2016 Annual Report of China's Paper Industry

China Paper Association

I. Production and Consumption of Paper & Board

1. The General Situation of 2016

According to the survey made by China Paper Association (CPA), in 2016, there were about 2,800 paper & board manufacturers in mainland china. The total production and consumption of paper & board were 108.55 million tons and 104.19 million tons, increased by 1.35% and 0.65% compared with the previous year respectively; paper & board per capita consumption was 75 kg. From 2007 to 2016, the average annual growth rate of paper & board production was 4.43%, and the average annual growth rate of paper & board consumption was 4.05%. As shown in Fig.1 and Table 1.

Shares of production and consumption of main paper & board grades in the nation's gross in 2016 are shown in Fig.2 and Fig.3 respectively.

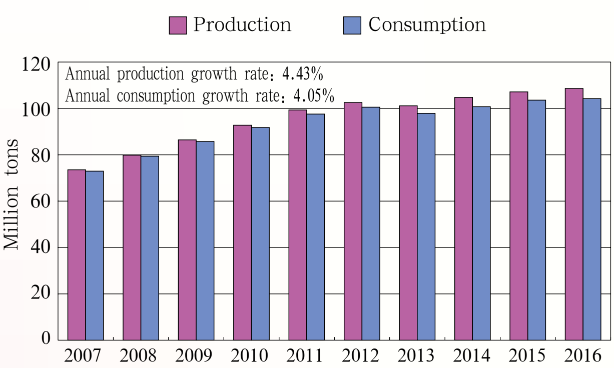


Fig.1 Total Production and Consumption of Paper & Board (2007—2016)

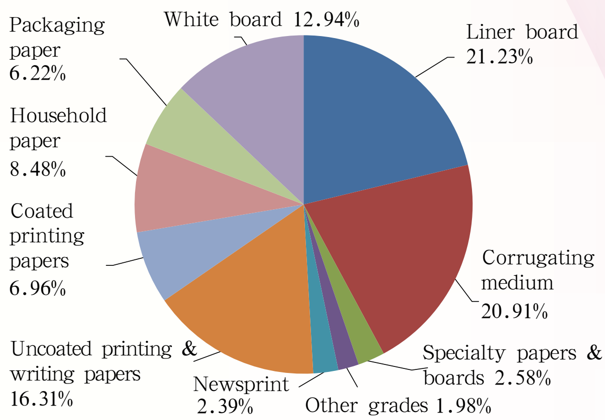


Fig.2 Shares of Production of Main Paper & Board Grades in the Nation's Gross in 2016

Table 1 Production and Consumption of Main Paper & Board Grades in 2016

Grade	Production			Consumption		
	2015 /million tons	2016 /million tons	Change /%	2015 /million tons	2016 /million tons	Change /%
Total amount	107.10	108.55	1.35	103.52	104.19	0.65
1. Newsprint	2.95	2.60	−11.86	2.99	2.65	−11.37
2. Uncoated printing & writing papers	17.45	17.70	1.43	16.80	16.89	0.54
3. Coated printing papers	7.70	7.55	−1.95	6.42	6.09	−5.14
Coated art paper	6.80	6.65	−2.21	5.96	5.65	−5.20
4. Household paper	8.85	9.20	3.95	8.17	8.54	4.53
5. Packaging paper	6.65	6.75	1.50	6.81	6.89	1.17
6. White board	14.00	14.05	0.36	12.99	12.65	−2.62
Coated white board	13.40	13.45	0.37	12.38	12.05	−2.67
7. Liner board	22.45	23.05	2.67	22.97	23.64	2.92
8. Corrugating medium	22.25	22.70	2.02	22.28	22.71	1.93
9. Specialty papers & boards	2.65	2.80	5.66	2.17	2.25	3.69
10. Other papers & boards	2.15	2.15	0.00	1.92	1.88	−2.08

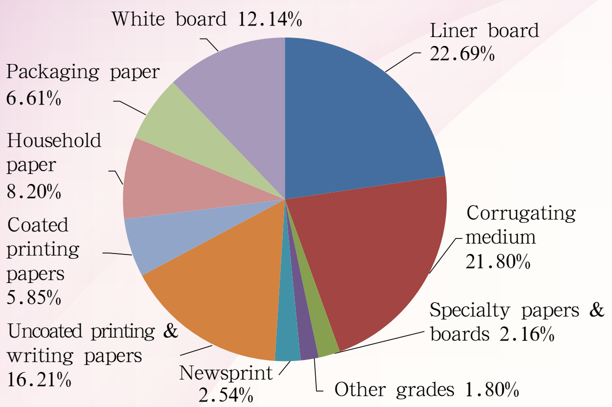


Fig.3 Shares of Consumption of Main Paper & Board Grades in the Nation's Gross in 2016

2. Production and Consumption of Main Paper & Board Grades

(1) Newsprint

In 2016, the production and consumption were 2.60 million tons and 2.65 million tons, decreased by 11.86% and 11.37% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were -5.91% and-4.28% respectvely. As shown in Fig. 4.

(2) Uncoated Printing & Writing Papers

In 2016, the production and consumption were 17.70 million tons and 16.89 million tons, increased by 1.43% and 0.54% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 3.14% and 2.67% respectively. As shown in Fig. 5.

(3) Coated Printing Papers

In 2016, the production and consumption were 7.55 million tons and 6.09 million tons, decreased by 1.95% and and 5.14% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 4.46% and 4.05% respectively. As shown in Fig. 6.

In which, the production and consumption of coated art paper were 6.65 million tons and 5.65 million tons, decreased by 2.21% and 5.20% compared with 2015 respectvely. The average annual growth rates of production and consumption from 2007 to 2016 were 5.24% and 4.91% respectvely. As shown in Fig. 7.

