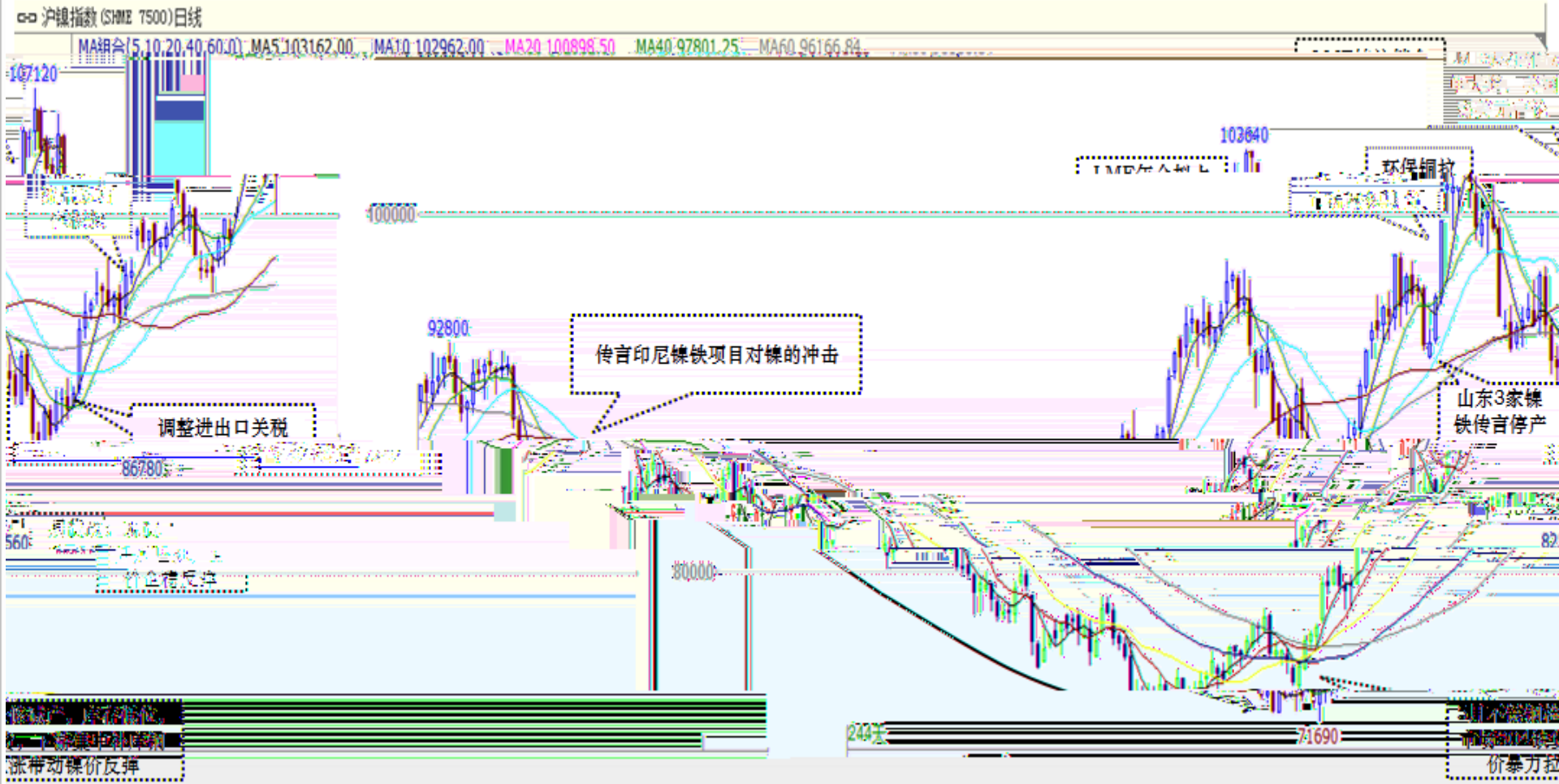


20180206



镍

2017



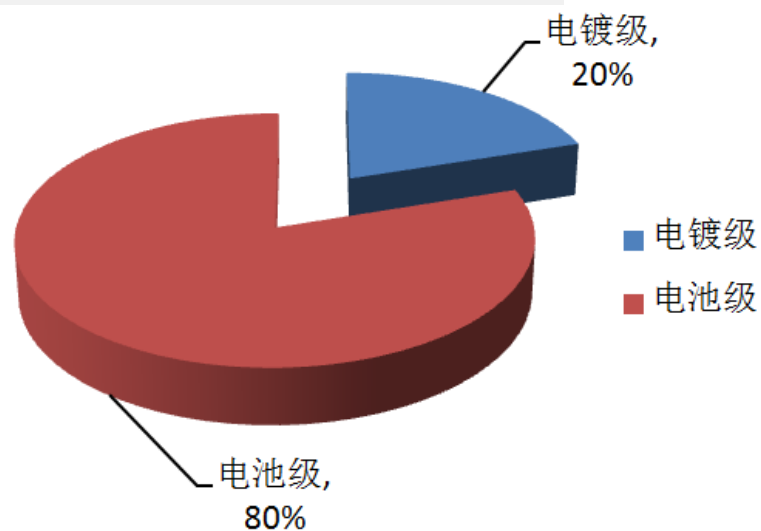
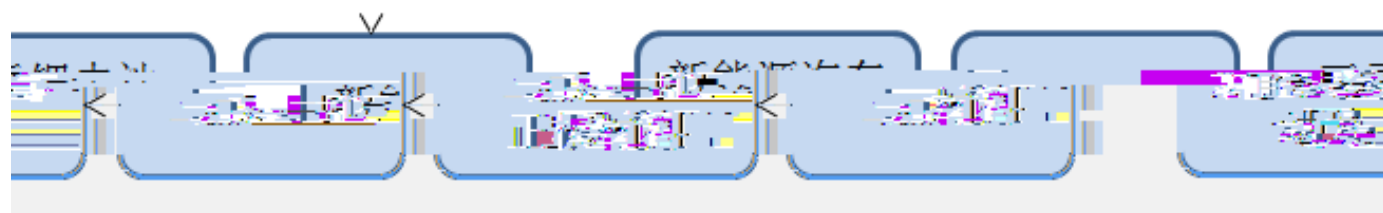
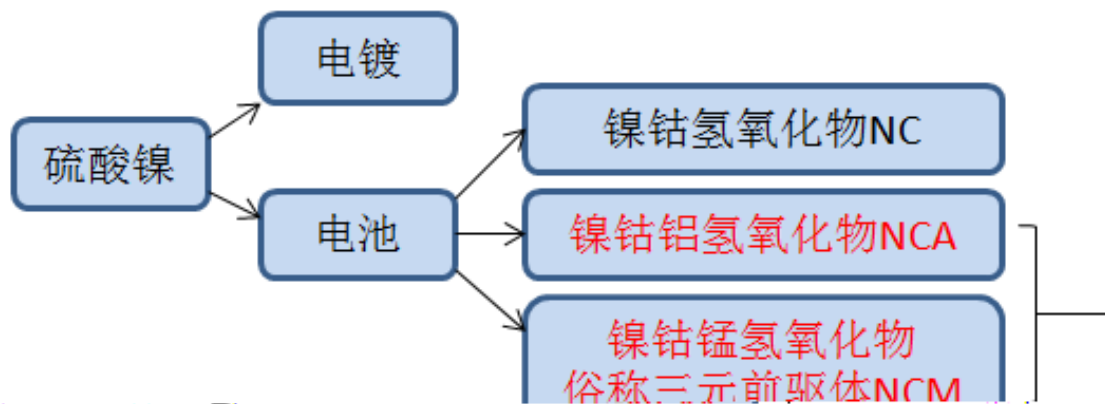
---

1

2

3

4



## 典型正极材料

磷酸铁锂正极材料  
LiFePO<sub>4</sub>(LFP)

锰酸锂正极材料  
LiMn<sub>2-x</sub>Al<sub>x</sub>O<sub>4</sub>(LMO)

