

1. 2013 PTC ASIA

2.

3.

4. 30%

5.

6. 2013

7.

8.

9. 2018

10.

11. CO2

12.

13.

14.

15.

16.

17.

22.

23. 18

24. 12%

25.

26. CIGS

27. 2014 ?

28.

29.

30.

1. 2013 36.7

2.

3. 2014

4. 2012 < > < >

5. 2012

6. 2013

7.

8. ()

9. 2014 49GW

10. 2013

1. Interclima

2.

3.

4.

5. KSB

6.

7. 23XRV

8.

9.

10.

11.

12.

13.

14. V

15.

16.

17.

18.

19. Edwards

20.

21.

22.

23. Edwards

24. Busch 50

25.

26. IDP-15

1. 2013

2. :

3. 2013

4. 2013

5. : , ---

6. : , ---

7. : ,

1 2013 PTC ASIA

PTC ASIA 2013

ComVac ASIA

70000

party

2011

10-20%

17

13

4

10 30

17

10

EK

EK

EK

EK

EK

14

315

67

6

2

29

23

8

60

1

10

15

5%

2013 12

3

2013 6 8

25

HFCs

HFCs

CFCs

HCFCs

HFCs

HFCs

GWP

HFCs

UNEP

CRAA

2013

GWP

HFCs

R134a

R410A

R404A

HCFC

2013

2013

8

HCFCs

HFCs

HFCs

ODSs

50

GWP

HFCs

CFCs

HCFCs

CFCs

HCFCs

ODP 0 GWP

HCFC-123

GWP

GWP

HFC	HCFC	R410a	R134a	HFO	R1234y
		R290	R32		
				R1234y	R1234ze
	2013	26		R1234y	R1234ze
		R1234yf		3000	
R1234yf		4000			

GWP HFCs

GWP R32

A2L

R32

R22

13

GWP

GWP

2013 12

4

30%

8000

r22

8

r22

r290

1.4

r290

r290

2015

10%

2030

30%

r22

http://www.chinahvacr.com/News/Class1/201312/News_3101644.shtml

5

12 21

10

1000

90

6 -8%

MPPT

	2012	1001.10		
	2013		887.59	
15.03%	75.79	42.13%	85	
	2013			
		59%	PM2.5	
9200				
.....				
	9			9000
2500	2013	11	2800	
8				

