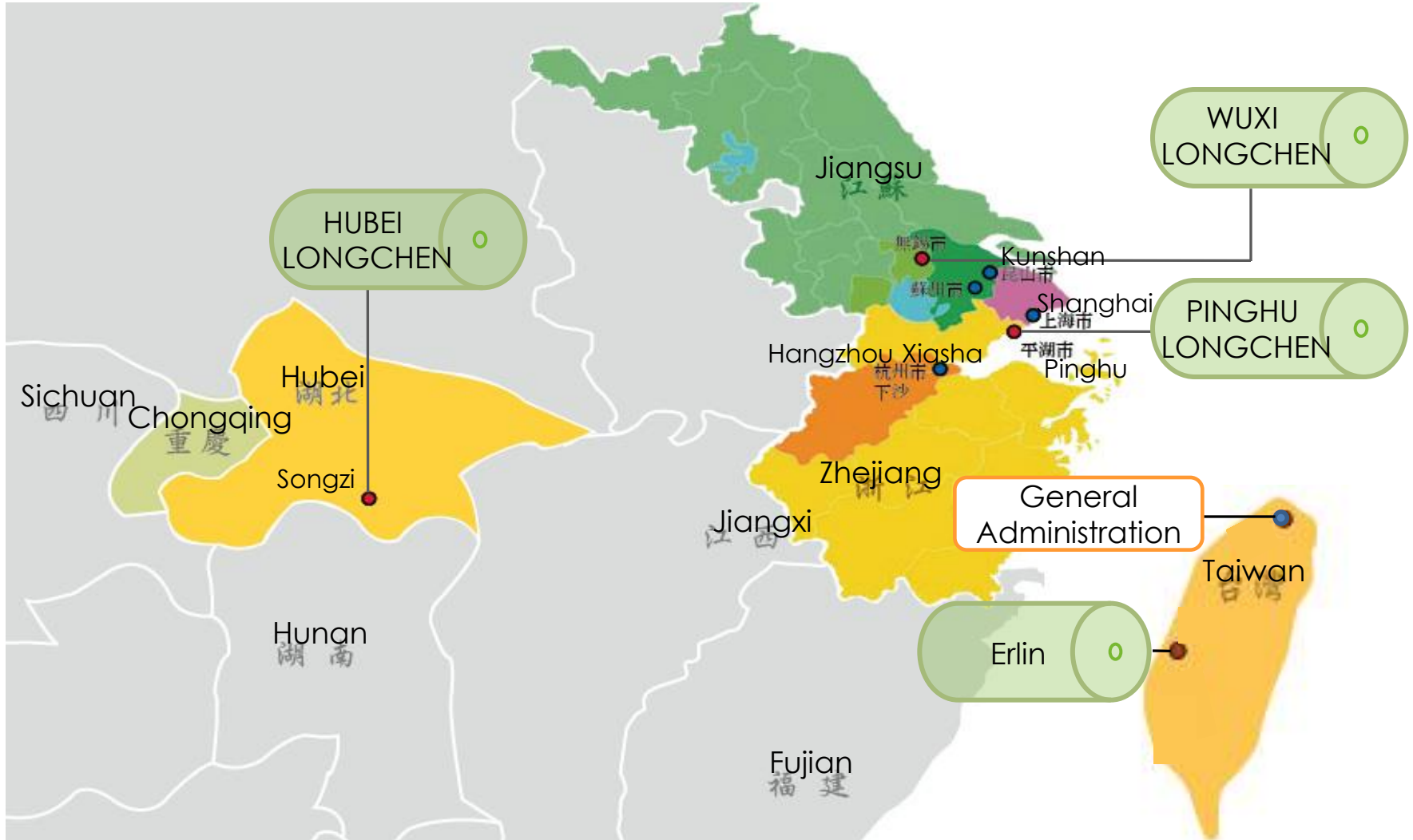
Paper Collection Centers

- 24 waste paper collection centers in China, 6 centers are in preparation.
- 4 waste paper collection centers in Taiwan.