三元正极材料 NCM

高镍正极材料 NCA

## 目前商业化的三元材料

LiNi<sub>1/3</sub>Co<sub>1/3</sub>Mn<sub>1/3</sub>O<sub>2</sub> NCM111

LiNi<sub>0.4</sub>Co<sub>0.2</sub>Mn<sub>0.4</sub>O<sub>2</sub> NCM424

LiNi<sub>0.5</sub>Co<sub>0.2</sub>Mn<sub>0.3</sub>O<sub>2</sub> NCM523

LiNi<sub>0.6</sub>Co<sub>0.2</sub>Mn<sub>0.2</sub>O<sub>2</sub> NCM622

LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub> NCM811  
(未产业化)

Ni

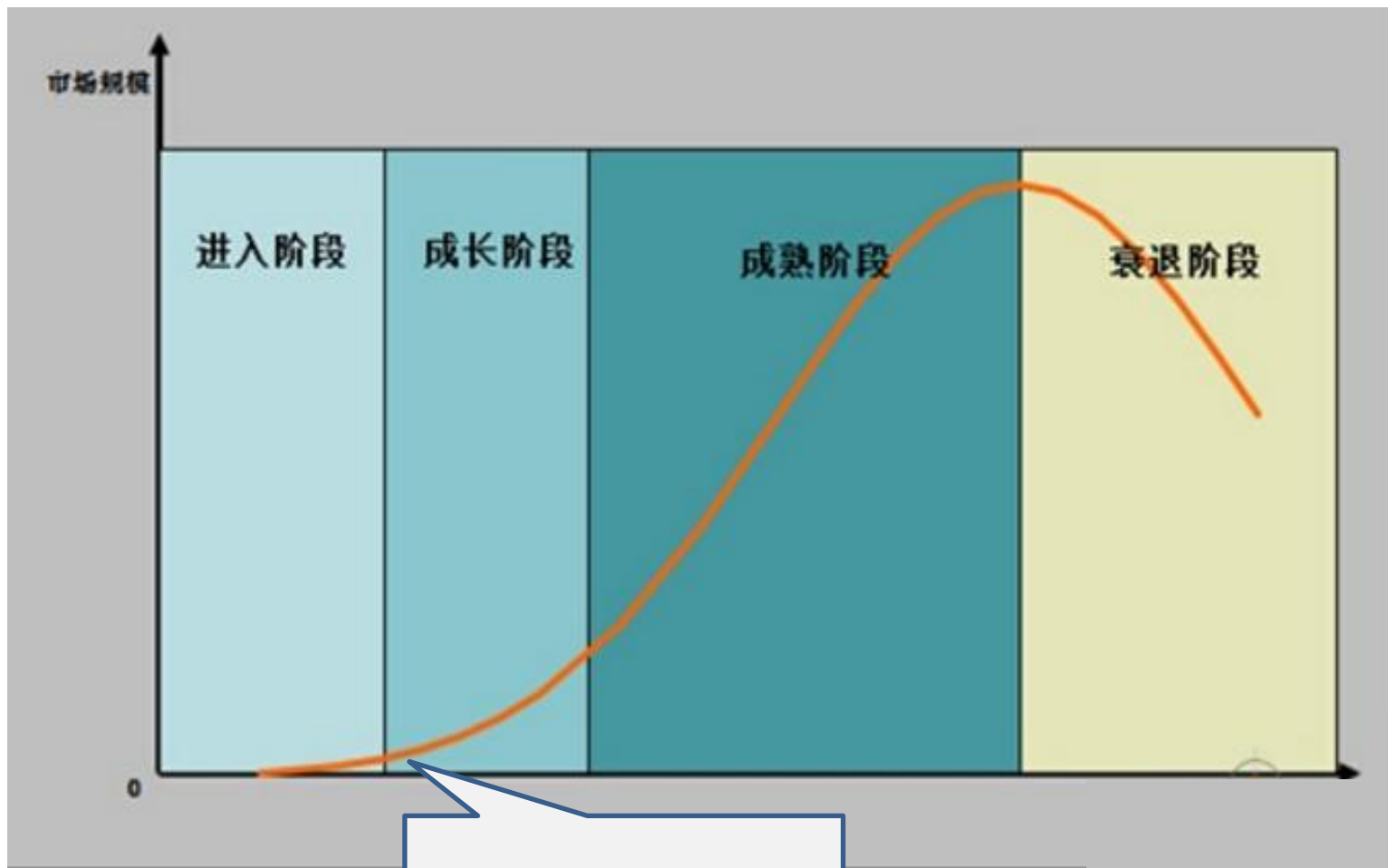
Ni

Ni Co

广义三元

### 2016-2017年国内纯电动汽车电池产量占比%

电池分类	乘用车		商用车		客车		专用车			
	纯电动	插混	纯电动	插混	纯电动	插混	纯电动	插混		
磷酸铁锂 (LFP)	28%	24%	48%	26%	41%	23%	79%	6%	93%	93%
三元电池 (NCM)	37%	69%	59%	75%	20%	94%				
锰酸锂 (LMO)	3%	58%	67%	14%	5%	0%	1%	0%	2%	
其他	5%	14%	9%	1%					5%	