2011

40%

65%

2011

2013

349.15

21.79%

35.63

44.79%

887.59

15.03%

75.79

42.13%

2012

2013

1200

<http://news.ehvacr.com/news/2013/1223/89630.html>

6 2013

2012

2013

2013

2013

2013

2012 11 1

2013

2013

12

5000

1.5

1200

2013 3

12

2013 6 1

75%

85 20 2015 250

200

15 / 30 /

50 /

2015

3—5

9600 210

210

2015

2015 20%

2015 12 31

1000

2013 12 1

2737

1000 100 10

2013

, 2014

,

,

,

,2015

,

50%

2014

1.3

500

15

--- EMC

2010

2012

2015

EMC

2013

	2013	2012	EMC
300			
200-300			
700-1050			
3.5			
11			
600			
5.92			
100			
592			
30%			
20%			

3 1

2.28

102

722

98

56

45

2013

2012

2013

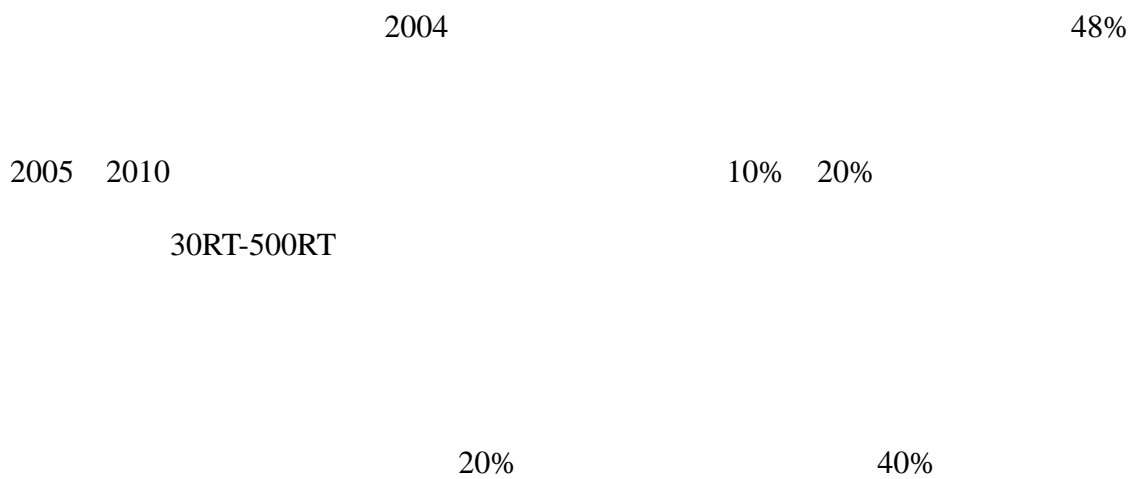
100

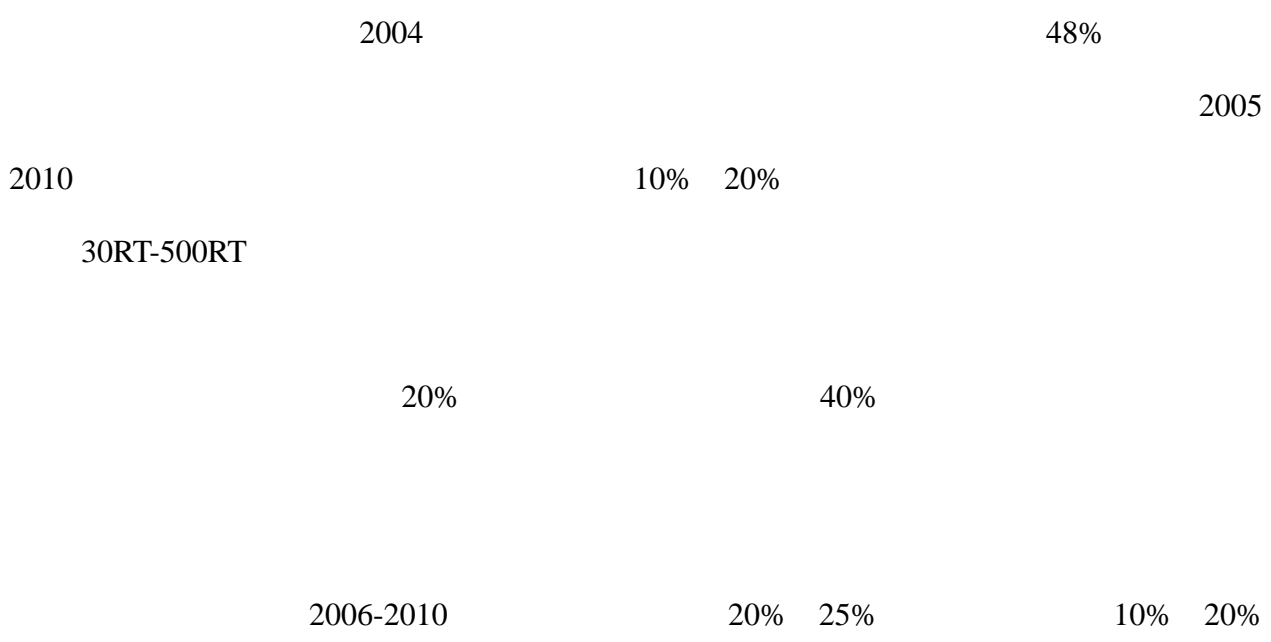
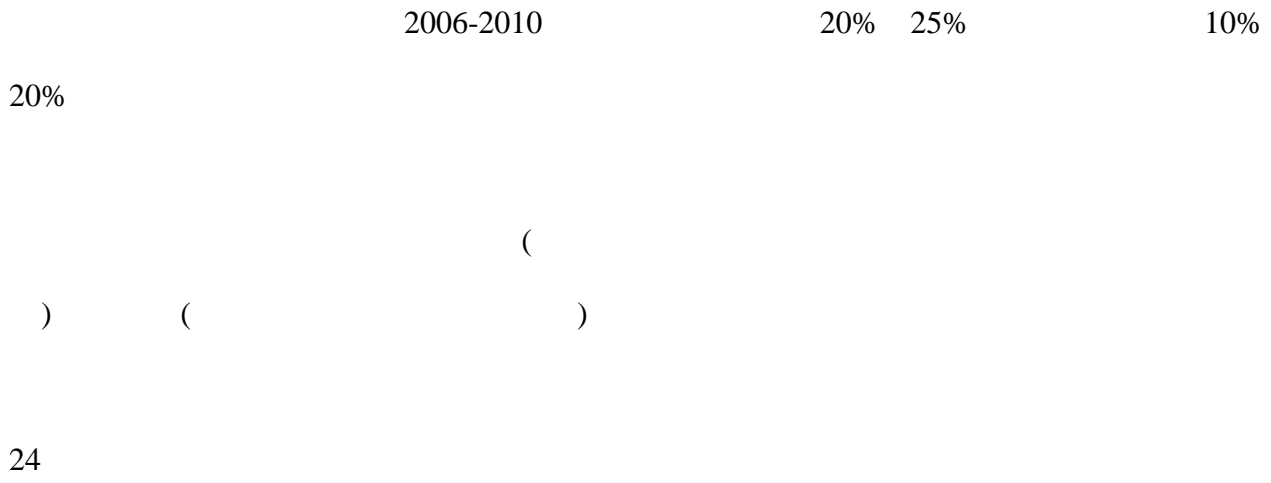
TOP50