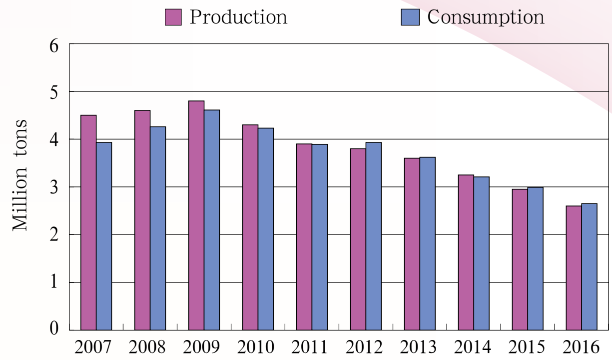


Fig.4 Production and Consumption of Newsprint (2007—2016)

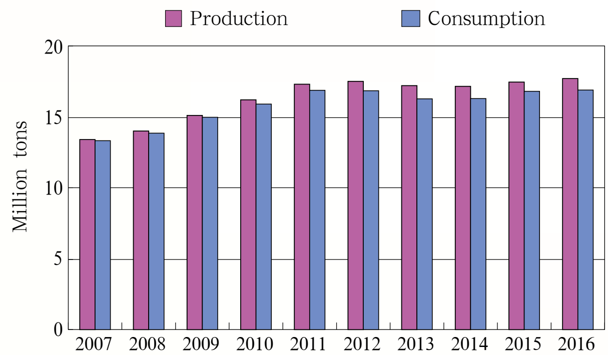


Fig.5 Production and Consumption of Uncoated Printing & Writing Papers (2007—2016)

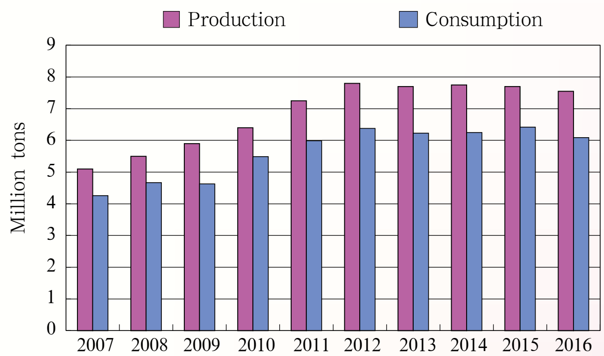


Fig.6 Production and Consumption of Coated Printing Papers (2007—2016)

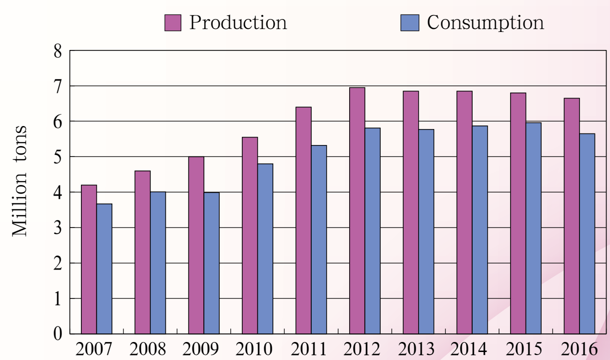


Fig.7 Production and Consumption of Coated Art Paper (2007—2016)

(4) Household Paper

In 2016, the production and consumption were 9.20 million tons and 8.54 million tons, increased by 3.95% and 4.53% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 6.54% and 6.71% respectively. As shown in Fig. 8.

(5) Packaging Paper

In 2016, the production and consumption were 6.75 million tons and 6.89 million tons, increased by 1.50% and 1.17% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 2.72% and 2.81% respectively. As shown in Fig. 9.

(6) White Board

In 2016, the production and consumption were 14.05 million tons and 12.65 million tons, increased by 0.36% and decreased by 2.62% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 3.28% and 1.96% respectively. As shown in Fig. 10.

In which, the production and consumption of coated white board were 13.45 million tons and 12.05 million tons, increased by 0.37% and decreased by 2.67% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 3.35% and 1.96% respectively. As shown in Fig. 11.

(7) Liner Board

In 2016, the production and consumption were 23.05 million tons

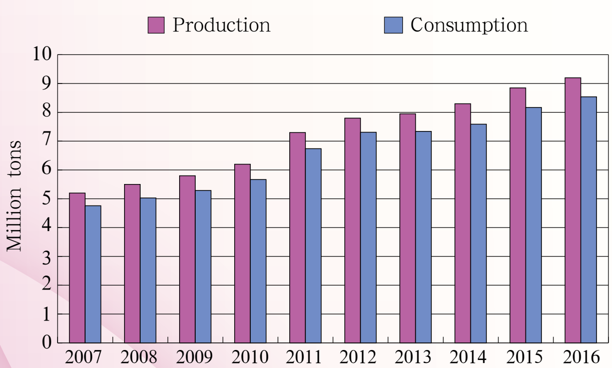


Fig.8 Production and Consumption of Household Paper (2007—2016)

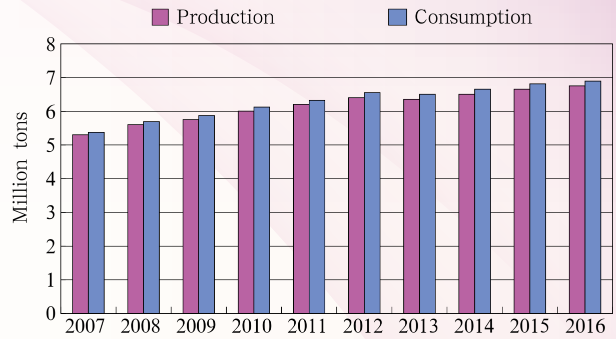


Fig.9 Production and Consumption of Packaging Paper (2007—2016)

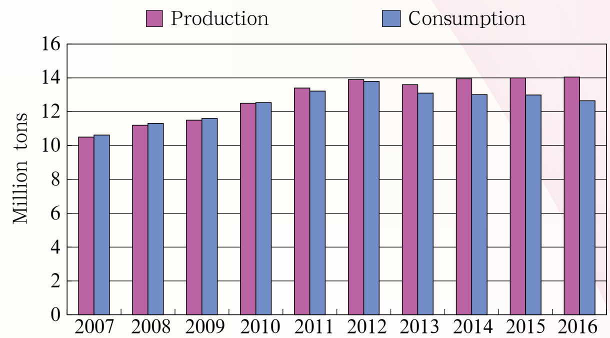


Fig.10 Production and Consumption of White Board (2007—2016)

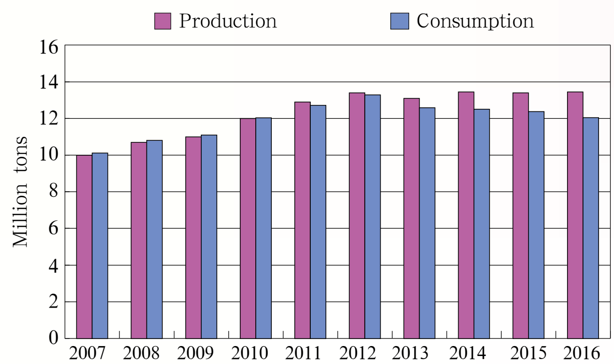


Fig.11 Production and Consumption of Coated White Board (2007—2016)

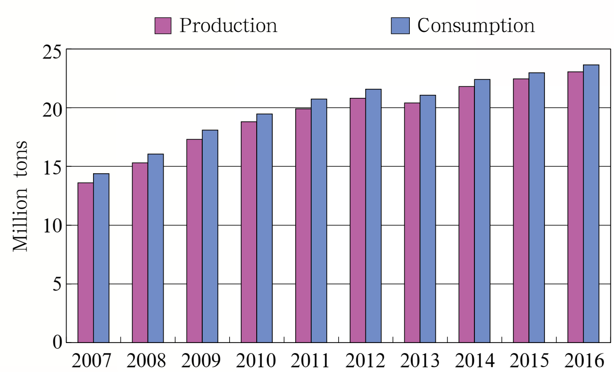


Fig.12 Production and Consumption of Liner Board (2007—2016)

and 23.64 million tons, increased by 2.67% and 2.92% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 6.04% and 5.68% respectively. As shown in Fig. 12.