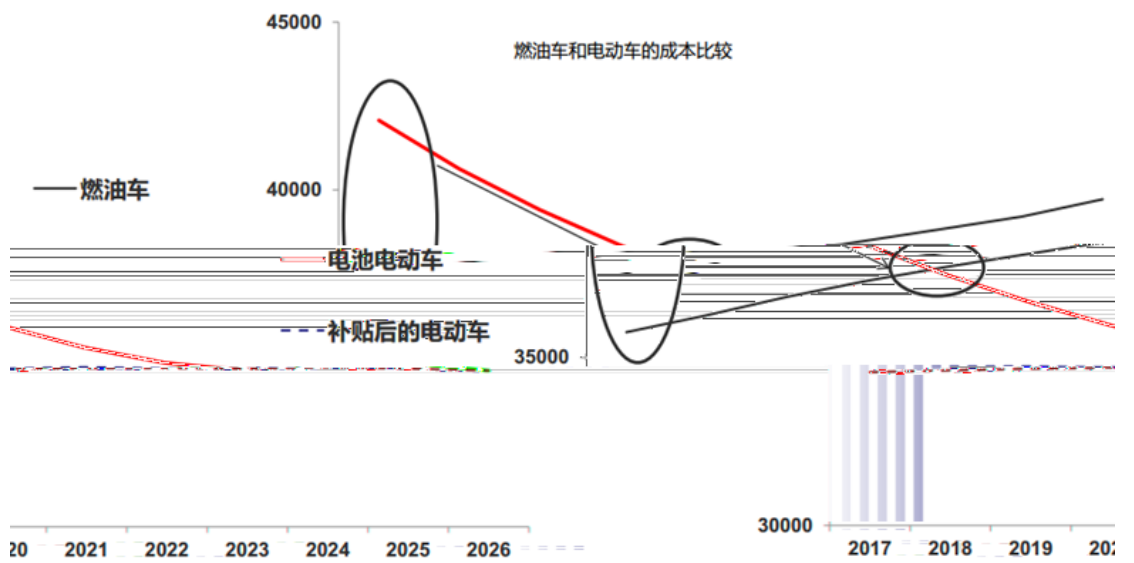


# 2012-2017





### 北美燃油车和电动车的采购价格+终身运营成本, \$/车

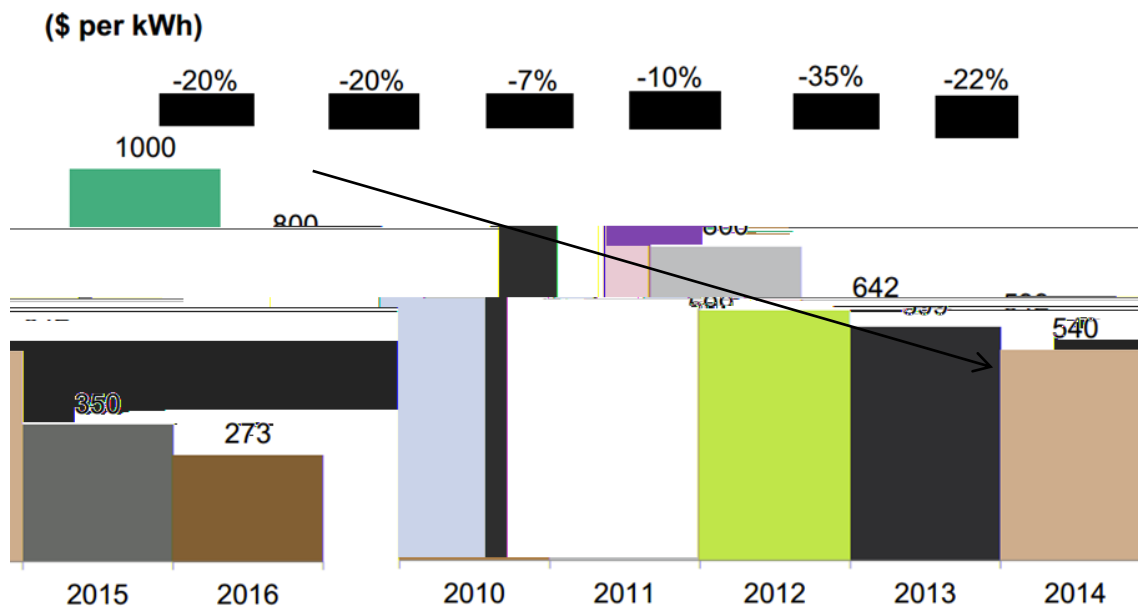


2010-2016

72%

100 /

2020



	2015	2016	2017E	2018E	2019E	2020E
NCM	4.91	5.29	6.13	10.47	23.06	40.00
2.68	3.26	5.46	6.83	8.65	NCA	2.35
7.96	11.39	17.93	30.79	49.48	三元材料合计	6.56
21.34%	43.09%	57.42%	71.72%	60.70%	YOY%	
12.28	17.48	28.86	50.71	81.00	电池用硫酸镍	最低 9.67
13.02	18.16	30.55	53.92	88.64		最高 10.85
28.2	29.6	31	32.6	34.16	电镀用硫酸镍	25.6
40.48	47.08	59.86	83.31	115.17	对应硫酸镍总需求	最低 35.27
41.22	47.76	61.55	86.52	122.80		最高 36.45
10.17%	10.17%	10.17%	10.17%	10.17%	10.17%	10.17%
10.17%	10.17%	10.17%	10.17%	10.17%	10.17%	10.17%

