Situation and Trends of PM Industry in China



Dr. Cai Rang

Board Chairman of CISRI Group

Chairman of CPMA

2015/11/08





Situation of PM Industry in China, 2014

New Challenges & Opportunities for PM





Situation of PM Industry in China, 2014

New Challenges & Opportunities for PM







Chinadaily.com.cn

Source: National Bureau of Statistics of China



Industrial Output, Real Estate Investment & Export

- Continued downward pressures from weak external demand (exports) and reduction of inventory in traditional industries related to the real estate had caused GDP growth to drop to 6.9% in Q3, the weakest since the first quarter of 2009.
- Industrial output in September slowed further to 5.7 percent from 6.1 percent in August, while fixed-asset investment growth—a key driver of the economy—fell further to 10.3 percent in the first nine months.
- In Q3, the property slump and export weakness contained industrial sales and profit margins and lifted spare capacity, particularly in heavy industry, such as cement and steel.



Consumption & Service Help Sharp Slowdown Avoided

- From January to September, spending on consumption contributed 58.4 percent of growth, compared with 49.1 percent a year ago. Retail sales strengthened from 10.5 percent in July to 10.9 percent in September.
- For the first time, service industries comprised more than half (51.4 percent) of GDP. Services, including the financial sector, had made great contribution even though the stock market declined significantly.
- Consumption function as the key cushion, preventing a sharper overall slowdown.
- Quarter-on-quarter, the economy grew by 1.8 percent. The forces that prop up the economy and drag it down have reached a new equilibrium.



Economic Rebalancing With Weak Growth

- The acceleration of macro policy easing in Q4.Risk of an even sharper real estate downturn and a material slowdown in infrastructure have eased.
- The 'propping-up' forces include ongoing re-industrialization and urbanization, the untapped hinterland regions, and the upgrading of consumption.
- Rebalancing is evident. GDP expected growth of 6.9% in 2015 and 6.3% in 2016.
- The PM Industry in China, benefiting from the consumer electronics and the auto-industry, were not too bad during the past Q3 of 2015 and the whole year of 2014. But in next year, it will be full of challenges.



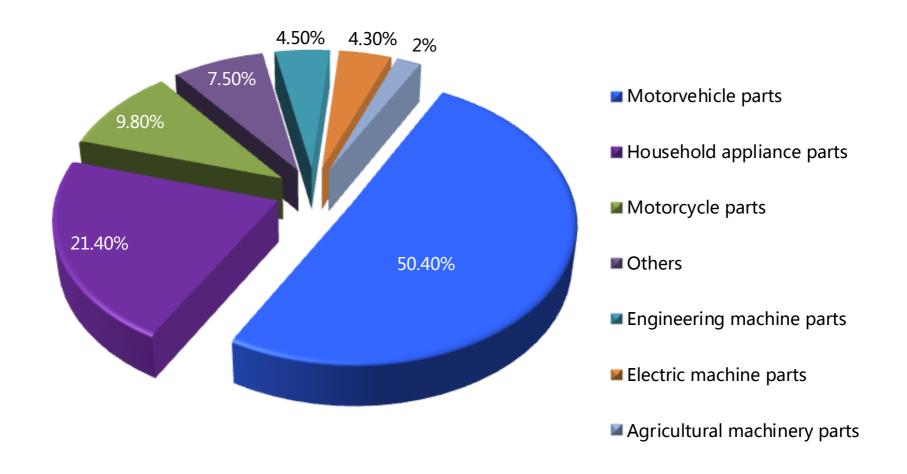


Situation of PM Industry in China, 2014

New Challenges & Opportunities for PM



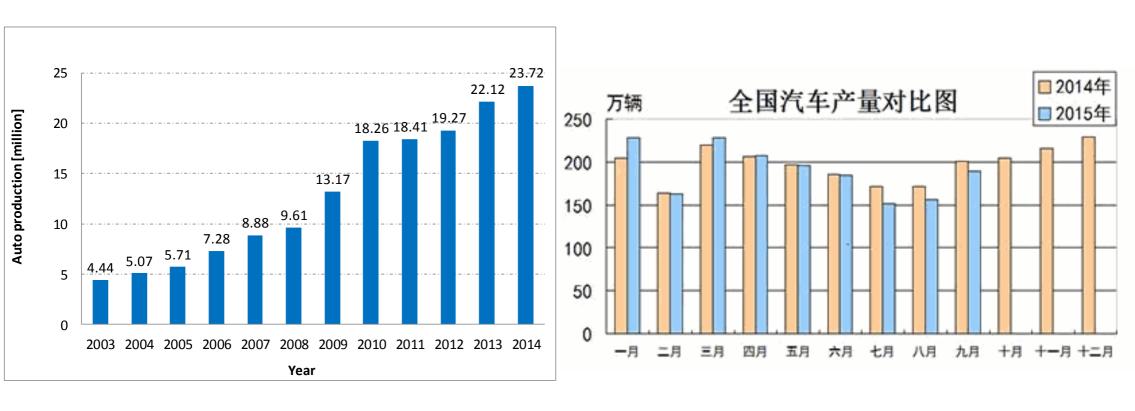
Applications of PM Industry in China, 2014