(8) Corrugating Medium

In 2016, the production and consumption were 22.70 million tons and 22.71 million tons, increased by 2.02% and 1.93% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 6.03% and 5.91% respectively. As shown in Fig. 13.

(9) Specialty Papers & Boards

In 2016, the production and consumption were 2.80 million tons and 2.25 million tons, increased by 5.66% and 3.69% compared with 2015 respectively. The average annual growth rates of production and consumption from 2007 to 2016 were 9.87% and 5.75% respectively. As shown in Fig. 14.

II. Major Economic Indicators

According to the statistics released by the National Bureau of Statistics, in 2016, there were 2,757 paper and board producers whose scales were above the statistical threshold. The core business income was RMB 872.5 billion, increased by 6.98% compared with 2015. The growth rate of industrial added value was 6.70%. The products inventory was RMB 27.5 billion, decreased by 13.08% compared with 2015. The total pre-tax profits was RMB 48.6 billion, increased by 28.74% compared with 2015. The total asset was RMB 1003.7 billion, increased by 0.51% compared with 2015. The asset-liability ratio was 56.91%, decreased 1.83 percentage points. The total liability was RMB 571.2 billion, decreased by 2.98% compared with 2015. 316 mills accounting for 11.46% of total 2,757 mills were running with deficit.

The major economic indicators from 2007 to 2016 were shown in Fig.15 and Fig.16.

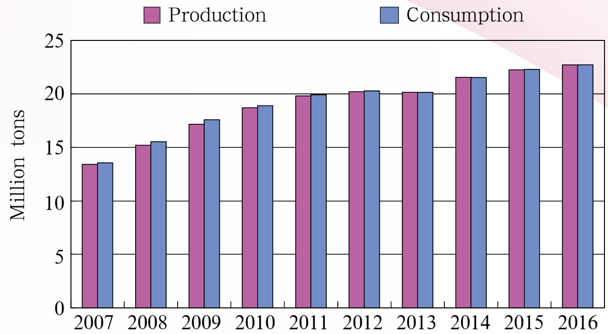


Fig.13 Production and Consumption of Corrugating Medium (2007—2016)

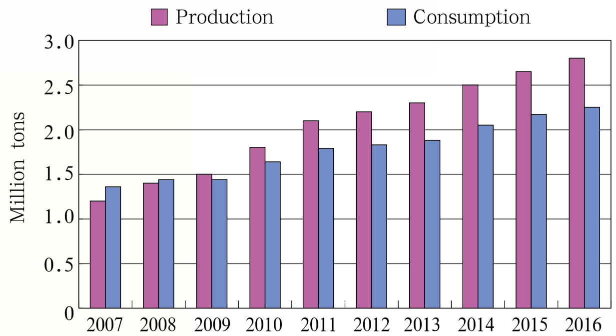
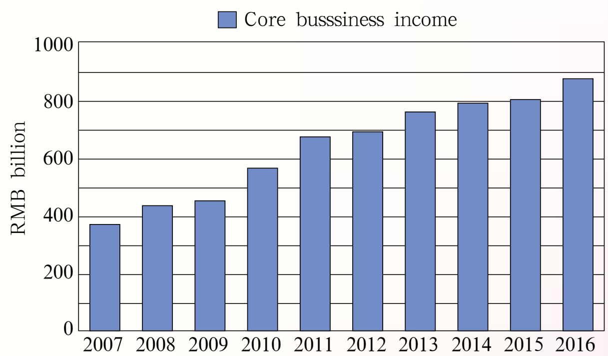
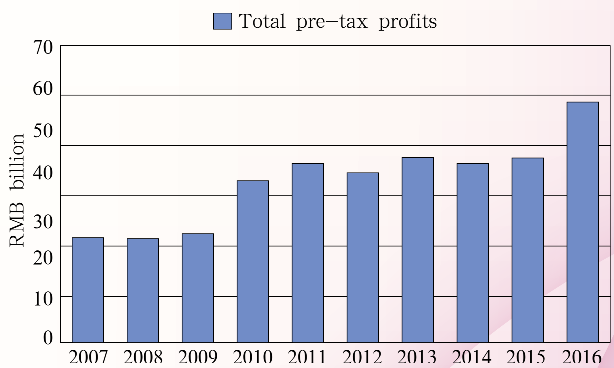


Fig.14 Production and Consumption of Specialty Papers & Boards (2007—2016)



Note: The datas from 2007 to 2010 form CPA.

Fig.15 Core Bussiness Income (2007—2016)



Note: The datas from 2007 to 2010 form CPA.

Fig.16 Total Pre-tax Profits (2007—2016)

III. Production and Consumption of Pulp

1. Production of Pulp

According to CPA's survey, the total pulp production was 79.25 million tons in 2016, decreased by 0.74% compared with the previous year. In which, wood pulp was 10.05 million tons, increased by 4.03%; pulp from waste paper was 63.29 million tons, decreased by 0.14%; non-wood pulp production was 5.91 million tons, decreased by13.08% compared with 2015. As shown in Table 2.