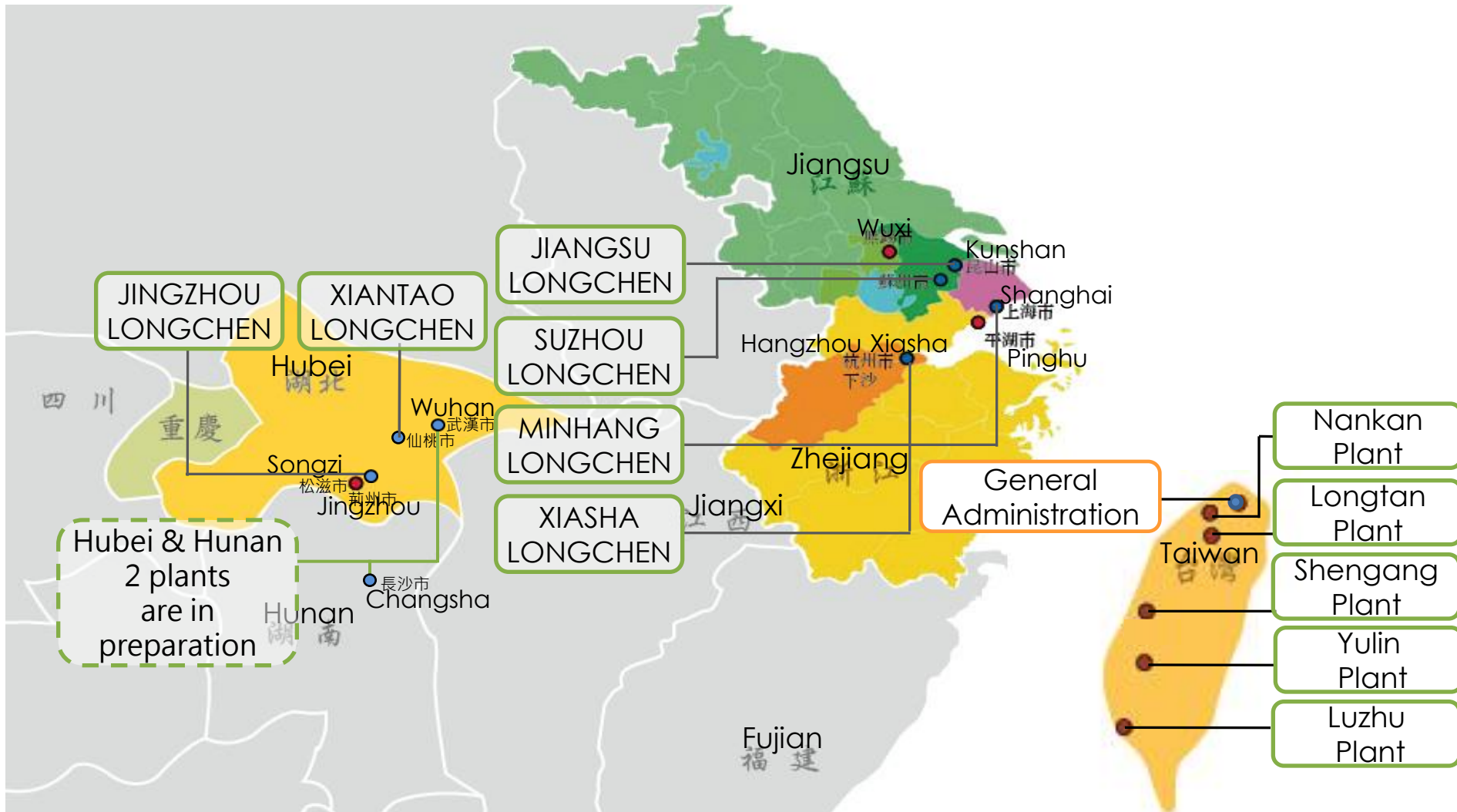
Low Carbon Paper Mill

- 3 Low Carbon Paper Mills in China
- 1 Low Carbon Paper Paper Mill in Taiwan



Eco Packaging Plants

- 6 Eco Packaging Plants in China, 2 plants are in preparation.
- 5 Eco Packaging Plants in Taiwan.