(Source: CMPMA)



Auto Industry, 2014 and Q3 of 2015 in China

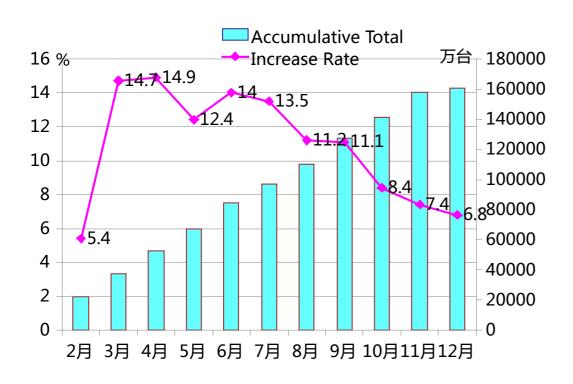


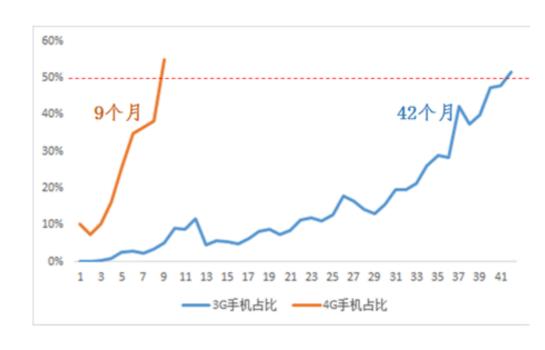
Yields of the motor vehicle in 2014 up to 23.7 million, increase 7.3%. While for the motor cycles, 21.3 million, decreased 7.08%. From Jan. to Sep. in 2015, out put of the motor vehicle reached 17.09 million, decreased 0.82%. Sales amount up to 17.05 million, increase only 0.31%.

(Source: CAAM)



Mobile Phone, 2014 and Q3 of 2015 in China





(Source: CAICT)

1.63 Billion mobile phone produced in 2014, growing 6.8% than 2013.

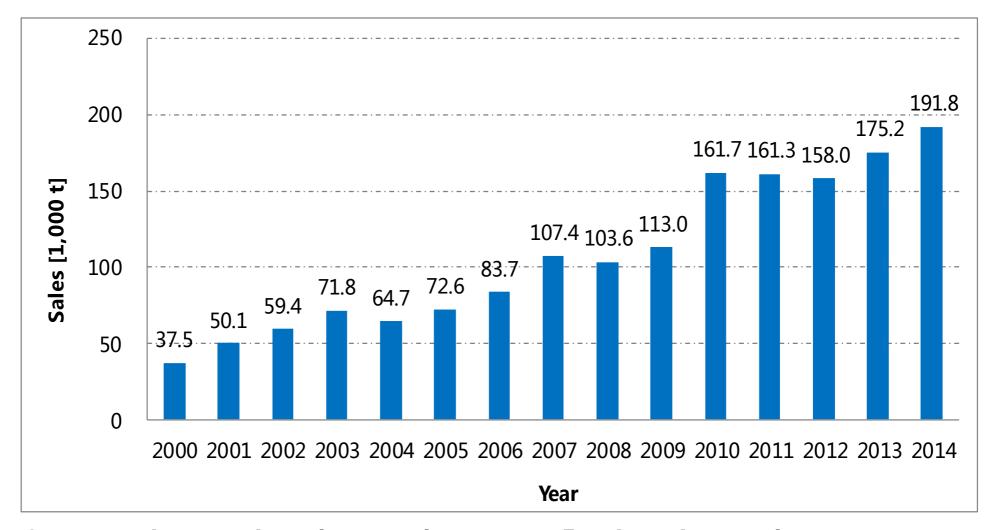
From Jan. to Sep. in 2015, total production amout was 1.21 Billion, decrease 1.6% comparing to the same period of last year. But for the 4G smart mobile phone among of it, delivery amount in past Q3 2015 up to 0.33 Billion, increase 15.1%.