2. The Consumption of Pulp

In 2016, the total pulp consumption was 97.97 million tons, increased by 0.68%. The consumption of wood pulp was 28.77 million tons, and its share in total pulp consumption was 29%; in which, imported wood pulp accounted for 19%, domestic wood pulp accounted for 10%. The consumption of pulp from wastepaper was 63.29 million tons, and its share in total pulp

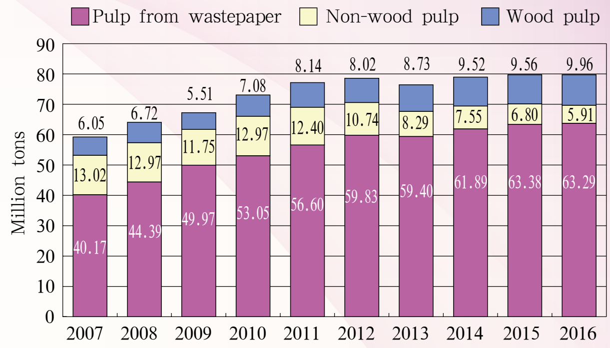


Fig.17 Consumption of Domestic Pulp (2007—2016)

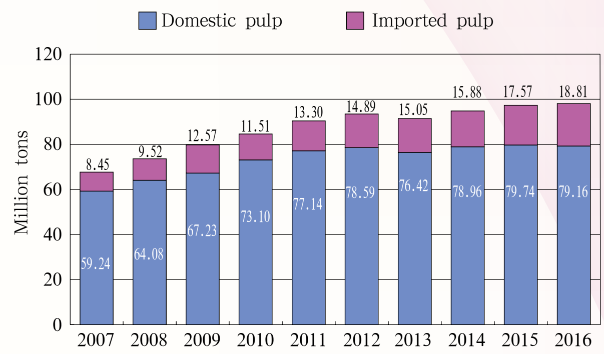


Fig.18 Consumption of Pulp (2007—2016)

Table 2 Pulp Production in 2007—2016 **Million tons**

Grades / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total pulp	**59.24**	**64.15**	**67.33**	**73.18**	**77.23**	**78.67**	**76.51**	**79.06**	**79.84**	**79.25**
1. Wood pulp	6.05	6.79	5.60	7.16	8.23	8.10	8.82	9.62	9.66	10.05
2. Pulp from wastepaper	40.17	44.39	49.97	53.05	56.60	59.83	59.40	61.89	63.38	63.29
3. Non-wood pulp	13.02	12.97	11.76	12.97	12.40	10.74	8.29	7.55	6.80	5.91
Reed pulp	1.44	1.50	1.44	1.56	1.58	1.43	1.26	1.13	1.00	0.68
Bagasse pulp	0.90	0.97	0.98	1.17	1.21	0.90	0.97	1.11	0.96	0.90
Bamboo pulp	1.20	1.46	1.61	1.94	1.92	1.75	1.37	1.54	1.43	1.57
Wheat & rice straw pulp	8.49	8.08	6.76	7.19	6.60	5.92	4.01	3.36	3.03	2.44
Other pulps	0.99	0.97	0.97	1.11	1.09	0.74	0.68	0.41	0.38	0.32

Table 3 Pulp Consumption in 2016 **Million tons**

Pulp grades	2015	Share/%	2016	Share/%	Change/%
Total consumption	97.31	100	97.97	100	0.68
Wood pulp	27.13	28	28.77	29	6.04
Imported wood pulp	17.57*1	18	18.81*2	19	7.06
Pulp from wastepaper	63.38	65	63.29	65	−0.14
Pulp from imported wastepaper	23.92	25	23.08	24	−3.51
Non-wood pulp	6.80	7	5.91	6	−13.09

Note: *1 Import of wood pulp in 2015 was 19.84 million tons, deduct dissolving pulp of 2.27 million tons, and actual consumption was 17.57 million tons;
*2 Import of wood pulp in 2016 was 21.06 million tons, deduct dissolving pulp of 2.25 million tons, and actual consumption was 18.81 million tons.

consumption was 65%; in which, the pulps from imported and domestic waste paper accounted for 24% and 41% respectively. The consumption of non-wood pulp was 5.91 million tons, and its share in total pulp consumption was 6%; in which, wheat & rice straw pulps accounted for 2.5%, bamboo pulp accounted for 1.6%, reed pulp accounted for 0.7%, bagasse pulp accounted for 0.9%, other non-wood pulps accounted for 0.3%. As shown in Table 3, Fig. 17 and Fig. 18.

IV Production and Consumption of Converted Paper Products

According to the statistics from National Bureau of Statistics, there were 3,895 converted paper products enterprises whose scales were above the statistical threshold in 2016. Their production was 71.90 million tons, increased by 2.16% compared with 2015; the consumption was 69.11 million tons, increased by 2.14%; the import amount was 120,000 tons and the export amount was 2.91 million tons. The average annual growth rates of production and consumption were 11.43% and 11.58% respectively from 2007 to 2016. As shown in Fig.19.

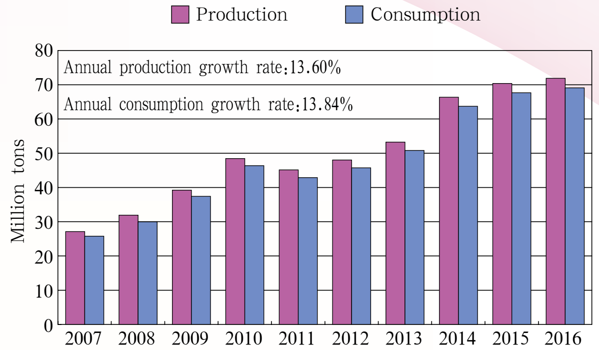


Fig.19 Production and Consumption of Converted Paper Products (2007—2016)

V. Import and Export of Paper & Board, Pulp, Waste paper and Converted Paper Products

1. Import of Paper & Board, Pulp, Waste paper and Converted Paper Products

Table 4 Imports of Pulp, Wastepaper, Paper & Board and Converted Paper Products in 2016

Grades	Import		
	2015 /10,000 tons	2016 /10,000 tons	Change /%
I. Pulp	1984	2106	6.15
II. Wastepaper	2928	2850	−2.66
III. Paper & board	287	297	3.48
1. Newsprint	6	6	0.00
2. Uncoated printing & writing papers	37	41	10.81
3. Coated printing papers	34	35	2.94
Coated art paper	26	26	0.00
4. Packaging paper	21	21	0.00
5. Liner board	84	94	11.90
6. White board	61	58	−4.92
Coated white board	60	57	−5.00
7. Household paper	3	3	0.00
8. Corrugating medium	9	8	−11.11
9. Specialty papers & boards	26	26	0.00
10. Other papers & boards	6	5	−16.67
IV. Paper products	12	12	0.00
Total amount	**5211**	**5265**	**1.04**

Data source: General Administration of Customs.