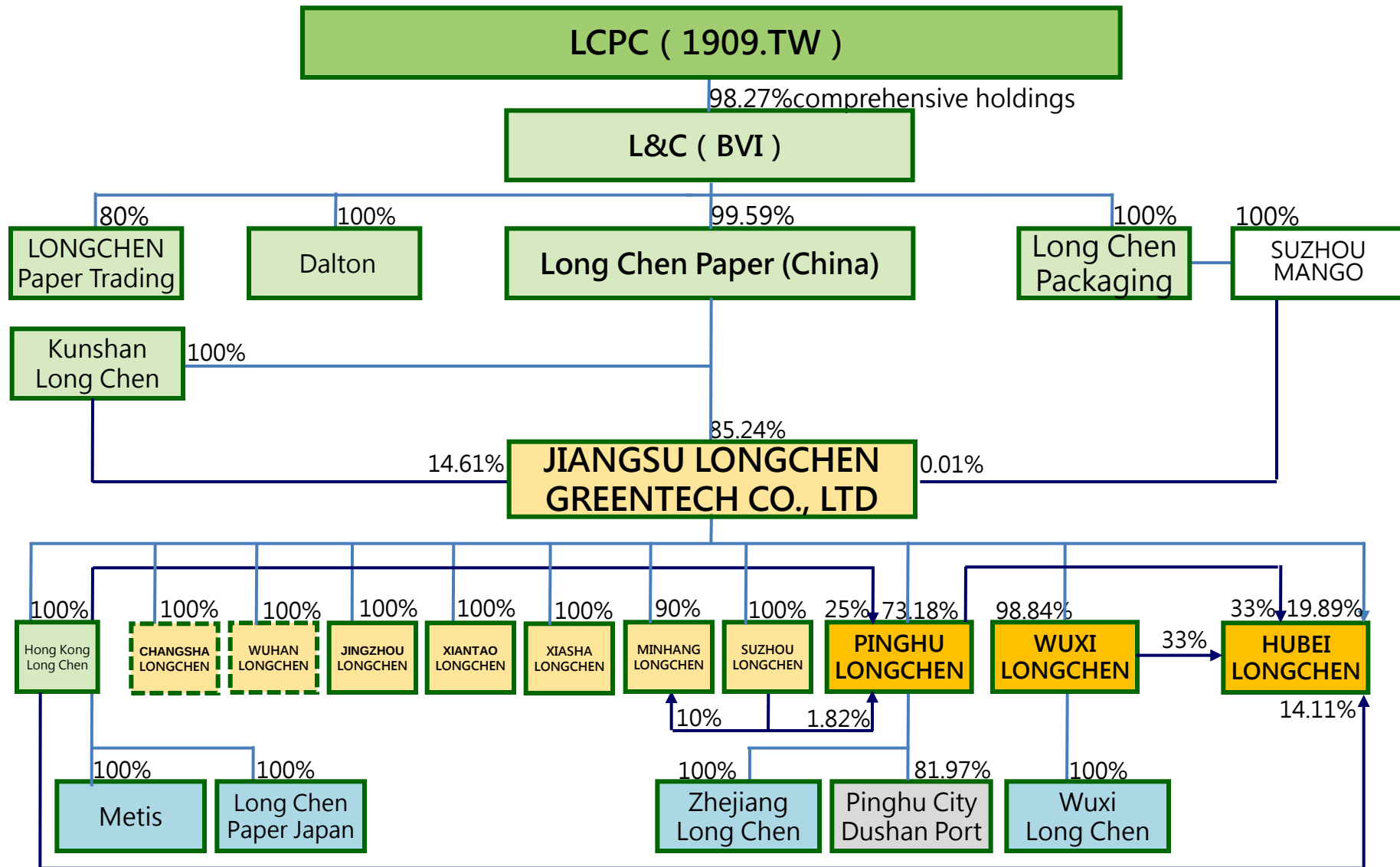


LCPC

Finance and Industry

1. Company Structure
2. Financial Information
3. Industry Overview
4. Guardian Environment

1. Company Structure(2018/06/30)



2. Financial Information – Income Statement

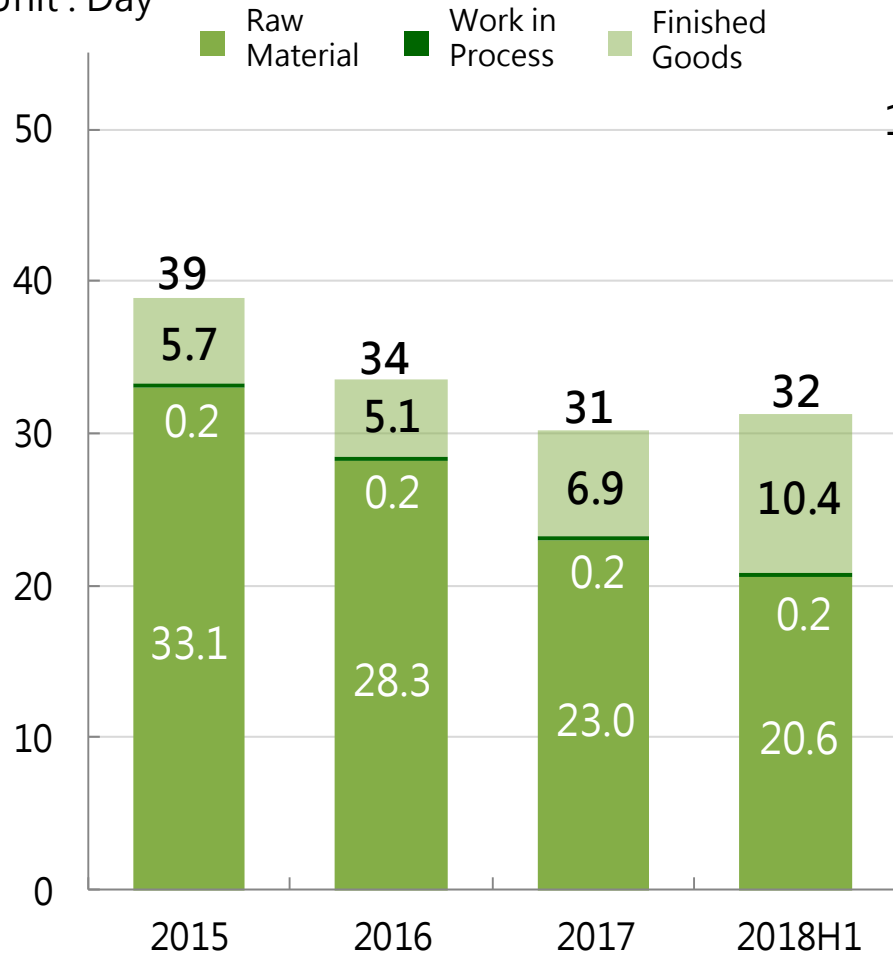
Unit : NT\$ Million

	2016	%	2017	%	YOY	2017H1	%	2018H1	%	YOY
Revenues	32,512	100	46,717	100	43.69%	19,413	100	26,330	100	35.63%
Cost of good Sold	26,132	80.4	37,107	79.4	42.00%	15,002	77.3	22,510	85.5	50.05%
Gross Profit	6,380	19.6	9,610	20.6	50.63%	4,410	22.7	3,820	14.5	-13.38%
Operating Expenses	3,439	10.6	4,300	11.4	25.04%	1,990	10.3	2,075	7.9	4.27%
Operating Income	2,942	9	5,310	12.5	80.49%	2,419	12.5	1,744	6.6	-27.90%
Non-Operating Income / Expenses	311	1	39	0	-87.46%	189	1.0	227	0.9	20.11%
Profit before Tax	3,252	10	5,348	11.5	64.45%	2,609	13.4	1,517	5.8	-41.86%
Income Tax Expenses	740	2.3	1,396	3	88.65%	711	3.7	523	2.0	-26.44%
Profit Attributable To Owners of the Parent	2,407	7.4	3,883	17.6	61.32%	1,868	9.6	988	3.8	-47.11%
EPS (NT\$)	2.79		3.50		25.45%	1.71		0.87		-49.12%

2. Financial information: Inventory turnover in days and product mix ratio

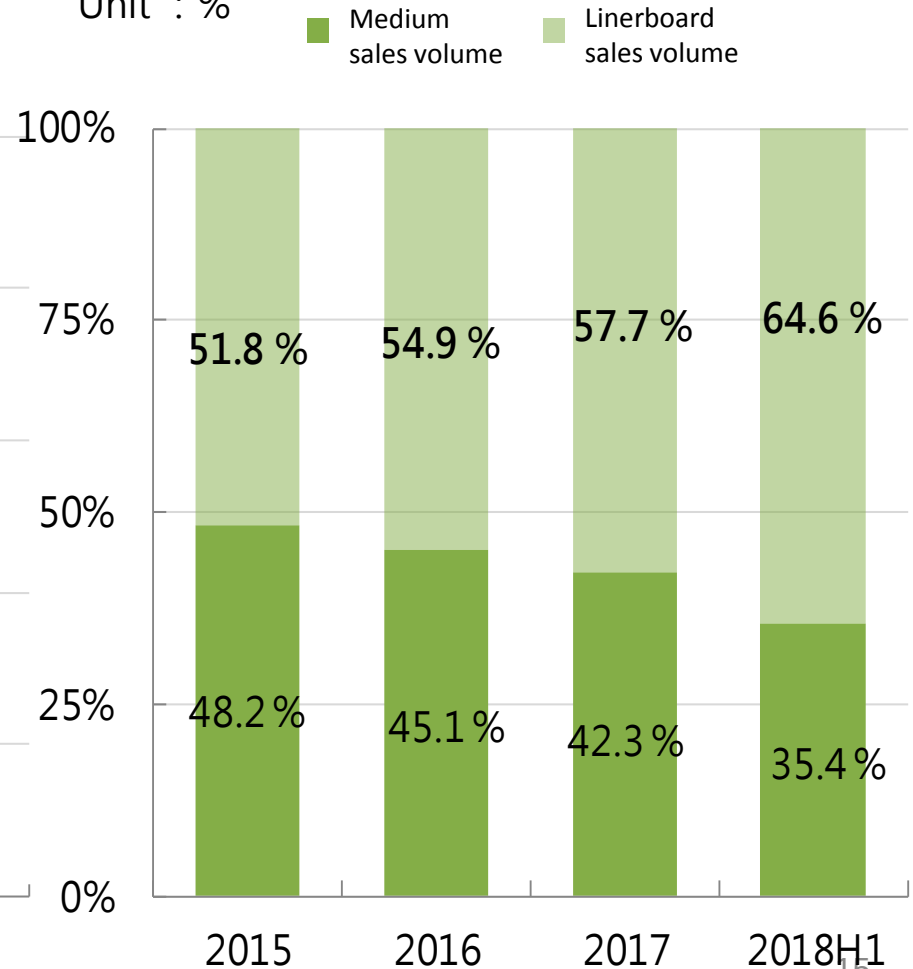
Inventory turnover in Days over the Last 4 Years