2013

<http://news.ehvacr.com/news/2013/1226/89704.html>

7





()
()
24

http://www.chinahvacr.com/News/Class1/201312/News_3101597.shtml

8

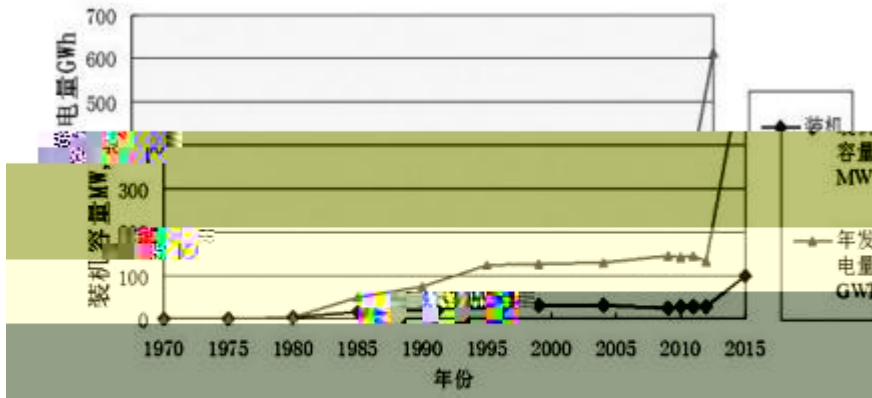


图 1 中国地源热泵装机容量和年发电量

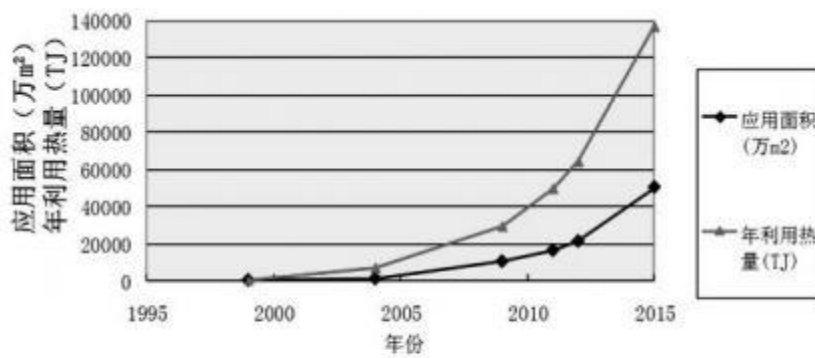


图 2 中国地源热泵应用面积和年利用热量

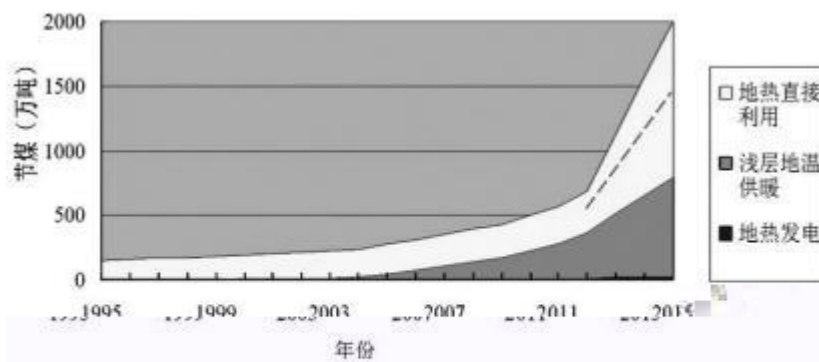


图 3 中国地源节能节煤

3.5

700

2006

50

90

30%-60%

8%

2002

400

300

2010

30

30%-80%

5

700

<http://news.ehvacr.com/news/2013/1203/89234.html>

9

2018

2015

2898

2016 1 1

IGCC

璿 2018 1 1

<http://news.ehvacr.com/news/2013/1204/89252.html>

10

2007 3

2011

2011

2013 1—9

2013 1—9

18

2012

5.3%

2013 3

50%

2012

2010

12

26.80%

21.64%

18.95%

8.05%

7.57%

3.42%

19%

85%

GDP

4

2012

2013

1

52

1

2014

4000

62.5%

25%

http://bao.hvacr.cn/201401_2043191.html

13

1

7

http://bao.hvacr.cn/201401_2043365.html

14

2014 1 1

2014 1 1

15

8 25 24 15

60

(7.53, -0.18, -2.33%)

/

/

/

1/10

10%

31.1

7.37

6

http://bao.hvacr.cn/201401_2043217.html

17

UPS DHL

<http://news.ehvacr.com/news/2013/1121/88971.html>

19

500

240 / 500 /
2010

240 / 60 /

10000
350 300 /
200 /

<http://news.ehvacr.com/news/2013/1205/89325.html>

20 2014

8% 2010-2011
28%
2009 400 90%
60 40%; 10%
90 60%
2013

2014

<http://www.compressor.cn/News/hyqx/2013/1214/71316.html>

21

PM2.5 , 3M

2013

2013

52

13

2013 年，公司实现营业收入 10.5 亿元，同比增长 15%。2014 年，公司实现营业收入 12.1 亿元，同比增长 15%。2015 年，公司实现营业收入 15.7 亿元，同比增长 30.72%。2015 年，公司净利润 4.5 亿元，同比增长 28%。2015 年，公司经营活动产生的现金流量净额 2.1 亿元，同比增长 35%。

2013 年 12 月 15 日 2014

;

;

;

21

4800

40%

400

;

60%

TRT

30

<http://www.compressor.cn/News/hyqx/2013/1218/71340.html>

22

50HP

;