Table 5 Exports of Pulp, Wastepaper, Paper & Board and Converted Paper Products in 2016

Grades	Export		
	2015 /10,000 tons	2016 /10,000 tons	Change /%
I. Pulp	10.20	9.57	−6.18
II. Wastepaper	0.07	0.23	228.57
III. Paper & board	645	733	13.64
1. Newsprint	2	1	−50.00
2. Uncoated printing & writing papers	102	122	19.61
3. Coated printing papers	162	181	11.73
Coated art paper	110	126	14.55
4. Packaging paper	5	7	40.00
5. Liner board	32	35	9.38
6. White board	162	198	22.22
Coated white board	162	197	21.60
7. Household paper	71	69	−2.82
8. Corrugating medium	6	7	16.67
9. Specialty papers & boards	74	81	9.46
10. Other papers & boards	29	32	10.34
IV. Paper products	284	291	2.46
Total amount	**939.27**	**1033.80**	**10.06**

Data source: General Administration of Customs.

In 2016, the import amount of paper & board was 2.97 million tons, increased by 3.48% compared with 2015. The import amount of pulp was 21.06 million tons, increased by 6.15% compared with 2015. The import amount of waste paper was 28.50 million tons, decreased by 2.66% compared with 2015. The import amount of converted paper products was 120,000 tons, as the same as the previous year.

In 2016, the total import amount of paper & board, pulp, waste paper, converted paper products was 52.65 million tons, increased by 1.04% compared with 2015; their total cost was USD 21.17 billion, decreased by 4.12% compared with 2015. The average price of imported paper & board was USD 1,097.56 per ton, decreased by 5.57% compared with 2015. The average price of imported pulp was USD 581.12 per ton, decreased by 9.60% compared with 2015. The average price of imported waste paper was USD 175.06 per ton, decreased by 2.91% compared with 2015. As shown in Table 4.

2. Export of Paper & Board, Pulp, Wastepaper and Converted Paper Products

In 2016, the export amount of paper & board was 7.33 million tons and increased by 13.64% compared with 2015. The export amount of pulp was 95,700 tons, decreased by 6.18% compared with 2015. The export amount of waste paper was 2300 tons, increased by 228.57% compared with 2015. The export amount of converted paper products was 2.91 million tons, increased by 2.46%.

In 2016, the total export amount of paper & board, pulp, waste Paper, converted paper products was 10,338.0 thousand tons, increased by 10.06%, their total earning was USD 17.75 billion, decreased by 6.41% compared to 2015. The average price of exported paper & board was USD 1,235.85 per ton, decreased by 12.85%. The average price of exported pulp was USD 1,139.84 per ton, increased by 3.09%. As shown in Table 5.

3. Shares of Imported and Exported Major Paper & Board Grades

The shares of imported and exported major paper & board grades are shown in Fig.20 and Fig.21.

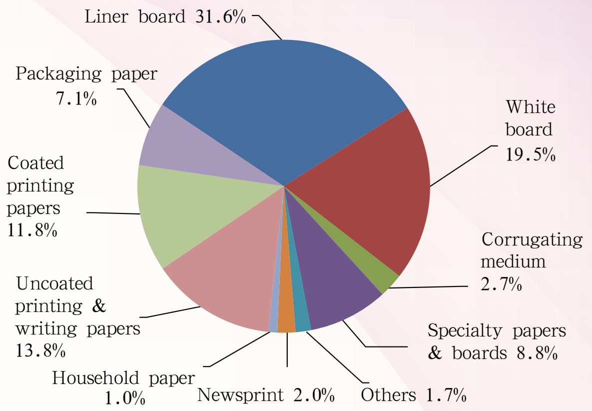


Fig.20 The Shares of Imported Paper & Board Grades in 2016

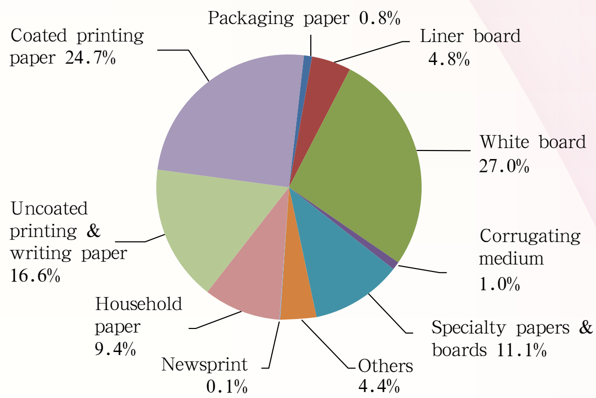


Fig.21 The Share of Exported Paper & Board Grades in 2016

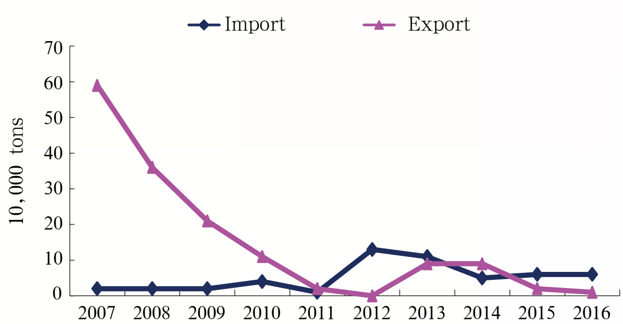


Fig.22 Import and Export of Newsprint (2007—2016)

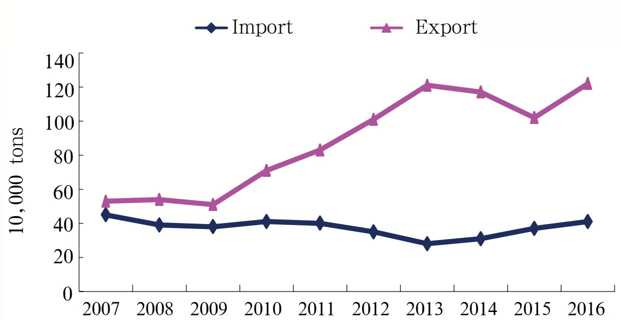


Fig.23 Import and Export of Uncoated Printing & Writing Papers (2007—2016)

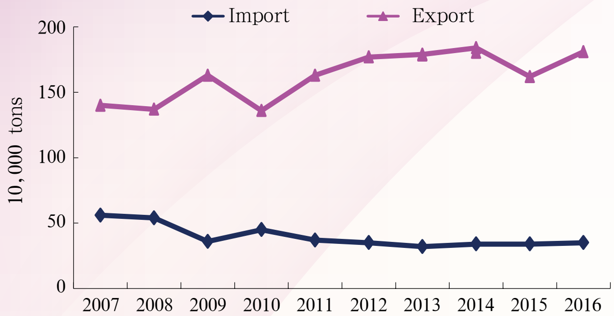


Fig.24 Import and Export of Coated Printing Papers (2007—2016)