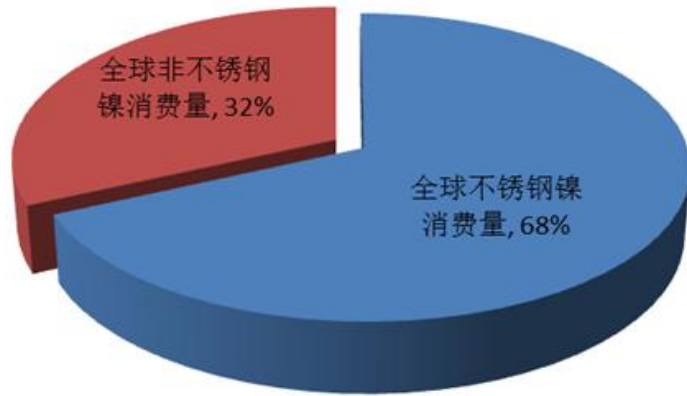
2019-2020

15

10%

10%

### 不锈钢仍然是原生镍消费主体



2/3

18%

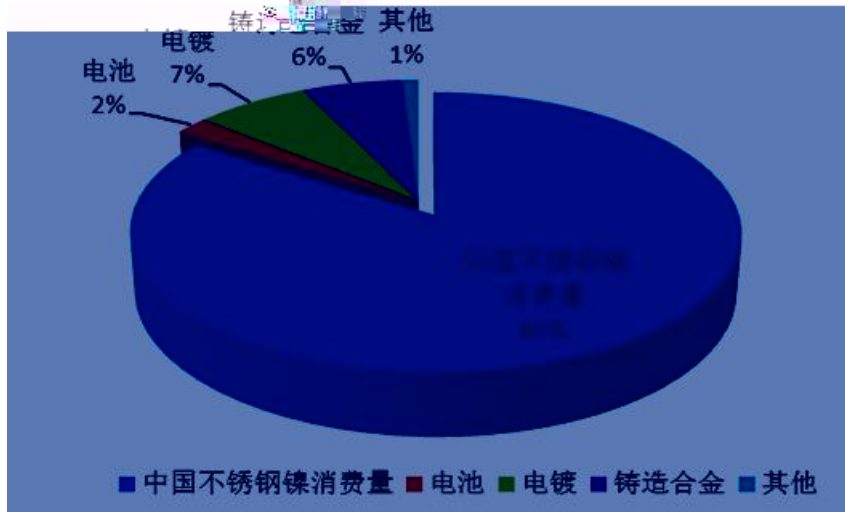
+ +

■ 全球不锈钢镍消费量 ■ 全球非不锈钢镍消费量

### 不锈钢仍然是原生镍消费主体

2014

-



■ 中国不锈钢镍消费量 ■ 电池 ■ 电镀 ■ 铸造合金 ■ 其他

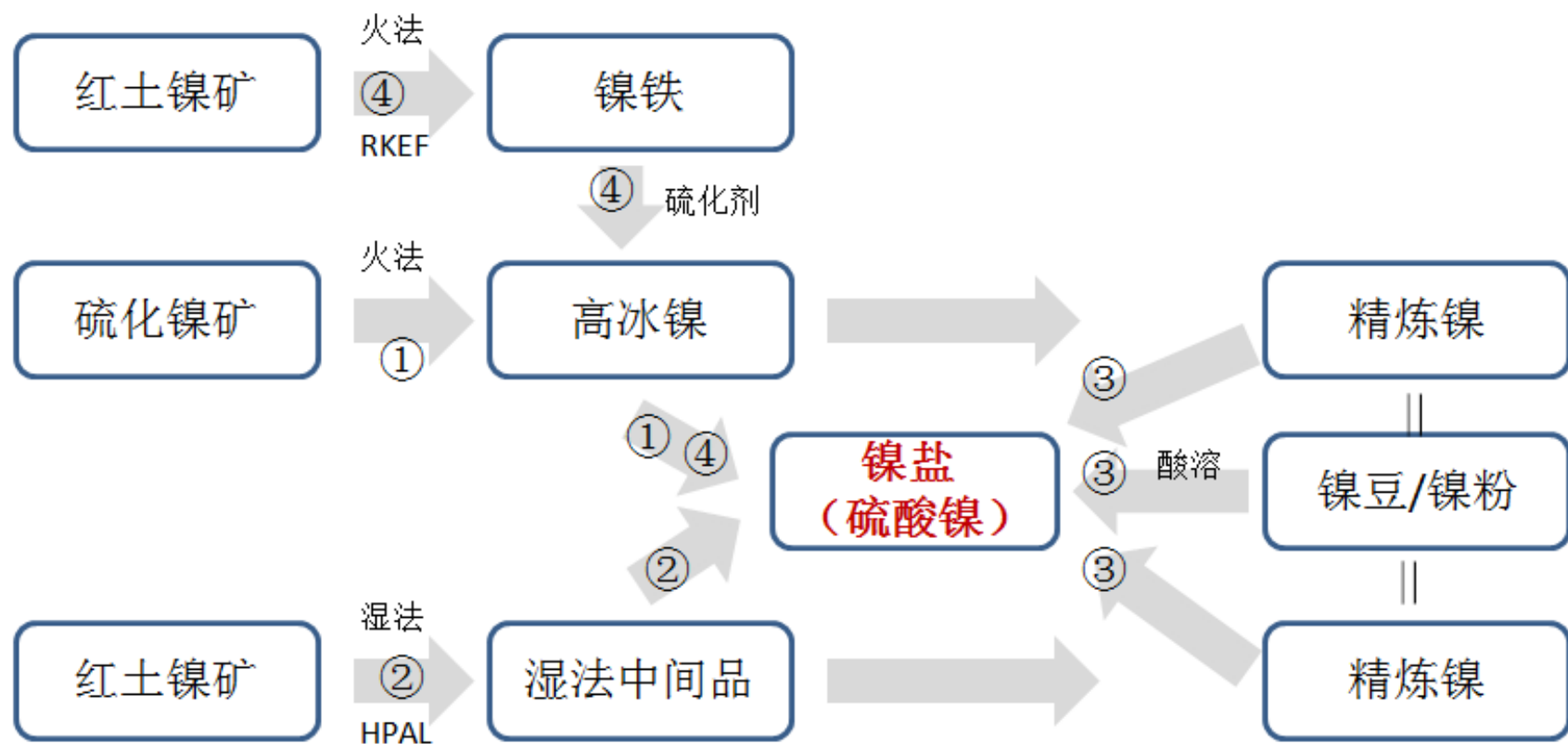
---

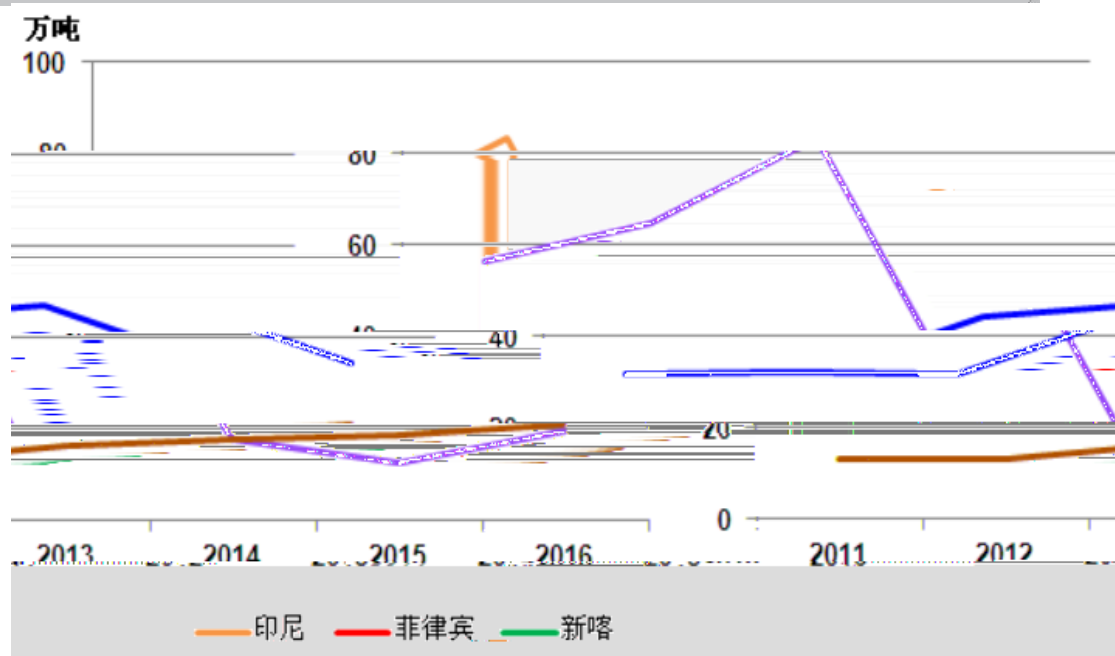