Unit : Day



Improved production efficiency realizes optimization of product mix

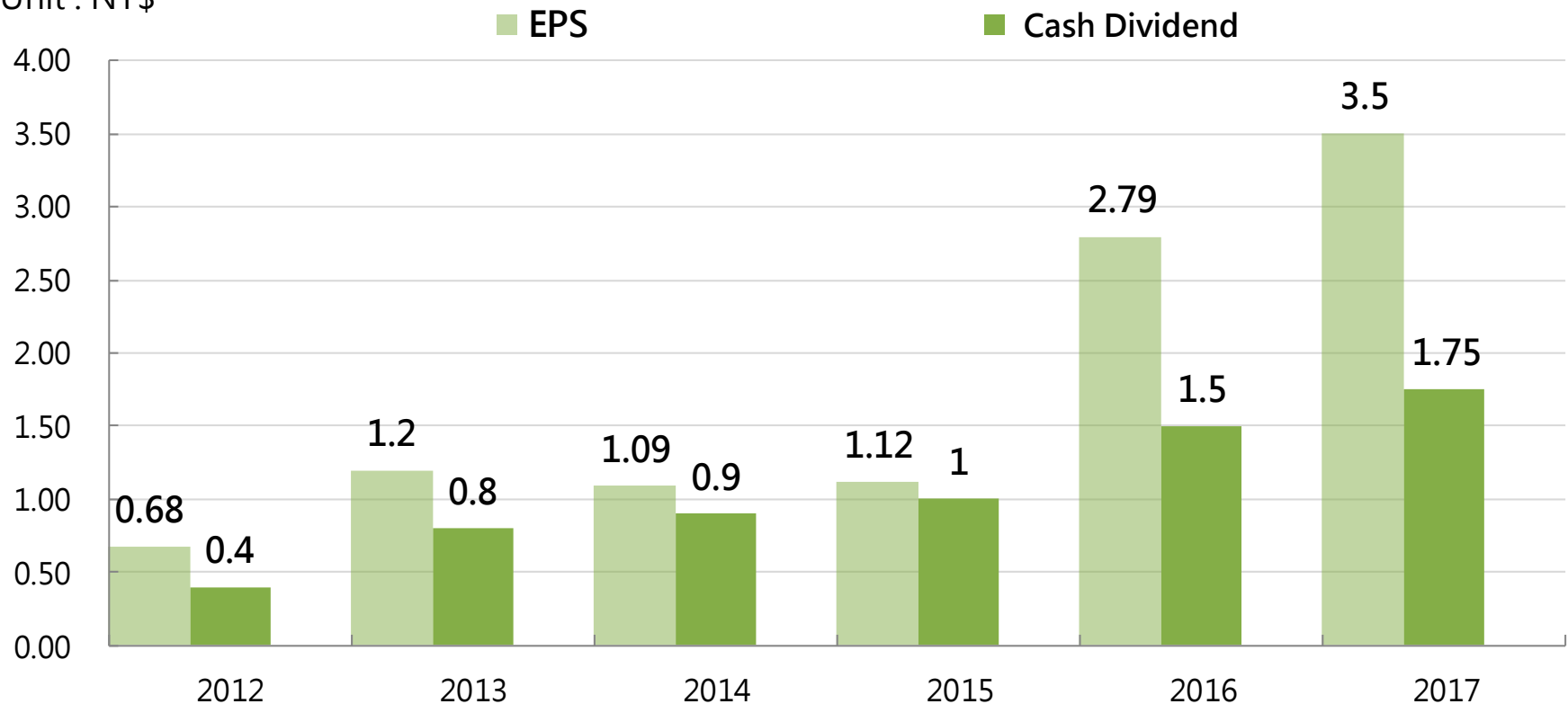
Unit : %



2. Financial Information-Dividend Policy

- Accumulated cash dividend accounted for 61% of accumulated profit attributable to owners from 2012 to 2017.
- Cash dividend payout ratio reached around 50% in 2017.