<http://www.compressor.cn/News/hyqx/2013/1120/70960.html>

25

20

10

20%~30%

<http://www.zhenkong.info/news/html/Market/10084.html>

26

CIGS

2014 1 14

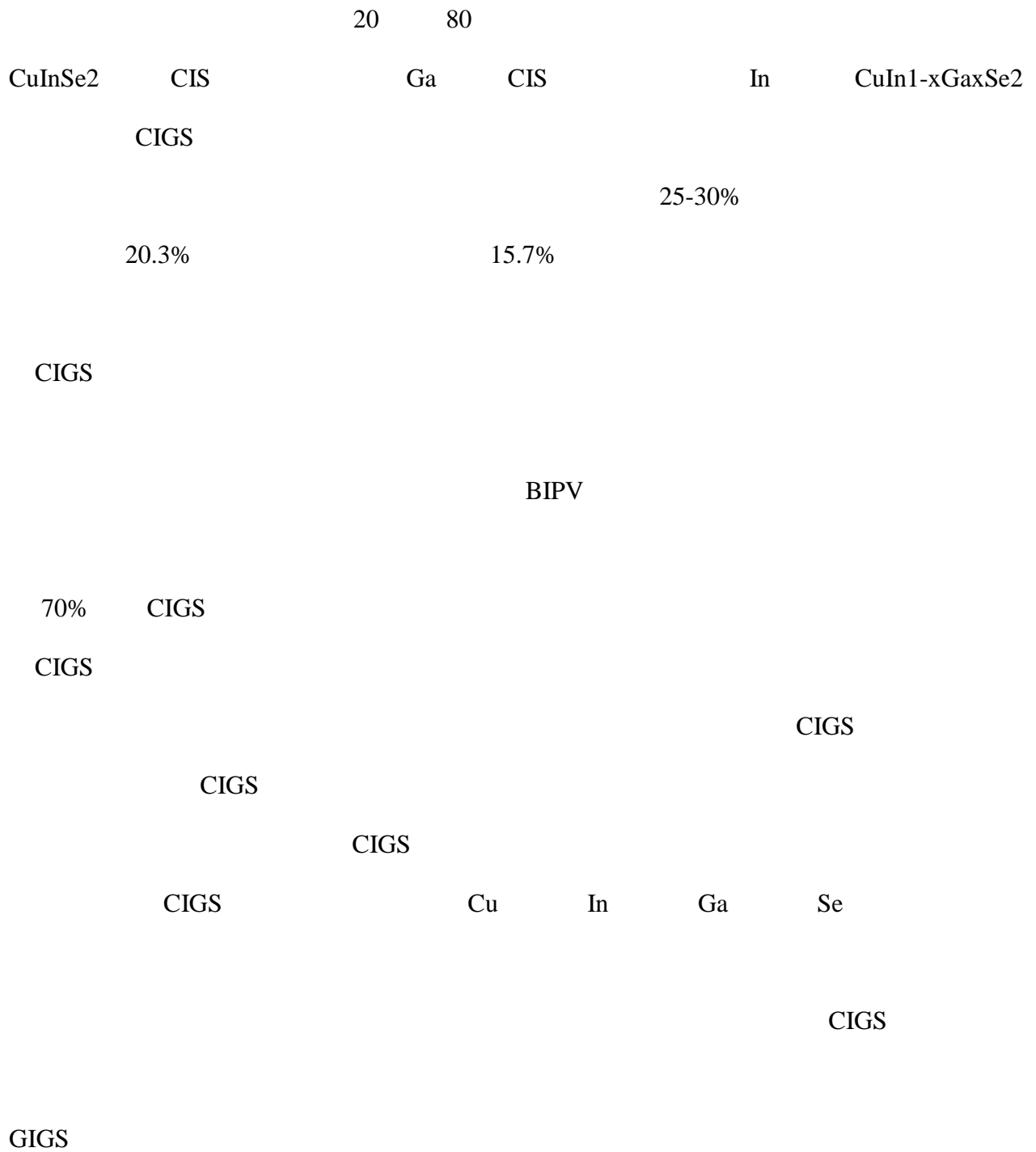
2014 46GW 2015

56GW

2013 12 18 2013

10GW 122%

1 13



http://www.semi.org.cn/pv/news_show.aspx?ID=13833&classid=12

27 2014 ?

¶

2013 7

53.3% 57%

2.3% 48.7%

2.4% 48.7%

2014 1 20 5

30%

OCI

2.4%

↑

50%

=

2013	11	792	27.1%
10%			
2013	11	2033	
71%;		2365	98%
			14.7 /
13.5 /	8.64%	20%	

http://www.chinaequip.gov.cn/2014-01/23/c_133067131.htm

29

2459 252

2403 239

56 13

2013 , 2013

2013

<http://news.ehvacr.com/news/2014/0109/89919.html>

30

09 13

9 12

1 4000

1

4000~8000

30

18

30

5

300

2700

<http://www.chinesevacuum.com/ShowArticle.aspx?id=42696&pid=39>

1. 2013

36.7

2013 2013

2013

3000

48

17%

2012

40%

2013 36.7

77% 2012 32 14.7% 2013

8.2 17.1% 2012 7

17% 2013 2013 2.7 2012

1.5 80%

1000 2013

1000 63 56

5

8 2014

2013

1.2

2013 2014

8128 6790

http://bao.hvacr.cn/201401_2043452.html

2.

20 2009 19%

20 40%

2004 2009 2004 33

2009 43

1997 2005

1997 11 8

- ()

1998 11 4

2002 4 23

2002 12 19

([2002]414)

2005 2 28

33

2006 1 1

2005 11 29

2006

2006 5 30

[2007]371)

2006 5 31

()

2006 839

2006 7 1

()

35 /

50 /

2006 9 4

(2006 460)

2006 10 11

([2006] 20)

312.3

2007

1800

2010

6500

2006 12

2010

(109)

([2002]222) 2006 12 28

([2006]315)

2007

2007 4 10

([2007]59)

/

2007 5 23

[2007]15

2007 7 10

(2007

71)

2007 8 1

2007 8 31

([2007]2174)

2010

400

2020

1200

2008 6 2

2008 ([2008]64) ()

2008 10 15 ()

([2008]531),

() 2009 1 1

2008 12 3 (

2008 249)

2009

2009 7 6

([2009]305) (

[2009]306) 5000 8000

2

2009 60 /

1800

2010

2010 4 2

(2010 25)

([2009]305)

([2009]306)

2010 5 7

2010 ([2010]34)

)

2010 8 4

([2010]455)

2011

2011 3 8

[2011]61

2020

15%

2015 25

3000

2011 3 21 2011

([2011]38)

()

/

2011 7 13

5

2011 11 29

2012

([2011]167)

()

2012

.