Covering rate to the 50%, from 2G to 3G cost 42 months, whereas from 3G to 4G only spent 9 months.

Now four native makers shipment list from 2 to 5 in China.



PM Mechanical Parts in China, 2014

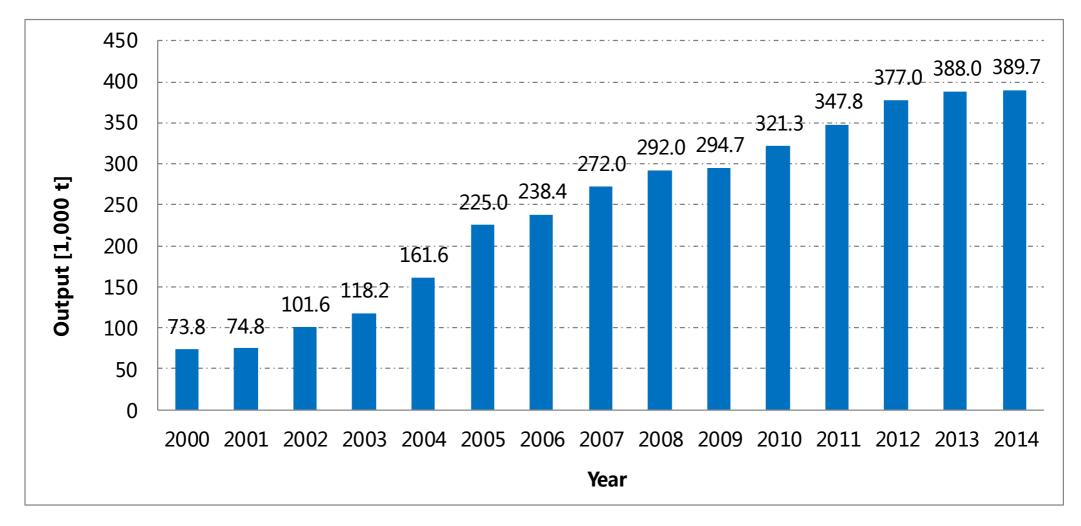


Over 190 thousand ton in 2014, increase 9.5% than the previous year.

(Source: CMPMA, based on the 53 companies registered in CMPMA)







<50% native made iron and steel raw powders serve to the PM auto parts

(Source: PMACS, based on the 35 companies registered in PMACS, Yuan Yong)

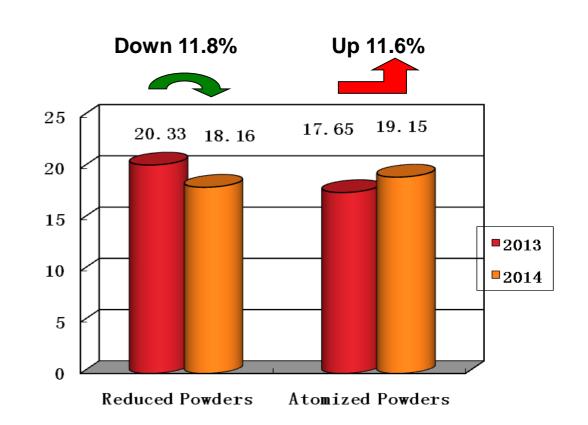


Iron & Steel Powders by Reduction and Atomization

- Reduced iron powder decreased 11.8% than 2013.
- Atomized iron & steel powders increased 11.6% than 2013, and was the first time over the total output of reduced iron powder.