Unit : NT\$



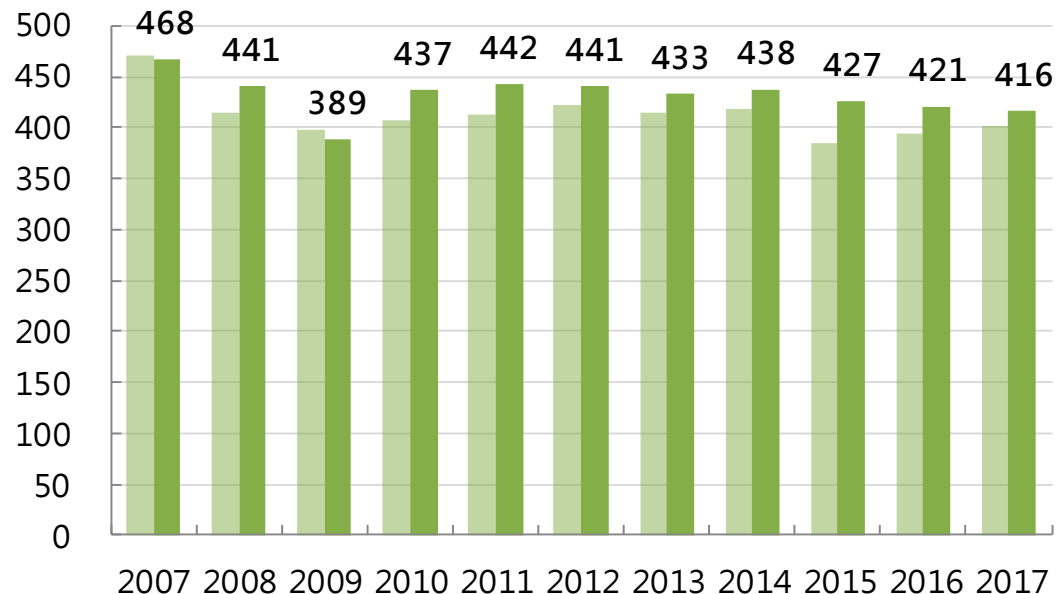
3.Industry Overview-Taiwan Market

- In Taiwan, the annual consumption of paper and paper boards (including industrial paper, writing & printing paper & household tissue) is 4.16 million tons, slightly reduced by 1.05%, a 1.24% decrease in per capita consumption.
- In Taiwan, the consumption of industrial paper is approximately 1.75 million tons, an increase of 0.44%. The consumption of cartons is 2.08 billion square meters, a 2.99% increase. LCPC is one of the top three industrial paper providers in Taiwan.

Paper and Paperboard Market in Taiwan

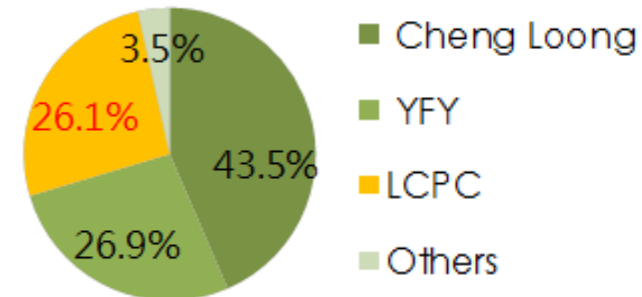
Unit : 10kt

Production Consumption

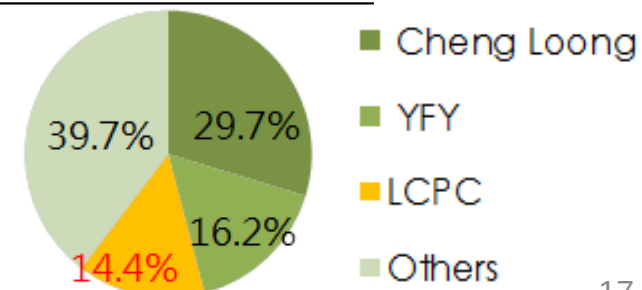


Source: Taiwan Paper Industry Association

2017 Industrial Paper Market Share in Taiwan



2017 Carton Box Market Share in Taiwan

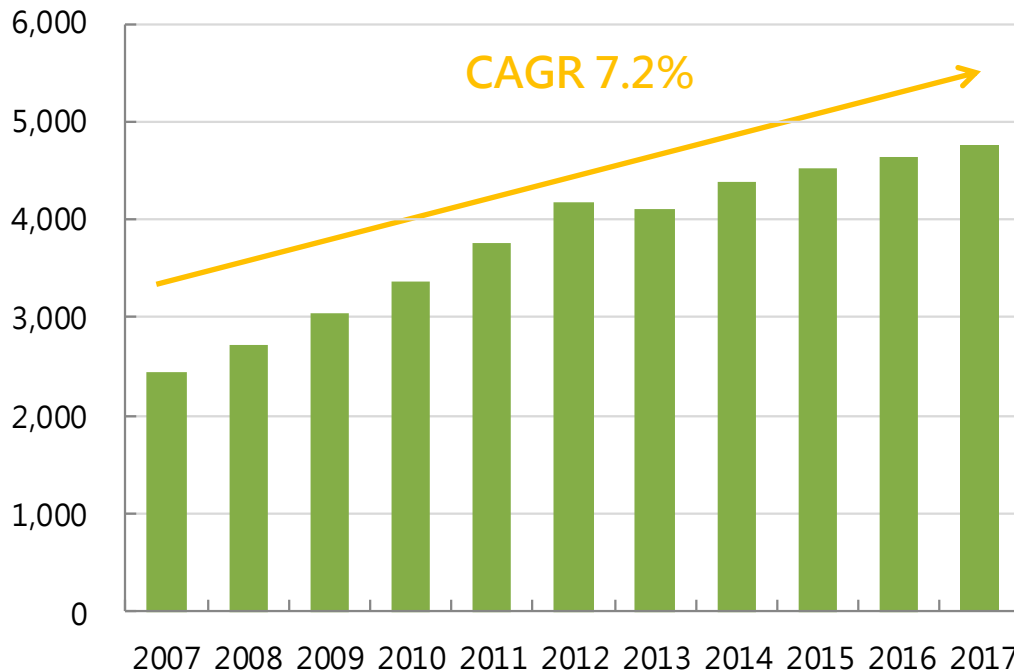


3. Industry Overview-China Market (1)

- 2017 China cardboard and corrugated paper consumption was about 49.1 million tons in 2017, YoY+5.9%.
- Nine Dragons and Lee & Man paper were in lead of the market share in China. LCPC's market share reached around 4.3% in 2017, which was one of the top four in China. The trend is clear that big ones get bigger.