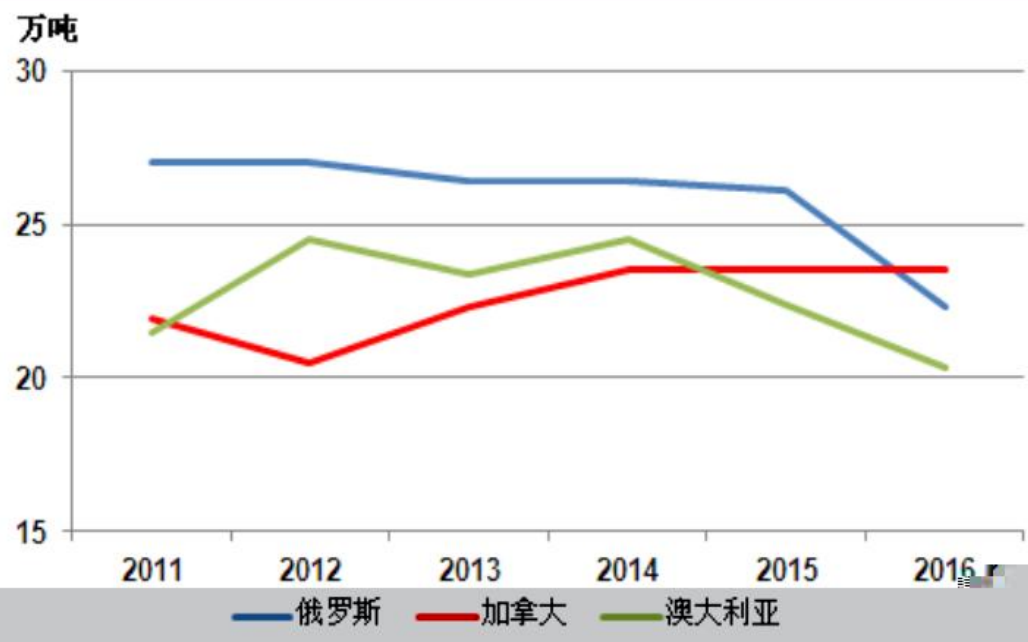
1

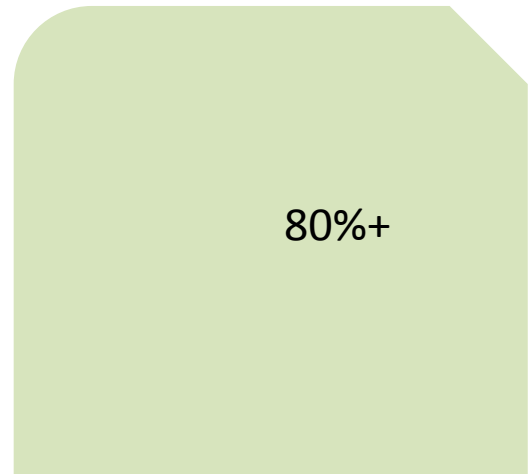
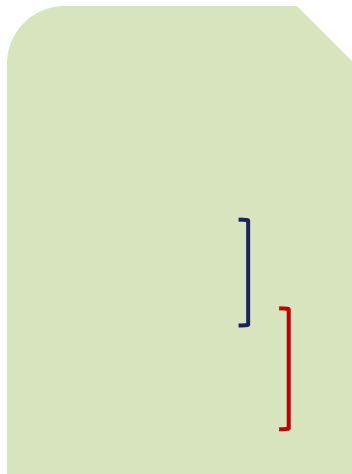
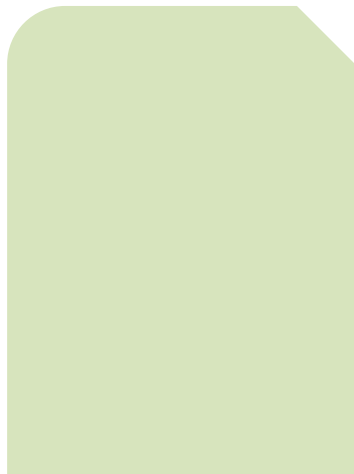
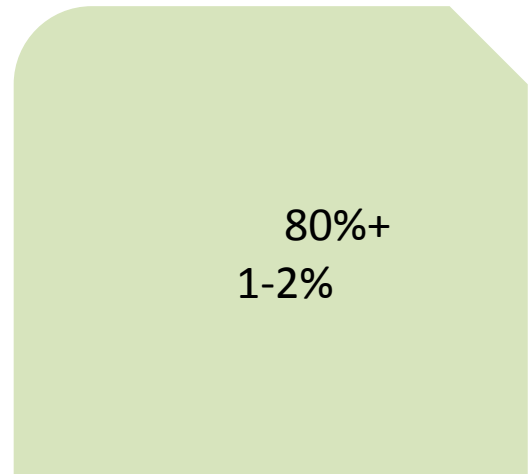
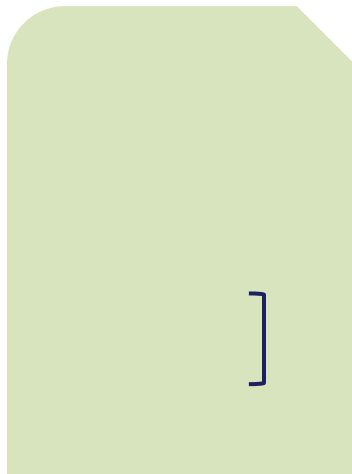
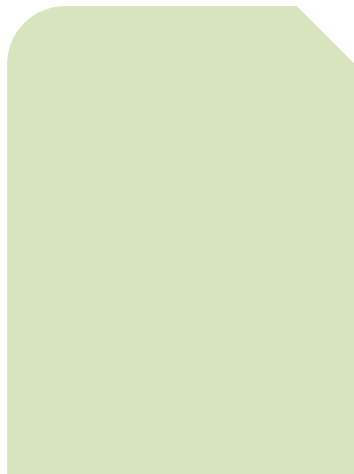
**2**