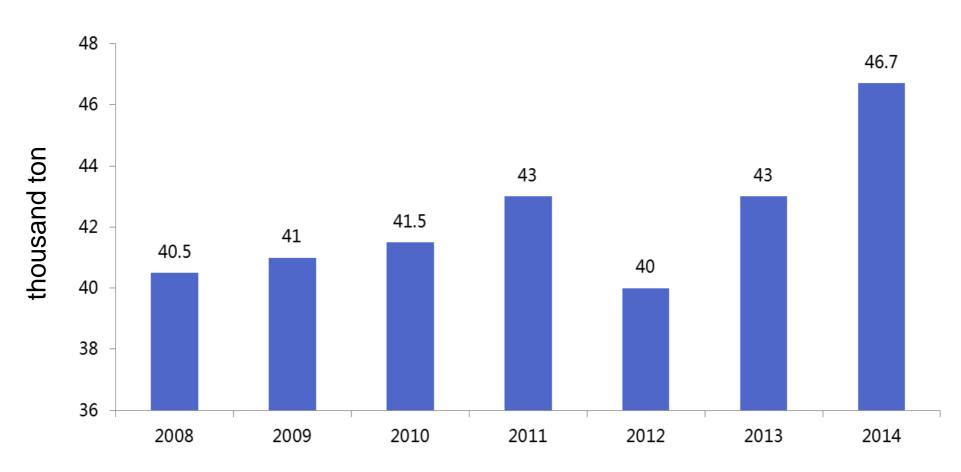
Because:

- Raw materials easily obtained
- Over investment, led to critical competition, cheaper than reduced powders.
- Low price of atomized iron & steel powders raised the percentage of covering rate, instead of some reduced powders.





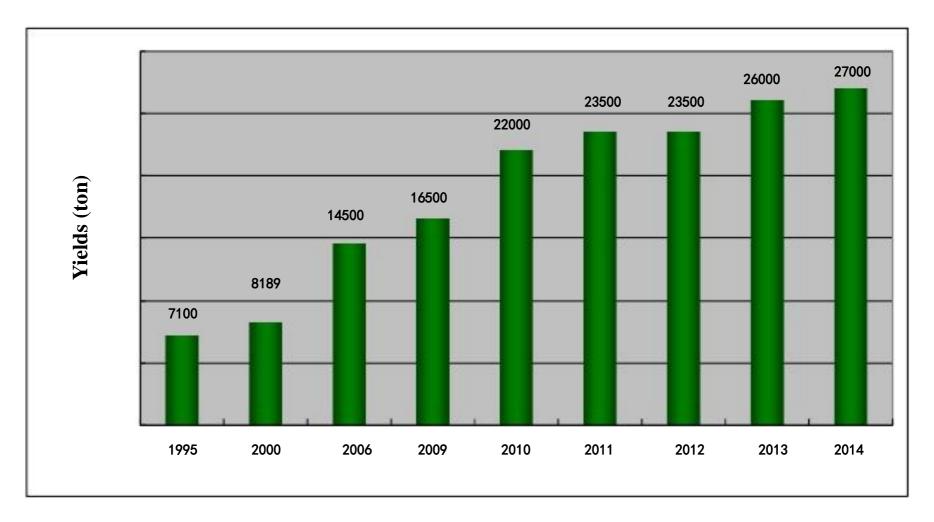




Increase about 8.5% in 2014 over the previous year



Cemented Carbide & W/Mo Products



27 thousand ton in 2014, growing 3.8% than last year

(Source: CWTIA, based on over 300 companies, Zhang ZhongJian)



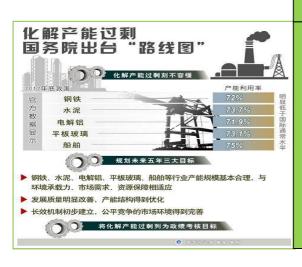


Situation of PM Industry in China, 2014

New Challenges & Opportunities for PM



Chinese Economic Restructuring



Invested Industries

Cut off overload capacity

Iron & Steel

Glass & Cement

Main ten kinds non ferrous metal, Al...

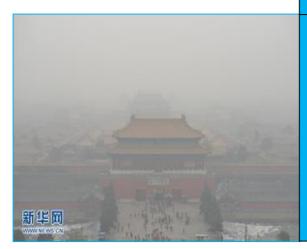
Ship building

General & construction machine Solar cell & LED

—>

Developing new product.

Resource & Environment



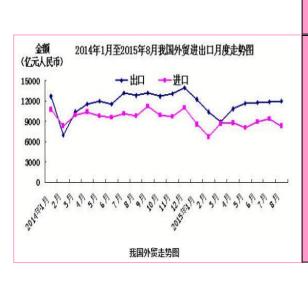
High fossil energy consumption cause heavy pollution



New Energy Saving, environmental protection, Modern traffic, Medical & Heath care



Chinese Economic Restructuring



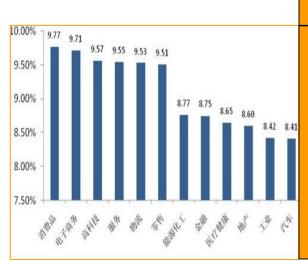
Foreign Trade

World market requirement still on low level.