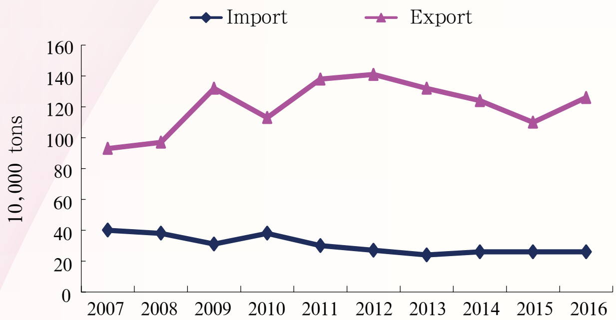


Fig.25 Import and Export of Coated Art Paper (2007—2016)

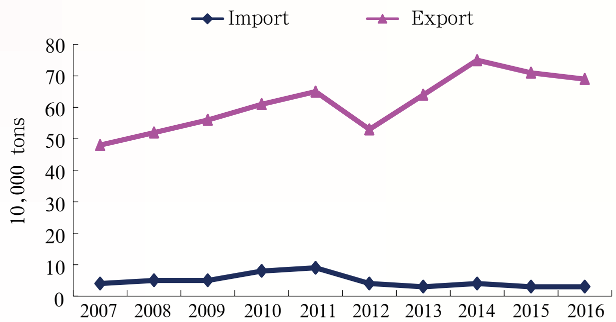


Fig.26 Import and Export of Household Paper (2007—2016)

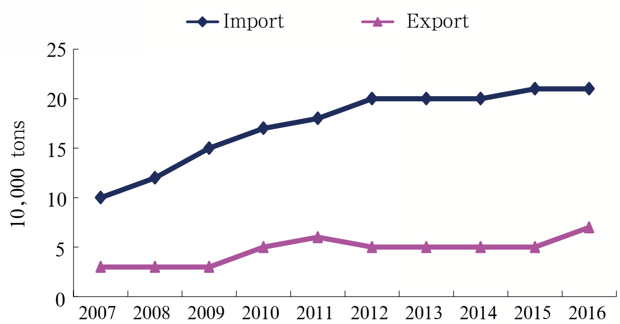


Fig.27 Import and Export of Packaging Paper (2007—2016)

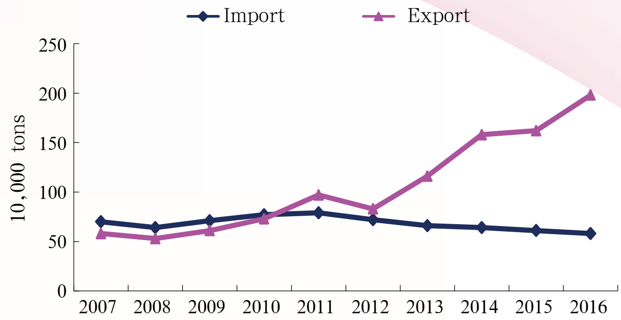


Fig.28 Import and Export of White Board (2007—2016)

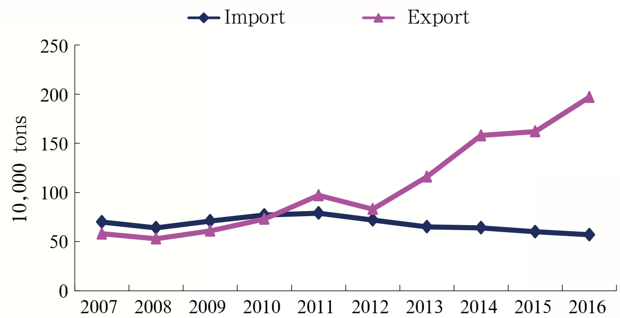


Fig.29 Import and Export of Coated White Board (2007—2016)

4. Import and Export of Major Paper Grades from 2007 to 2016

The imports and exports of major paper grades from 2007 to 2016 were showed in Fig. 22- Fig. 32.

(1) Newsprint: its import exceeded the export and the net import amount was 50,000 tons in 2016, as shown in Fig. 22.

(2) Uncoated printing & writing papers: its export exceeded the import and the net export amount was 810,000 tons in 2016, as shown in Fig. 23.

(3) Coated printing papers: its export exceeded the import and the net export amount was 1.46 million tons in 2016, as shown in Fig. 24; in which, the export of coated art paper exceeded the import and the net export amount was one million tons, as shown in Fig. 25.

(4) Household paper: its export exceeded the import and the net export amount was 660,000 tons in 2016, as shown in Fig. 26.

(5) Packaging paper: its import exceeded the export and the net import amount was 140,000 tons in 2016, as shown in Fig. 27.

(6) White board: its export exceeded the import and the net export amount was 1400,000 tons in 2016, as shown in Fig. 28; in which, the export of coated white board exceeded import and the net export amount was 1400,000 tons, as shown in Fig. 29.

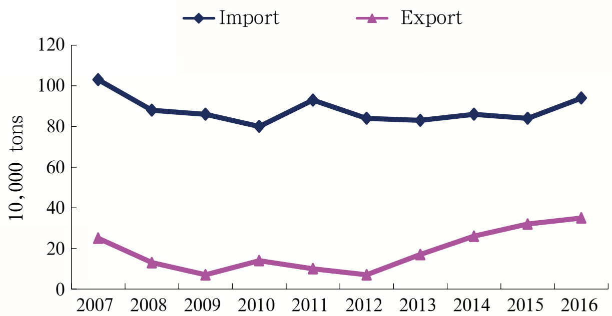


Fig.30 Import and Export of Liner Board
(2007—2016)

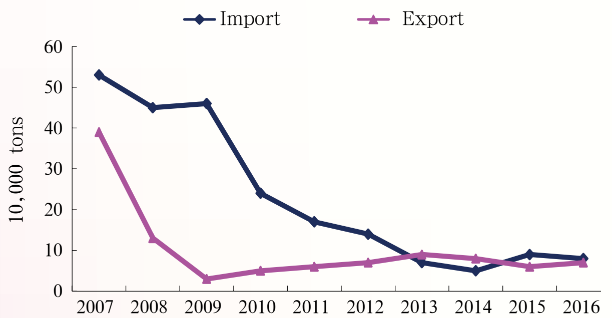


Fig.31 Import and Export of Corrugating Medium
(2007—2016)