3

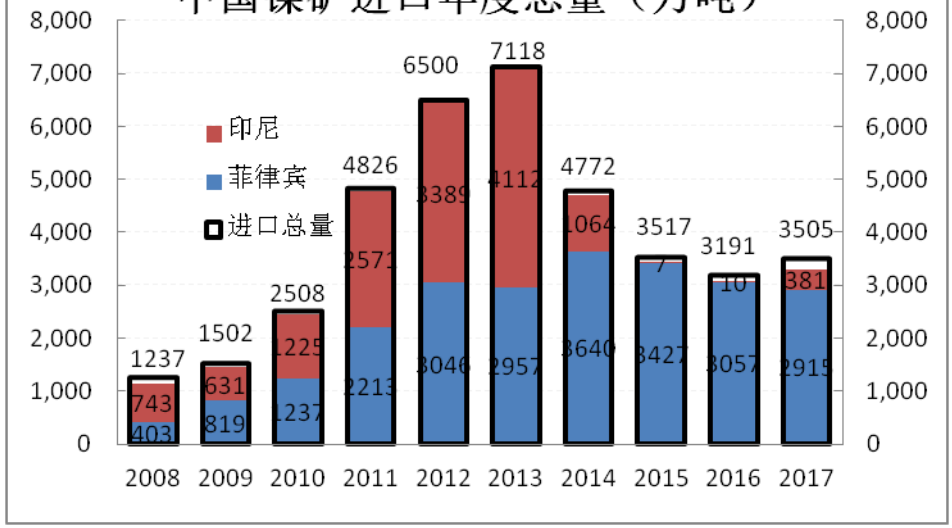
4



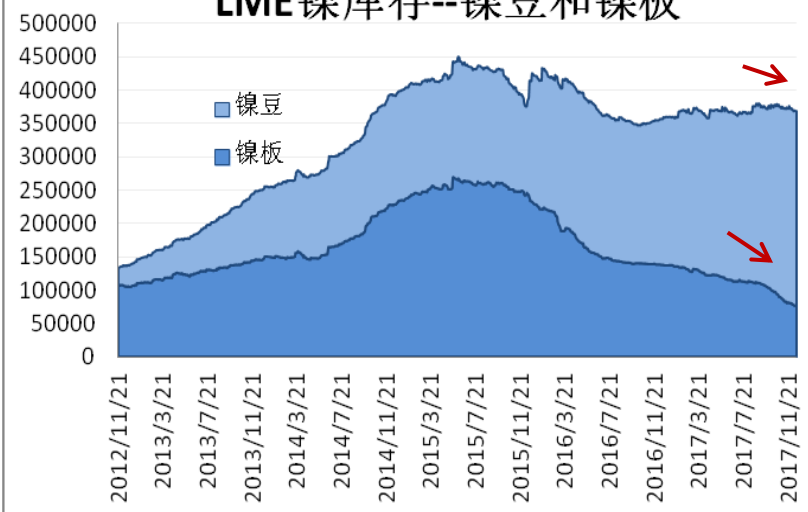




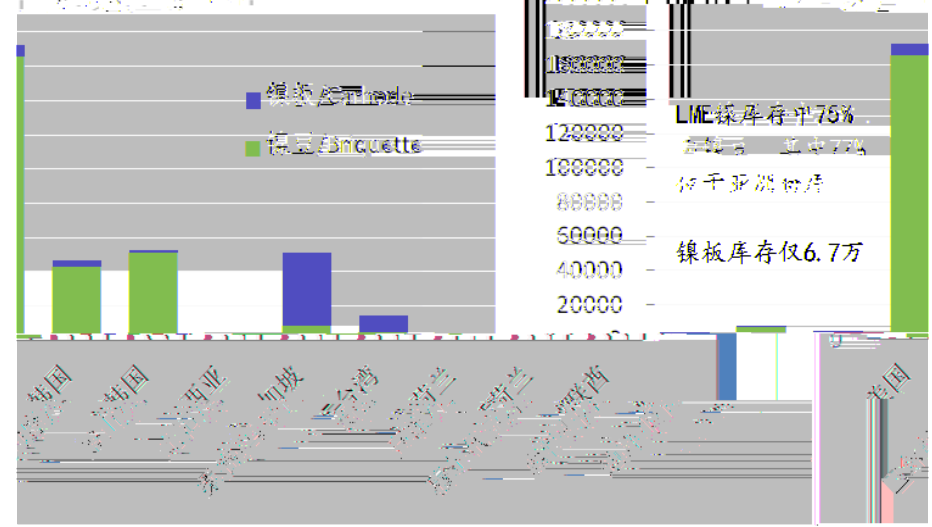
### 中国镍矿进口年度总量（万吨）



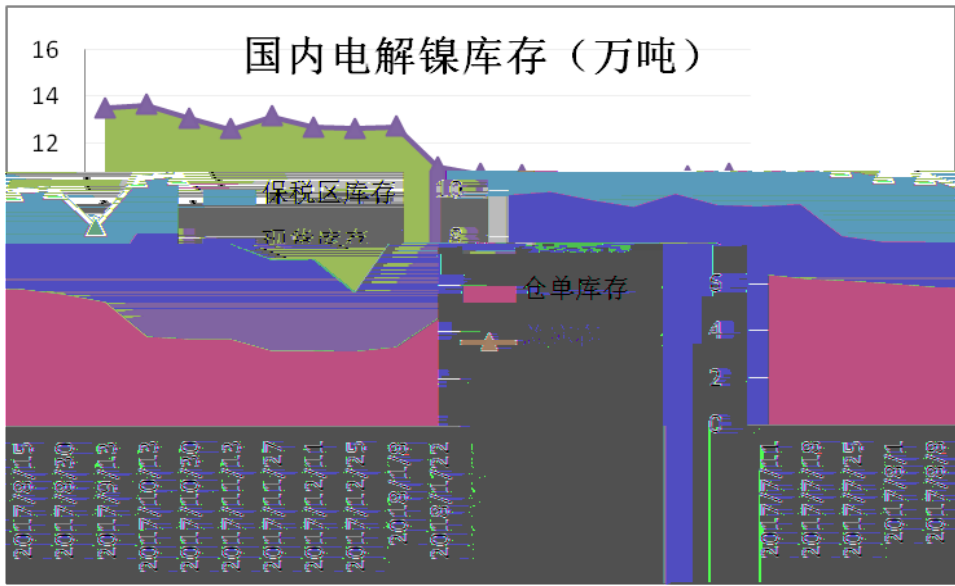
### LME镍库存--镍豆和镍板



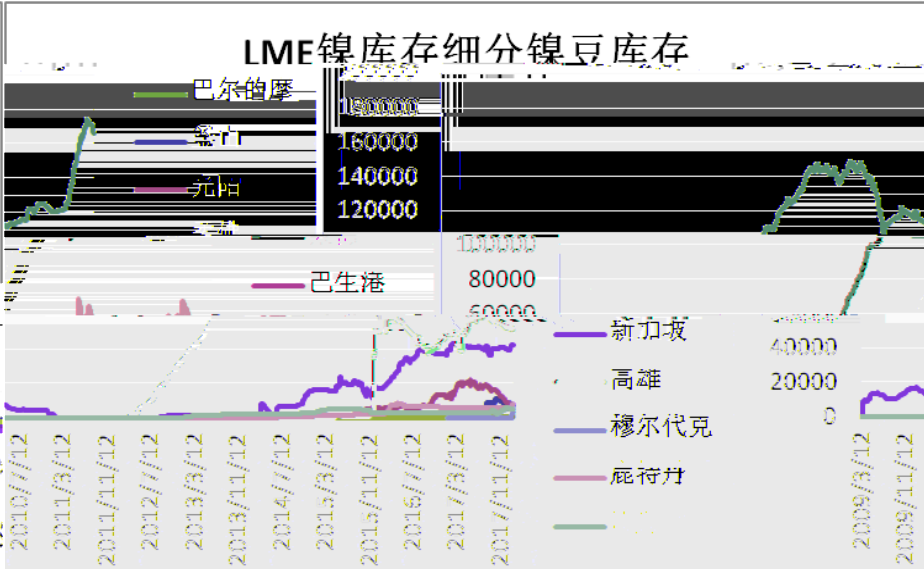
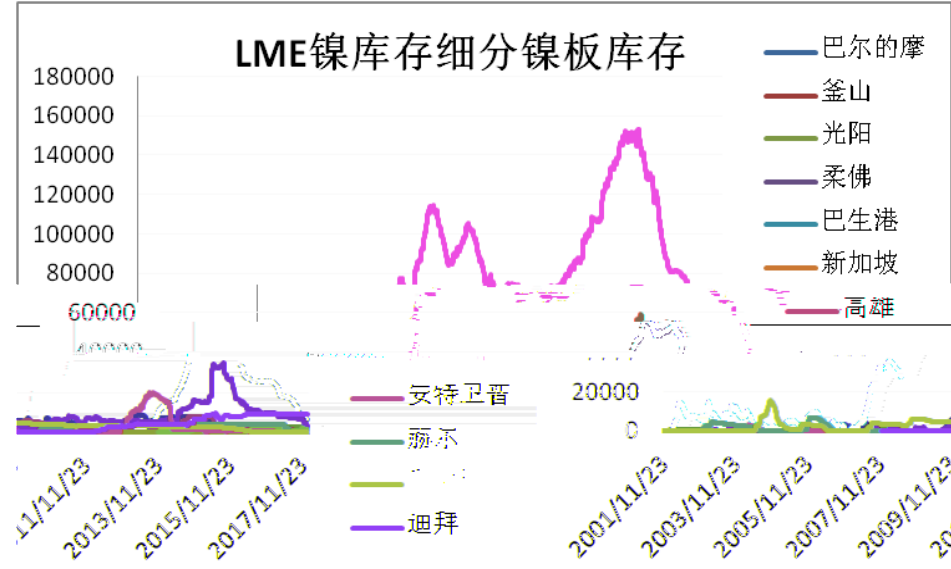
### LME镍库存分地区结构