High foreign exchange rate of RMB.

Trade protectionism intense trade
frictions

Expanding the domestic demand



Labor

Population is aging.

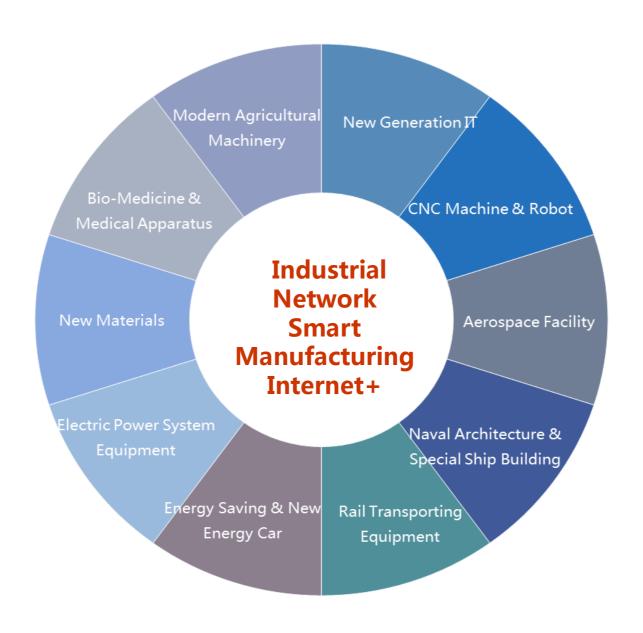
labor cost growth rate near 15% in city and town.



Automatic control system,
Smart manufacturing,
cooperation and good
management



Ten Key Points of 'Chinese Manufacturing Plan 2025'





New Challenges & Opportunities for PM

PM releated

New Materials New Energy Car

Energy sav.
Environment
Prot.
Equipment

Bio-Medical

ICT

Special
Functional,
High Perform.
Structural,
Re-forced
composite
3D Printing..

lithium cell Driving Motor Control SYS. HEV,BEV, E-Flex, fuelcell

Nuclear, New Energy & Energy saving, Smart grid Recycling Sys.

New & traditional Chinese medicine Apparatus instruments Remote & on-line

4G/5G-LTE IC,Chip, Display.. High Speed Internet & Industrial network

Big Key Project
Organizing & Funding

Government

New Policy Support



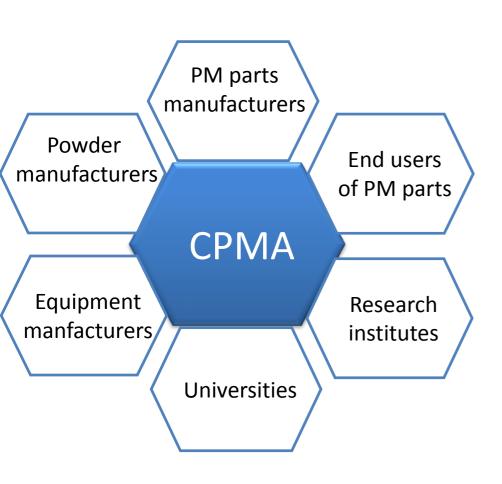


Situation of PM Industry in China, 2014

New Challenges & Opportunities for PM



Prompting Activities by the CPMA



- ✓ APMA 2013, Xiamen, China
- ✓ Series Forums in Shanghai, Beijing, WuHan
- **✓** Export Tax free for the Raw Powders
- ✓ Promoting the cooperation between the CPMA members and the applications.
- ✓ Some Additive Manufacturing Members
 Joining into CPMA
- **✓** Starting the Chinese PM Tec. Road-map
- ✓ Preparation Work for the PM World Congress 2018 in Beijing



Prompting Activities by the CPMA

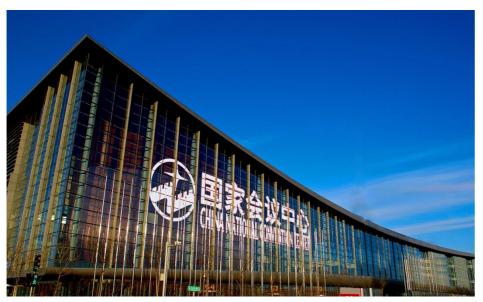




Prompting Activities by the CPMA



PM2014 World Congress Orlando, 2014



PM2018 World Congress, Beijing, 2018 Venue: China National Convention Center







Thanks for Kind Attention!