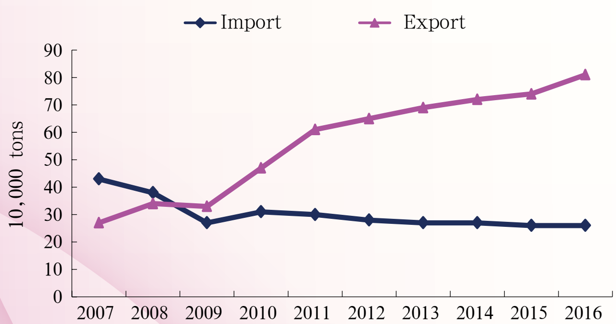


Fig.32 Import and Export of Specialty Papers & Boards
(2007—2016)

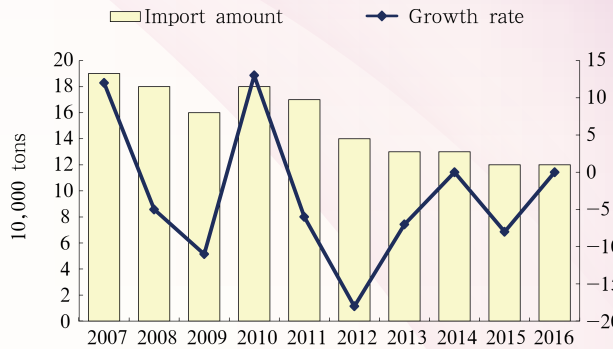


Fig.33 Import of Coverted Paper Products
(2007—2016)

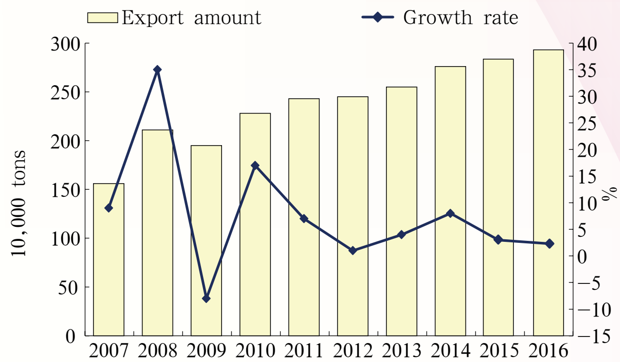


Fig.34 Export of Converted Paper Products
(2007—2016)

(7) Liner board: the import exceeded the export and the net import amount was 590,000 tons in 2016, as shown in Fig. 30.

(8) Corrugating medium: its import exceeded the export and the net import amount was 10,000 tons in 2016. As shown in Fig. 31.

(9) Specialty papers & boards: its export exceeded the import and the net export amount was 550,000 tons in 2016, as shown in Fig. 32.

5. Import and Export of Converted Paper Products from 2007 to 2016

The imports and exports of converted paper products from 2007 to 2016 were showed in Fig. 33- Fig. 34.

(1) The import amount of converted paper products was 120,000 tons in 2016, as the same as 2015. As shown in Fig. 33.

(2) The export amount of converted paper products was 2.91 million tons, increased by 2% compared with 2015. As shown in Fig. 34.

VI. Production Distribution and Centralization

According to the survey of CPA, in 2016, the total paper & board production of 11 provinces (regions, cities) in eastern China

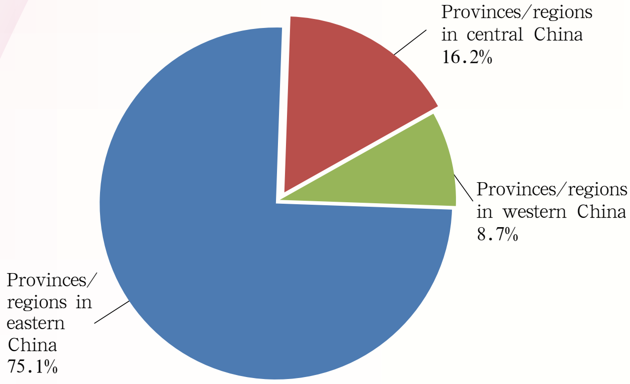


Fig.35 Regional Distribution of China's Paper Industry in 2015

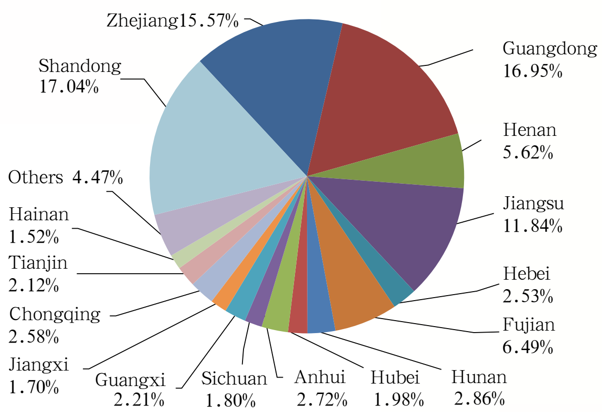


Fig.36 The Production Share of Major Provinces in 2015

Table 6 Production Distribution of China's Paper Industry in 2016

	2015		2016	
	Production /million tons	Share /%	Production /million tons	Share /%
Total production	107.10	100	108.55	100
1. Eastern	80.35	75.0	81.53	75.1
2. Central	17.50	16.3	17.58	16.2
3. Western	9.25	8.7	9.44	8.7

Data source: CPA.

Table 7 Provinces with Paper & Board Production Over 1 Million Tons in 2016

Province /regions/cities	2015 /million tons	2016 /million tons	Change/%
Shandong	17.80	18.50	3.93
Guangdong	18.20	18.40	1.10
Zhejiang	16.50	16.90	2.42
Jiangsu	13.05	12.85	−1.53
Fujian	6.65	7.05	6.02
Henan	6.00	6.10	1.67
Hunan	3.20	3.10	−3.13
Anhui	2.65	2.95	11.32
Chongqing	2.90	2.80	−3.45
Hebei	3.05	2.75	−9.84
Guangxi	2.30	2.40	4.35
Tianjin	2.35	2.30	−2.13
Hubei	2.30	2.15	−6.52
Sichuan	1.90	1.95	2.63
Jiangxi	1.73	1.85	6.94
Hainan	1.68	1.65	−1.79
Total amount	**102.26**	**103.70**	**1.41**

Data source: CPA.

accounted for 75.1% of the nation's gross; the total production of the 8 provinces (regions, cities) in central China accounted for 16.2%; and the total production of the 12 provinces (regions, cities) in western China accounted for 8.7%. As shown in Table 6 and Fig. 35.