2011 4 -2012 3

2012 6 16 (2012
 19) 15% 2015
 4.5 2%
 2015
 10% 30%
 30% 2015
 20 50 10
 2012 8
 2015 1500
 10
 5 2013 1 1 [2013]2
 ()
 2013
 2013 1 1 2013 1
 10 2015
 20%
 4 5000
 1.2
 10
 3.5

http://bao.hvacr.cn/201401_2043561.html

3. 2014

2014

2013

1

2

COP

20%-100%

3

65

46%

GDP

1500

0.5kg

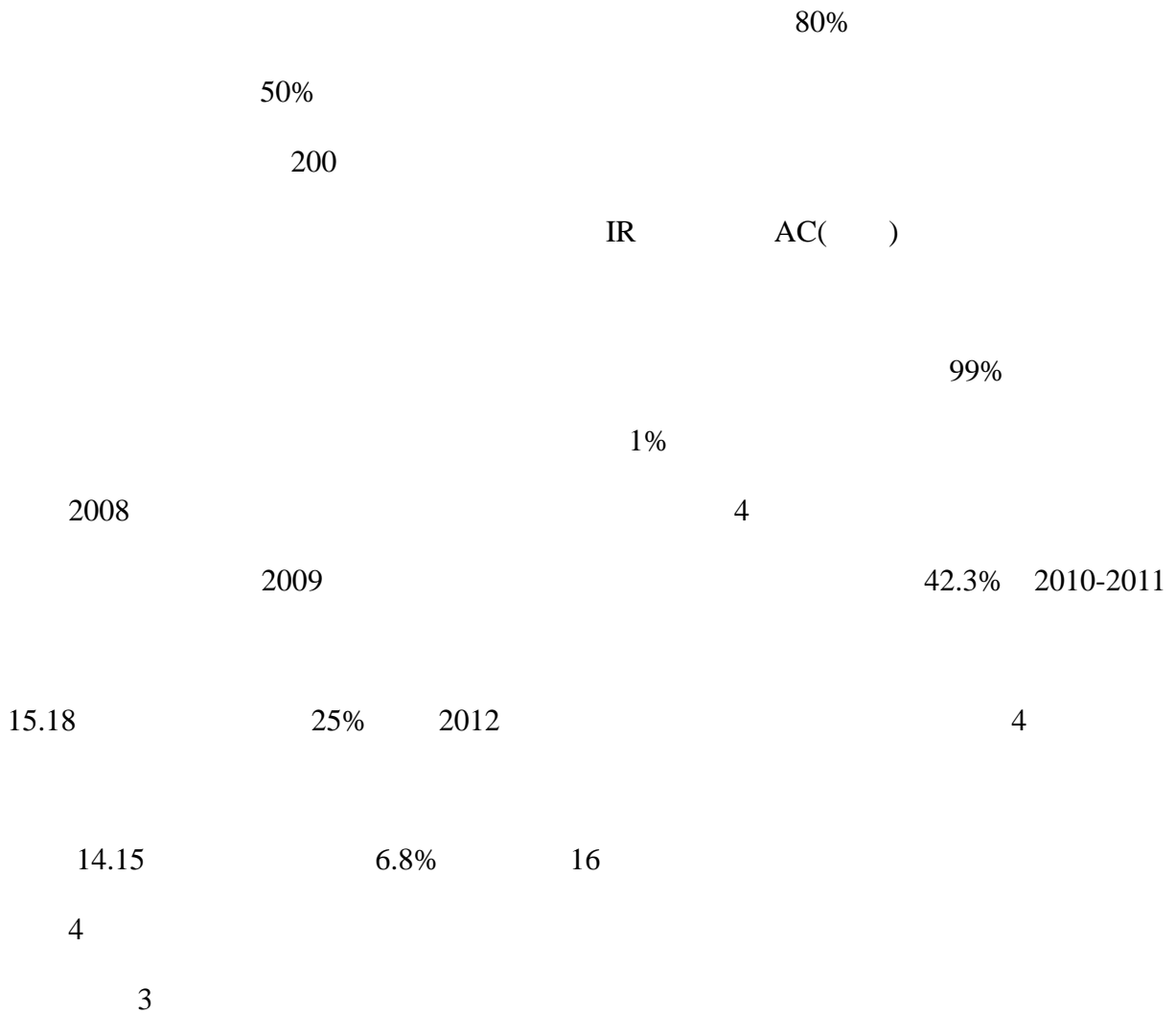
15.6%

15%

40%

GDP

- 3000~15000r/min
 -