Industrial paper consumption in China

Unit : 10kt



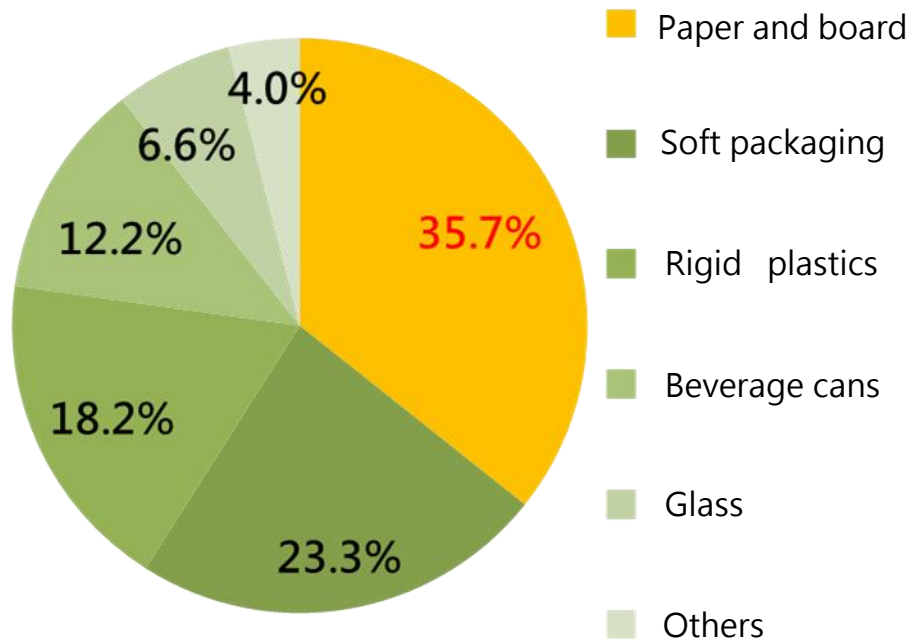
Source : Annual Report of China's Paper Industry ; RISI

2016 & 2017 Industrial Paper Market Share in China



3.Industry Overview-China Market (2)

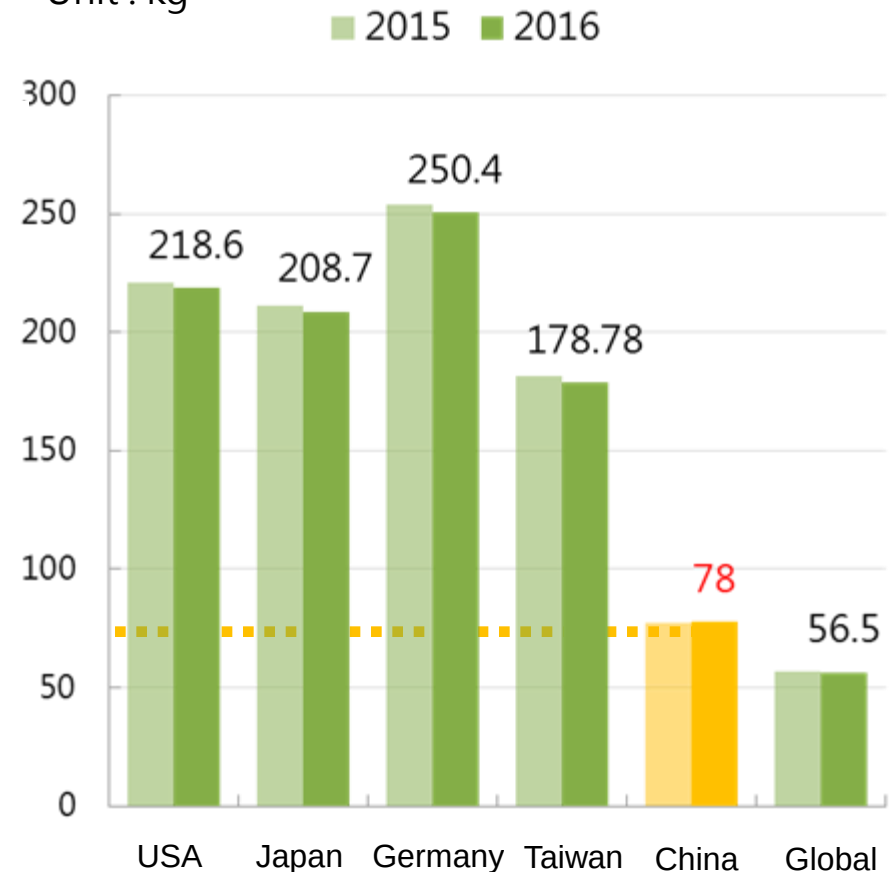
Paper package is leading the global packaging industry



Source: Smithers Pira data, 2016 data

Chinese population has great potential in average paper consumption

Unit : kg



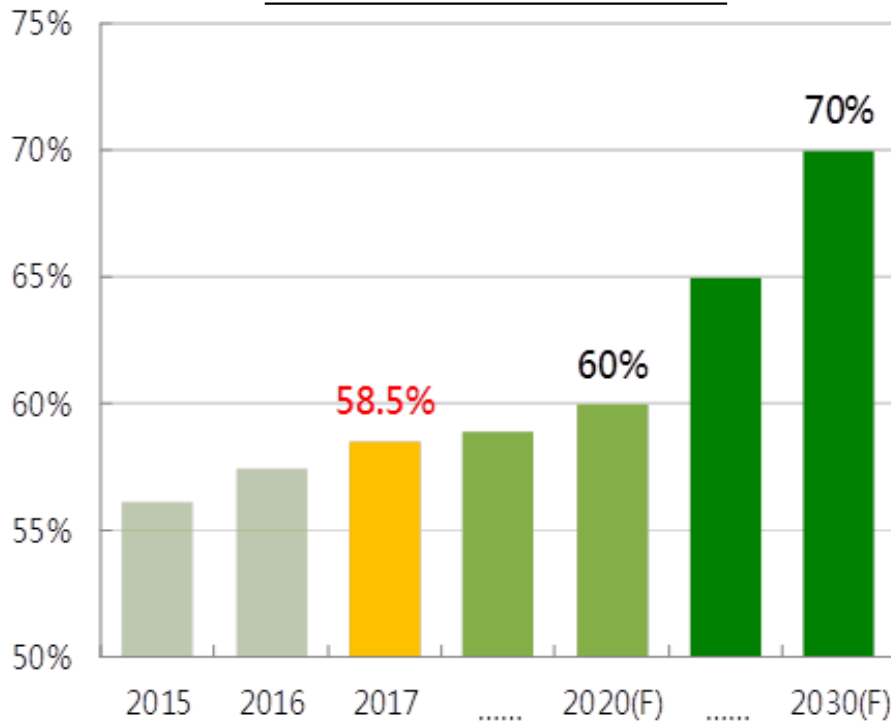
Source: Taiwan Paper Industry Association