There were 16 provinces (regions, cities) where the paper & board production exceeded 1 million tons in 2016, they were Shandong, Guangdong, Zhejiang, Jiangsu, Fujian, Henan, Hunan, Anhui, Chongqing, Hebei, Guangxi, Tianjin, Hubei, Sichuan, Jiangxi and Hainan, their total production reached 103.70 million tons, accounted for 95.53% of nation's gross, as shown in Table 7, Fig. 36.

VII. Environmental Protection

According to the statistics of the Ministry of Environmental Protection in 2015, the water consumption of pulping & papermaking and paper converting enterprises (the number of surveyed enterprises was 4,180, decreased 484 compared with the previous year) was 11.835 billion tons; of which freshwater consumption was 2.898 billion tons and accounted for 7.5% of the Nation's total industrial fresh water consumption of 38.696 billion tons. The recycled water was 8.937 billion tons and water recycling rate was 75.5%. Freshwater consumption per RMB 10,000 output values (current price) was 40.6 tons, decreased by 12.1% (i.e. 5.6 tons) compared with 2014. The effluent discharge from paper industry was 2.367 billion tons in 2015, accounted for 13.0% of the nation's total industrial effluent discharge 18.155 billion tons. The COD in discharged effluent from pulp and paper industry was 335,000 tons and decreased by 29.9% (i.e. 143,000 tons) compared with 478,000 tons in 2014, accounted for 13.1% of the nation's total industrial COD discharge 2,555,000 tons. The COD discharge intensity for RMB 10,000 output values (current price) of pulp and paper industry was 4.7 kg, decreased by 28.8% compared with 2014. The ammonia nitrogen in discharged effluent was 12,000 tons, accounted for 6.1% of the nation's total industrial ammonia nitrogen emission 196,000 tons. The ammonia nitrogen discharge intensity for RMB 10,000 output

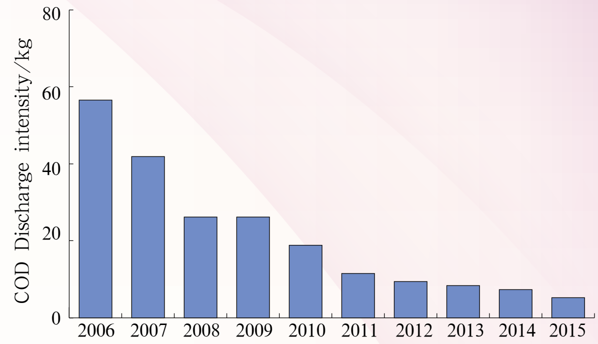


Fig.37 COD Discharge Intensity of RMB 10,000 Output Value (2006—2015)

values (current price) of pulp and paper industry was 0.17 kg, decreased by 22.7%. The annual operating cost for wastewater treatment facilities of paper industry was RMB 5.42 billion, decreased RMB 0.27 billion compared with 2014 (as shown in Fig. 37).

In 2015, the SO_2 emission from paper and converted paper products industries was 371,000 tons, decreased by 10.0% compared with 2014. The nitrogen oxide emission was 220,000 tons, increased by 13.4% compared with 2014. The discharged smoke and dust was 138,000 tons, decreased by 2.8% compared with 2014. The annual operation cost for exhaust gas treatment facilities was RMB 2.05 billion, increased by 18.5%.

VIII. Summary

In 2016, with the steady development of China's economy and the restoration of confidence in the market, the paper industry overcame many unfavorable factors such as a rise in prices of energy, transportation, and raw material, achieved a smooth production and operation, kept a balance between production and sales, increased profit, maintained the smooth development of paper industry through adopting the measures including intensifying the restructuring, adapting to the changes in market demand, exploiting potentialities, saving energy and reducing consumption, reducing production costs, and improving the product quality and so on.

Attached Table Top 30 Paper Enterprises Ranked by Production in 2016

Rank	Enterprises	Production		
		2015 /10,000 tons	2016 /10,000 tons	Change/%
1	Nine Dragons Paper Co., Ltd.	1263.00	1331.00	5.38
2	Lee & Man Paper Manufacturing Limit Ltd.	519.45	543.13	4.56
3	Shandong Chenming Paper Group Co., Ltd.	418.00	442.55	5.87
4	Shandong Sun Paper Co., Ltd.	313.88	378.93	20.72
5	Anhui Shanying Paper Co., Ltd.	294.00	354.00	20.41
6	Shandong Huatai Group Co., Ltd.	307.98	318.65	3.46
7	Fujian Liansheng Paper	232.00	235.00	1.29
8	China Paper Corporation	222.10	234.00	5.36
9	Ningbo Zhonghua Paper Co., Ltd.	199.31	223.90	12.34
10	Gold East Paper (Jiangsu) Co., Ltd.	203.38	207.73	2.14
11	Shandong Bohui Paper Co., Ltd.	181.00	197.85	9.31
12	Jiangsu Longchen Greentech Co., Ltd	160.83	189.53	17.84
13	Dongguan Jianhui Paper Co., Ltd.	135.43	143.00	5.59
14	Zhejiang Jingxing Paper Co., Ltd.	123.11	131.00	6.41
15	Gold Hongye Paper Group Co., Ltd.	123.66	129.34	4.59
16	Shandong Sunshine Paper Group Co., Ltd.	113.79	124.61	9.51
17	Hainan Jinhai Pulp & Paper Co., Ltd.	107.69	108.85	1.08
18	Dongguan Jinzhou Paper Co., Ltd.	85.27	105.91	24.21
19	UPM-Kymmene (China) Paper Co., Ltd.	89.50	100.00	11.73
20	Shandong Tralin Paper Co., Ltd.	77.37	93.06	20.28
21	Zhejiang Yongzheng Holding Co., Ltd.	105.59	83.90	−20.54
22	Xinxiang Xinya Paper Group Co., Ltd.	68.59	75.86	10.60
23	Wuhan Golden Phoenix Paper Co., Ltd.	47.30	73.22	54.80
24	Zhejiang Xinshengda Holding Group Co., Ltd.		70.99	
25	Gold Huasheng Paper (Suzhou Ind'l Park) Co., Ltd.	62.80	62.60	−0.32
26	Dahe Paper Co., Ltd.	62.00	59.32	−4.32
27	Shandong Guihe Xianxing Paper Co., Ltd.	55.83	57.59	3.15
28	Guangzhou Paper Group Co., Ltd.	53.50	50.50	−5.61
29	Shandong Henglian Investment Co., Ltd.	41.75	50.29	20.46
30	Asia Symbol (Guangdong) Paper Co., Ltd.	49.20	50.00	1.63

Note: based on the collected data.