 -
 -
 -
 -
 -
- 3



2015

181950

17

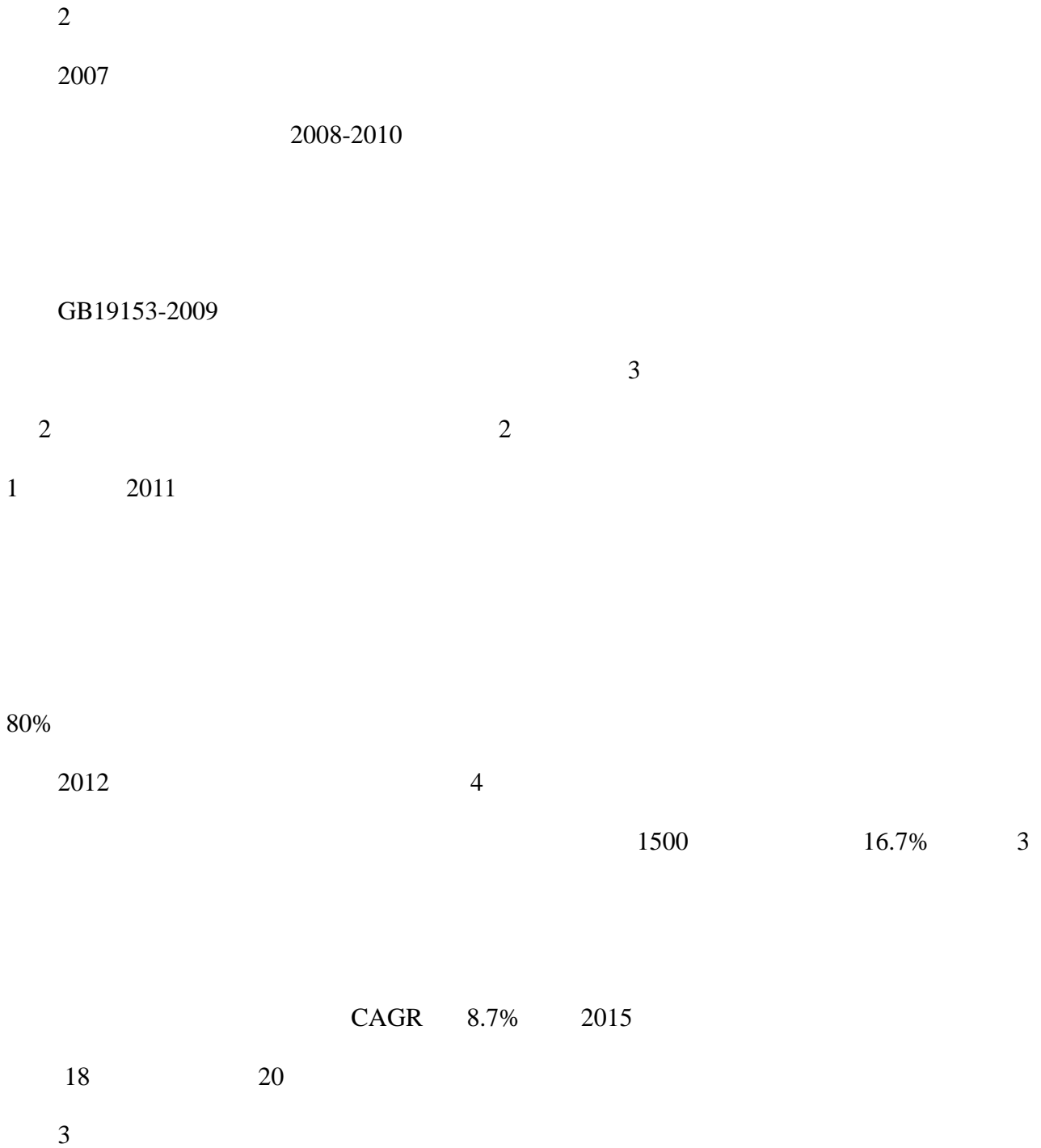
3

7

-
-
-
-
-
-
-
-

99%





LNG

CAGR9.1%

2015

2000

21

1

2

-

8

1

2

6

5

5

70%

1960



1

1

6

2970 2970r/min
2970*12=35640 2 5 5
2970 r/min 2970 *5=14850
35640

2

3

4

4

2

1/4~1/3

2

90%

10%

1

100

3000

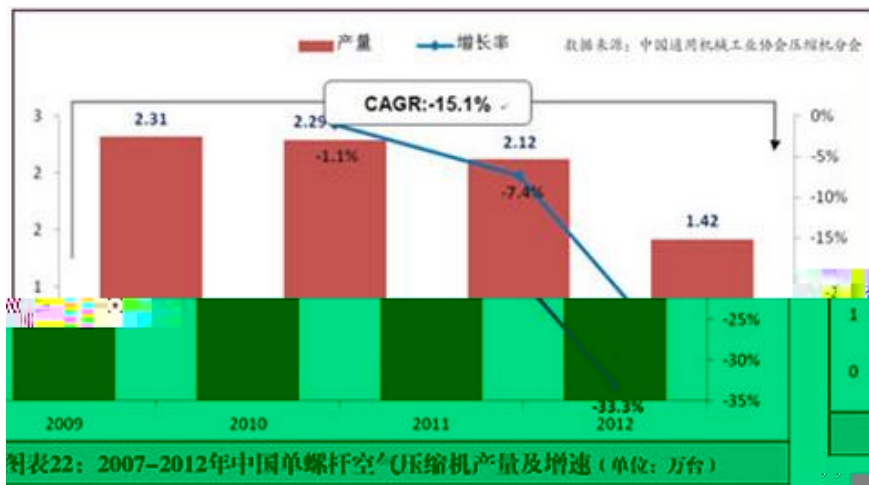
2007-2012

2012

1.42

33.3%

22



1974