18  
，  
10  
9400-9500



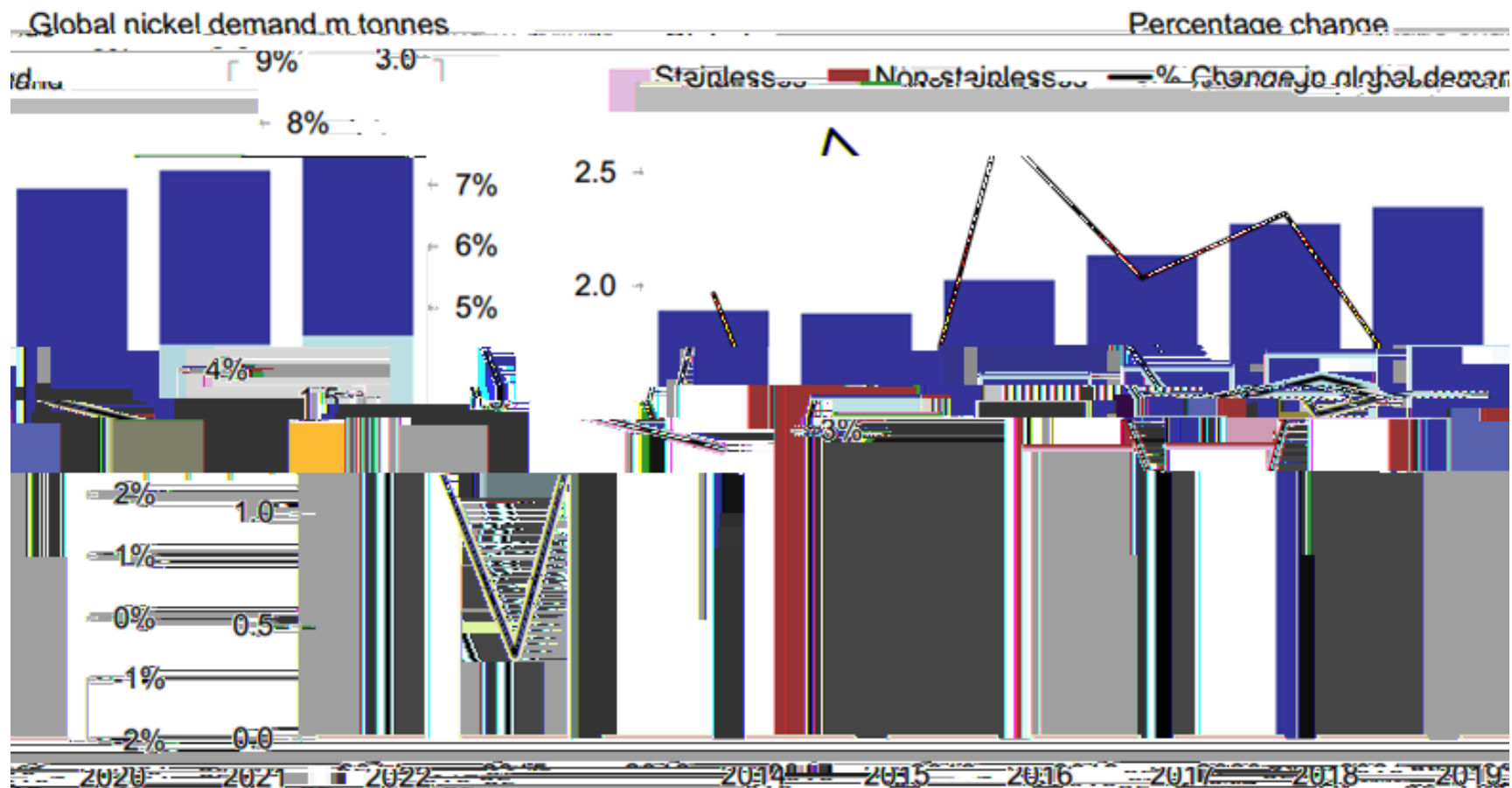
---

1

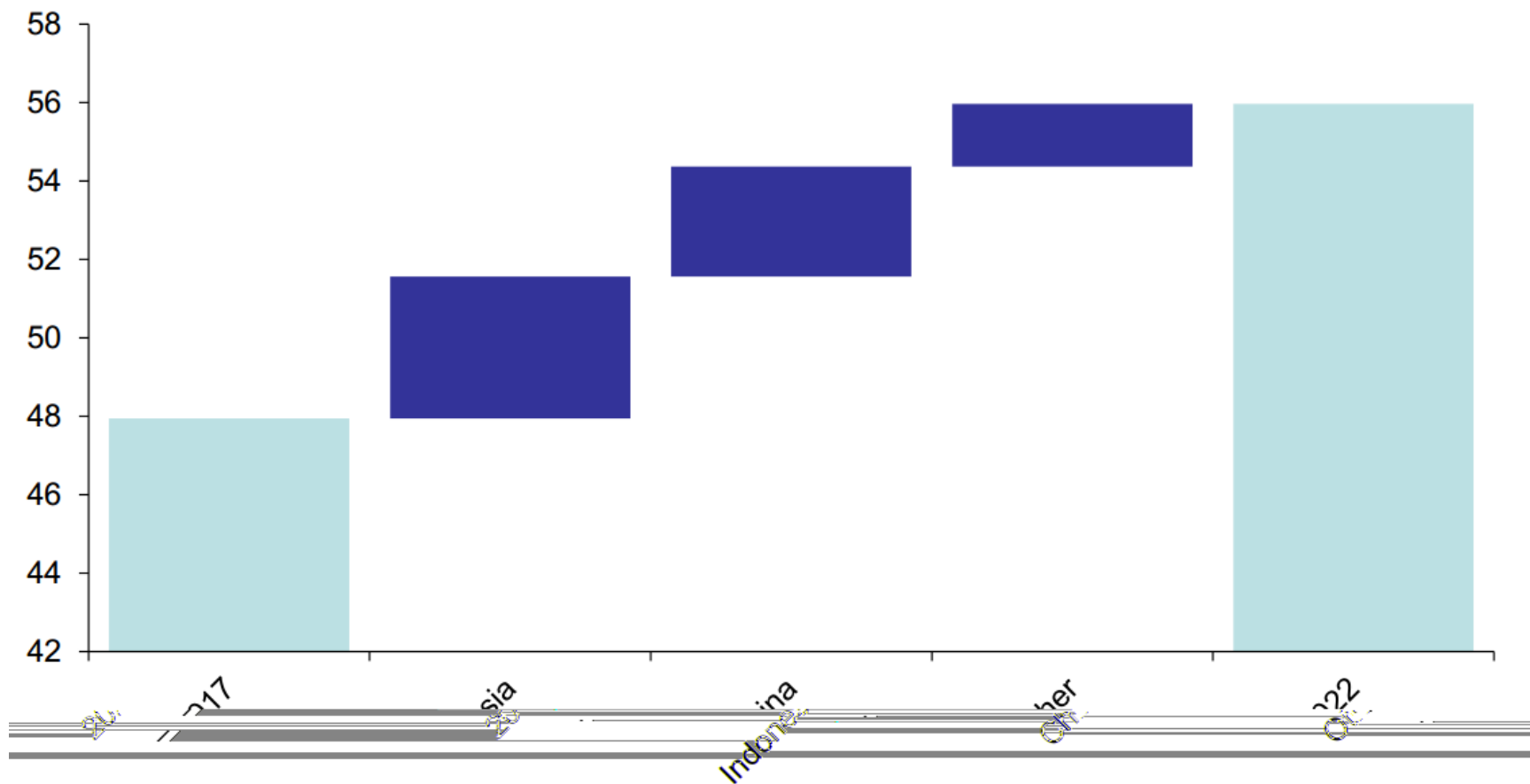
2

**3**

4



Stainless production million tonnes

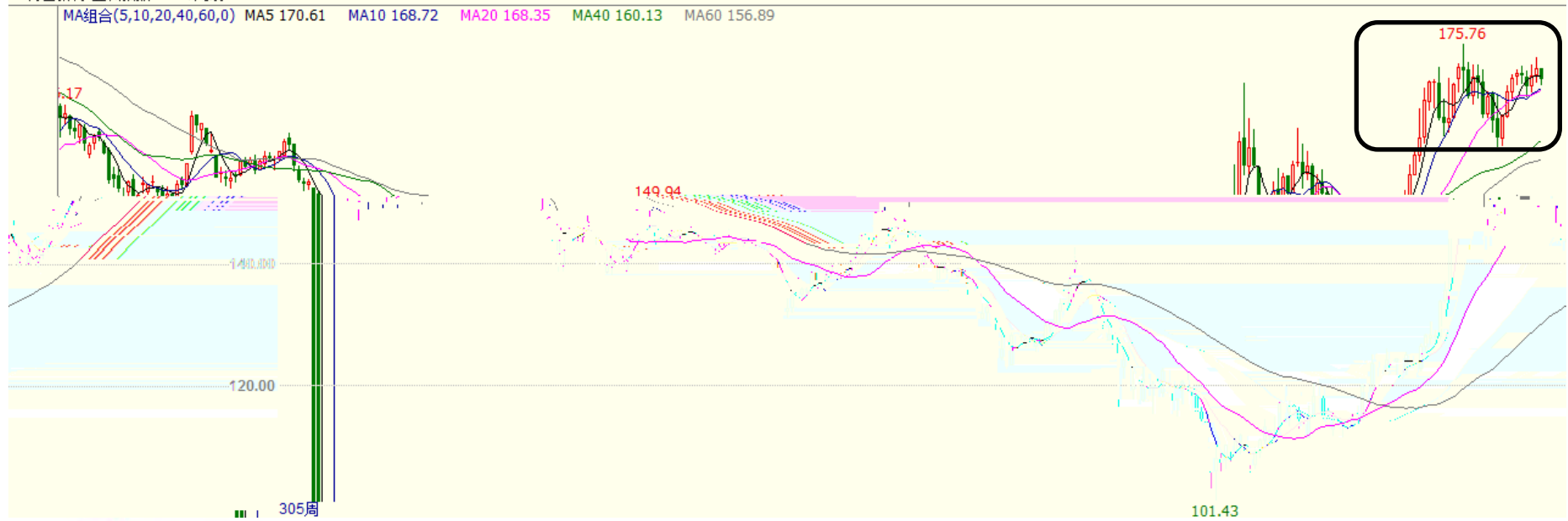


依靠成本优势 印尼将会成为未来5年不锈钢主要产量增长地

美元指数 (外汇\_D 8151)周线



有色板块 (亚洲指数 7189)周线

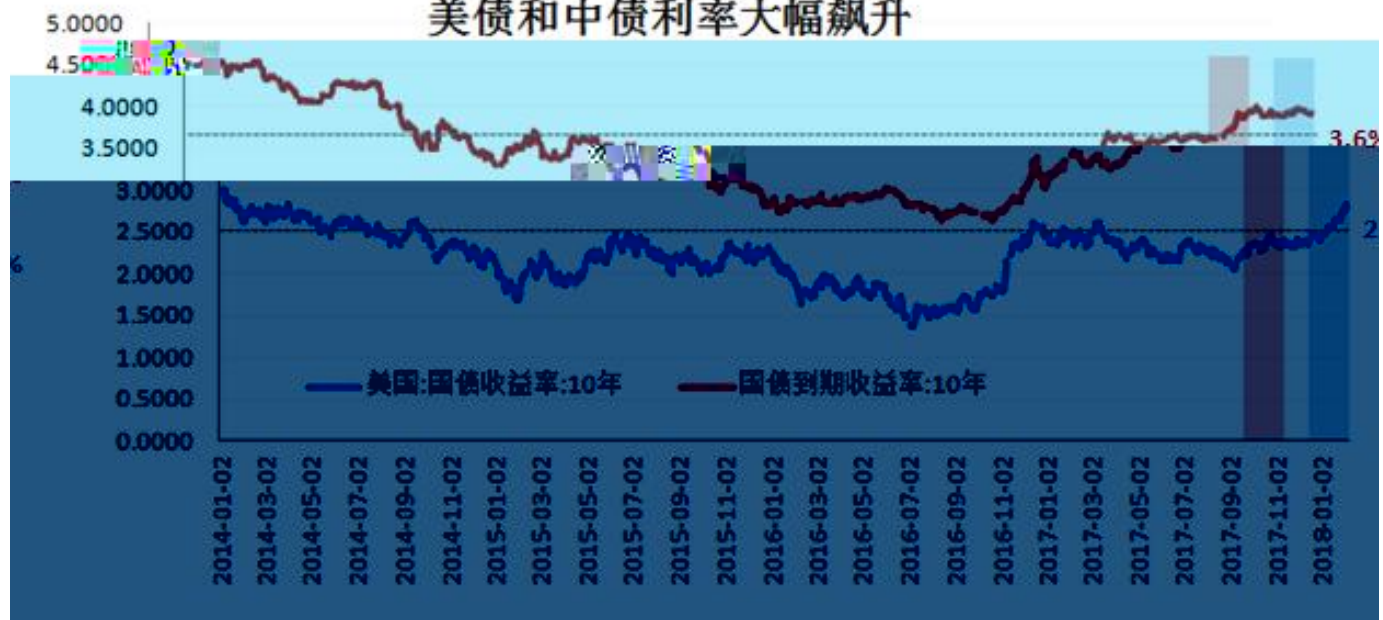


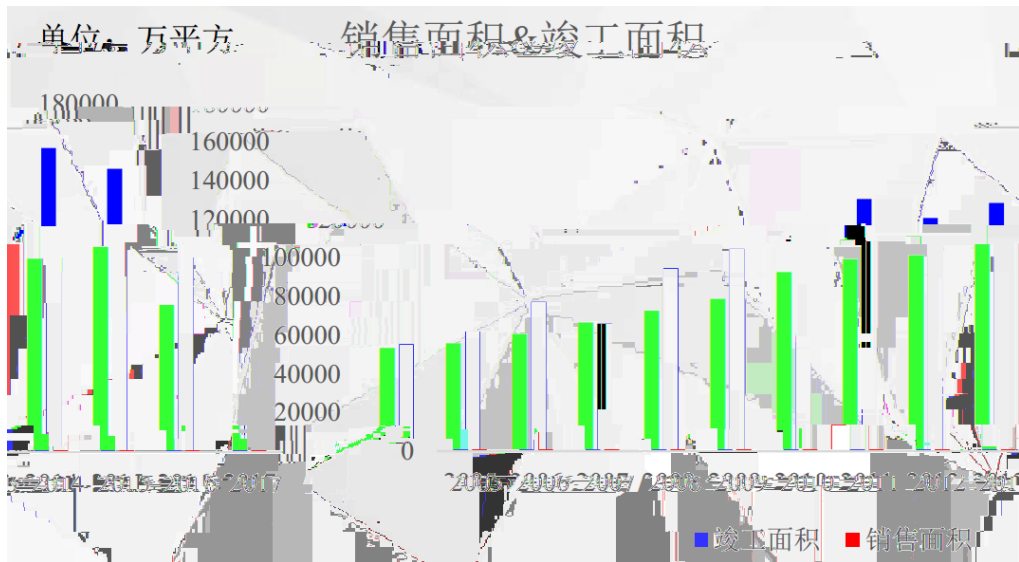
17 08 15 16 10

17 10 3.6% 18 10

2.5% 08

美债和中债利率大幅飙升





17

6-8  
1-2  
2

### 竣工缺口巨大

2017年1-11月全国商品房销售面积-近两年期房销售面积

年份	竣工面积 (万平方米)	销售面积 (万平方米)	竣工缺口 (万平方米)
2017 (统计至11月)	107.12	136.45	113.44