3.Industry Overview-China Market (3)

China's urbanization rate will boost consumer demand

Unit : %

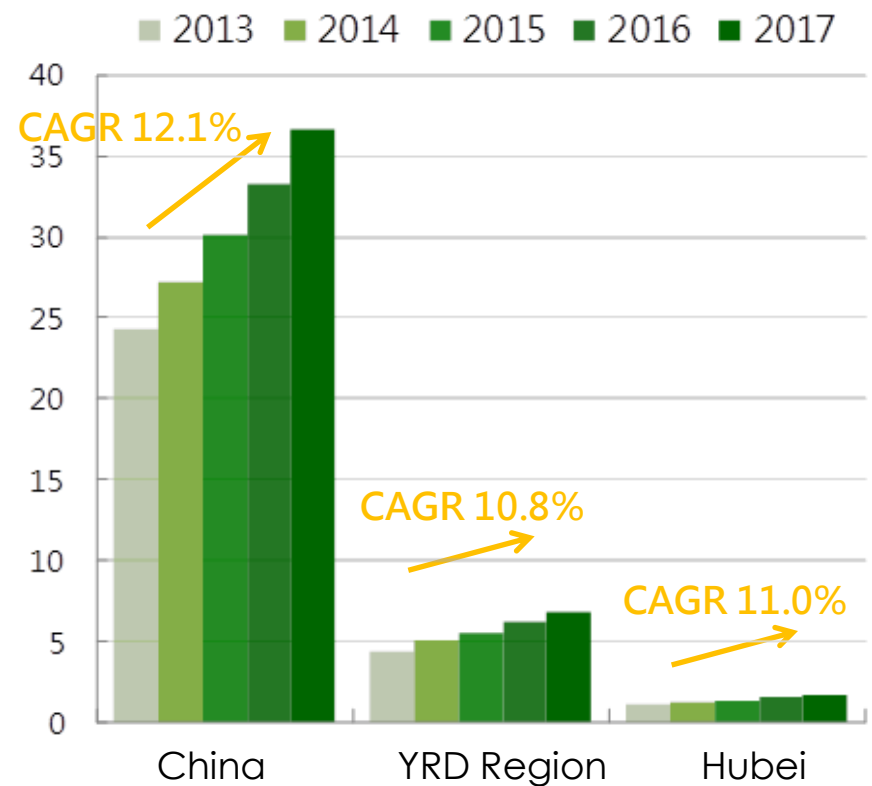
China's Urbanization Rate



Source: National Bureau of Statistics of China; Annual Report On Urban Development of China No.8