2016	99.49	121.79	100.31
2015	88.88	106.06	87.20
2014	78.88	93.21	74.03
2013	68.13	81.14	66.07
2012	57.99	68.09	55.98

18

16

2

18

17

15

16

17

18

19

---

1

2

3

**4**



LME镍豆库存下降

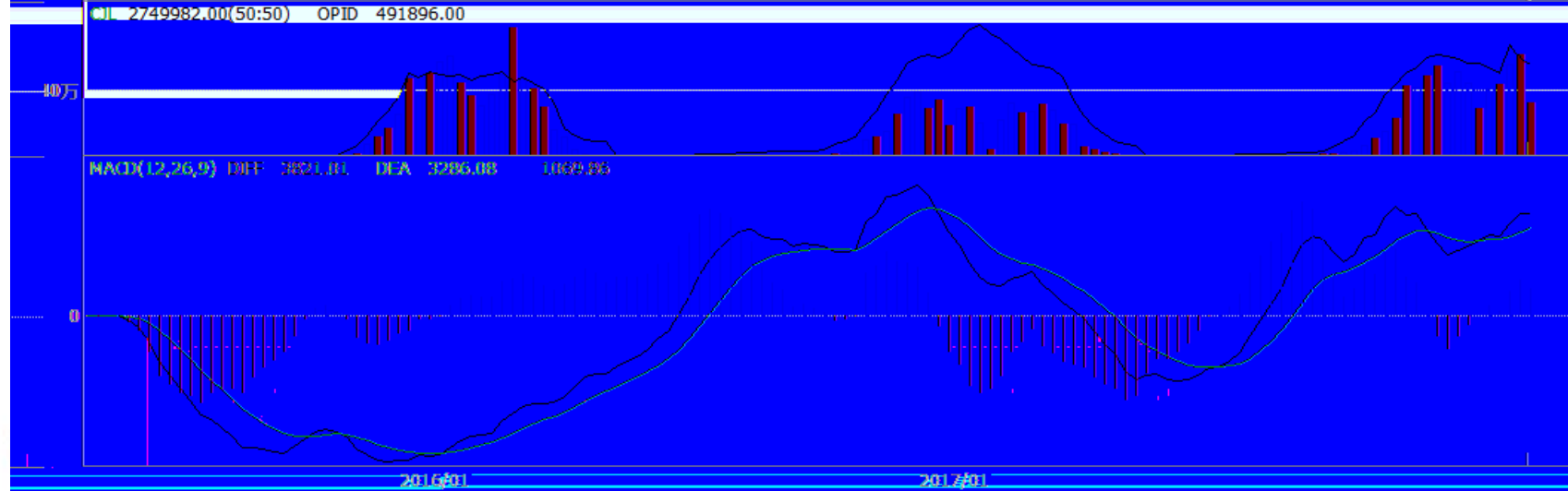
镍板库存已经在下降，LME镍库存下降

LME走强（因库存下降、贸易升水上涨、美元贬值）

LME走强（因中国的镍进口体额度提高）



沪镍1805 (SHME ni1805)周线

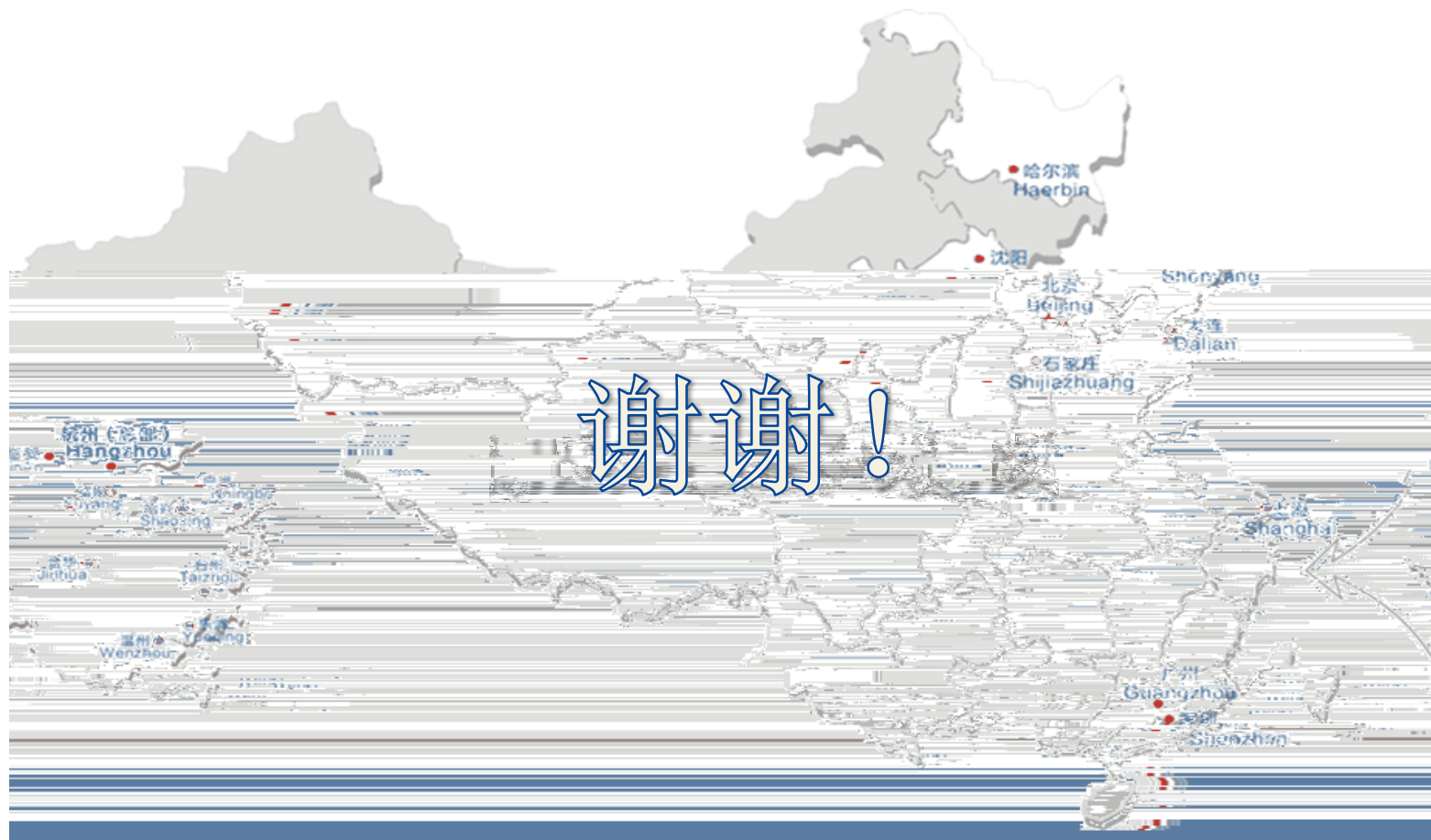


---

Z0002739  
0571-28132578  
lvjie@cindasc.com

0571-28132528  
zhoulei@cindasc.com





108

1125

1127

12

16

310004  
0571-28132579  
0571-28132689  
www.cindaqh.com