Rapid growth of China's total retail sales of consumer goods

Unit : Trillion RMB\$

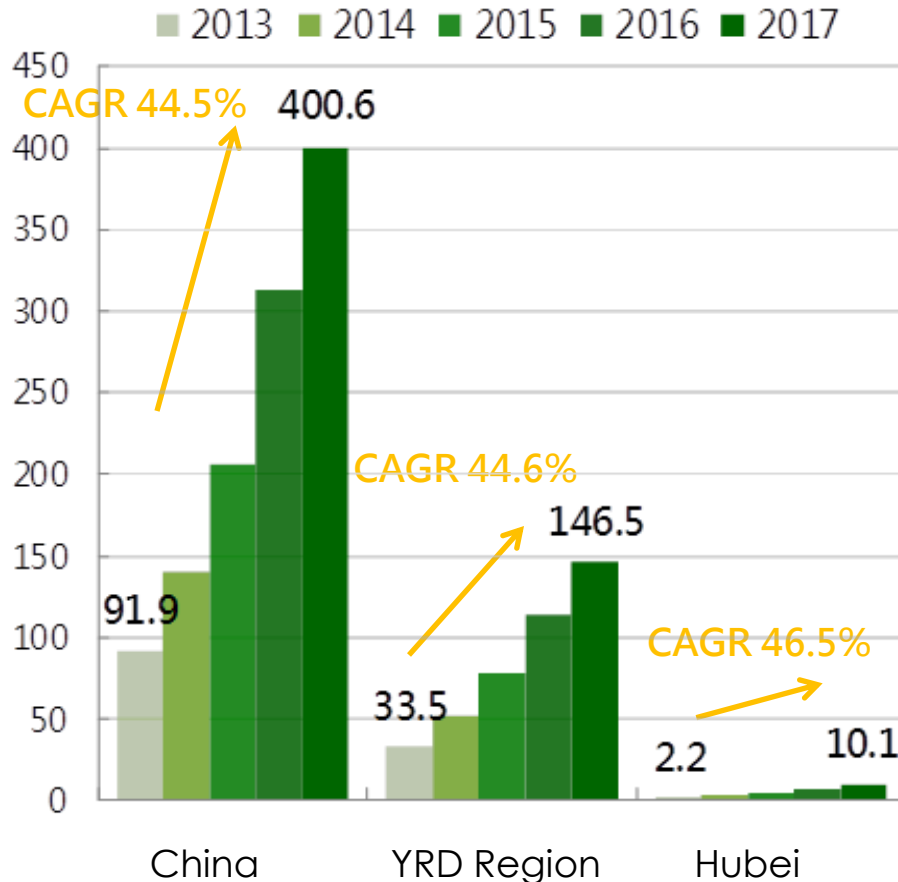


Source: National Bureau of Statistics of China

3. Industry Overview-China Market (4)

China's Fast-Growing Logistics Service

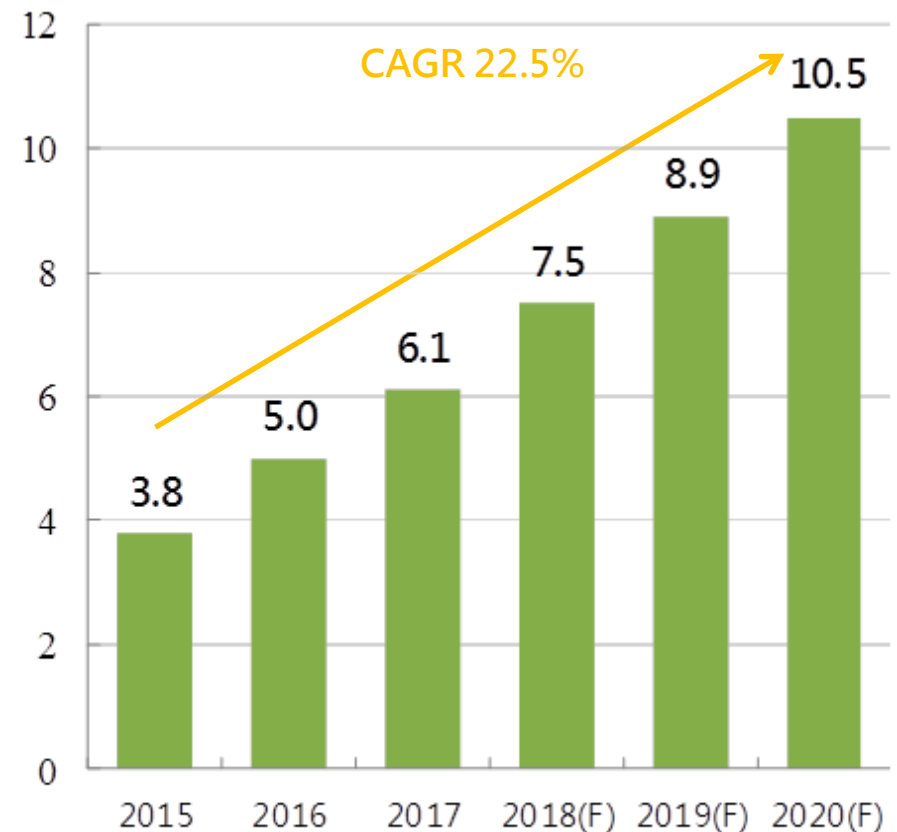
Unit : 100 Million Pcs



Source : China State Post Bureau

2015-2020 Transaction Amount in China's Online Shopping Market

Unit : Trillion RMB\$



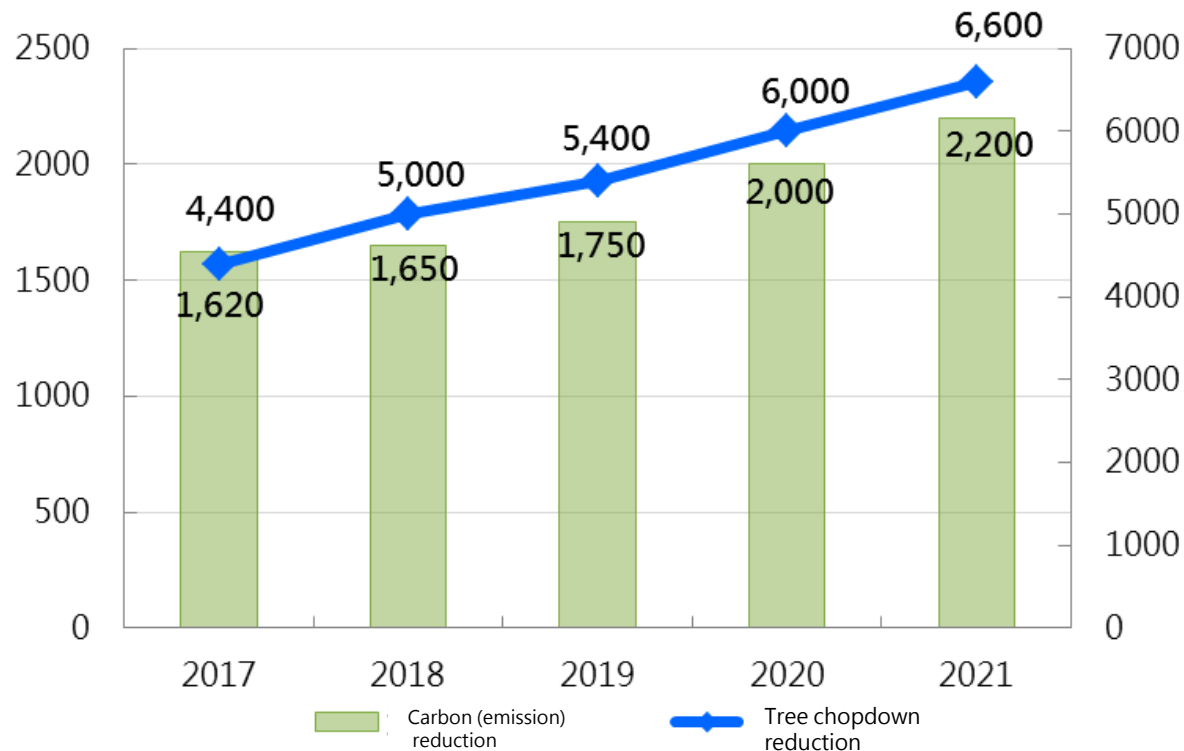
Source : iresearch

4. Guardian Environment - LCPC's 5-year carbon reduction plan

LCPC will recycle approximate 4.00 million tons of waste paper in 2021, it means that we can reduce 22 million carbon emission and save 66 million trees for Mother Earth per year, its carbon absorption is equal to 56 thousand Daan Forest Parks.

(Each hectare of forest absorbs 15 tons of carbon per year, the area of Daan Forest Park is 25.89 hectare.)

Carbon (emission) reduction: 10kt Tree chopdown reduction: 10k





LONGCHEN

recycling technology
for a better life