1976

1984

1986

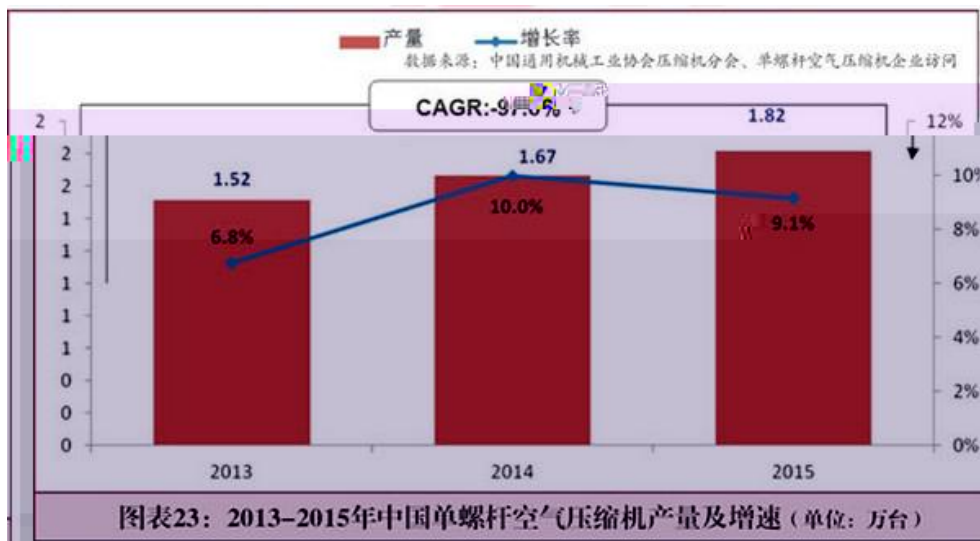
0

3

2015

1.82

23



2		100HP
50kg/cm ²		
3		
4		100%
5		
6		
	Surge	
7		
8		
2		10000KW
	4%	



2008

4

2009-2011

1500

2012

1

2

3

4

3

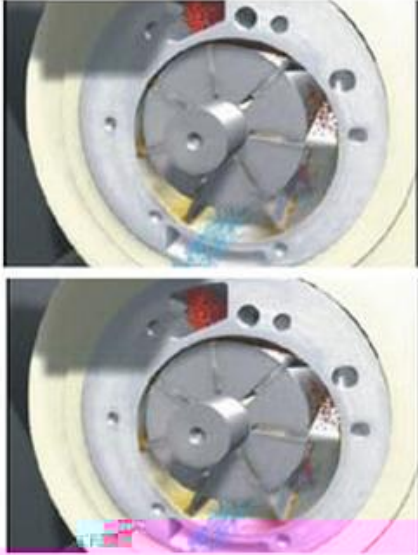
6.9%

2015

1650

24 25





+

$\leq 300 \text{ r} \cdot \text{p} \cdot \text{m}$

1

● 1905 Leon Creux

● 70

1972 Arthur D Little

● 80

81

83

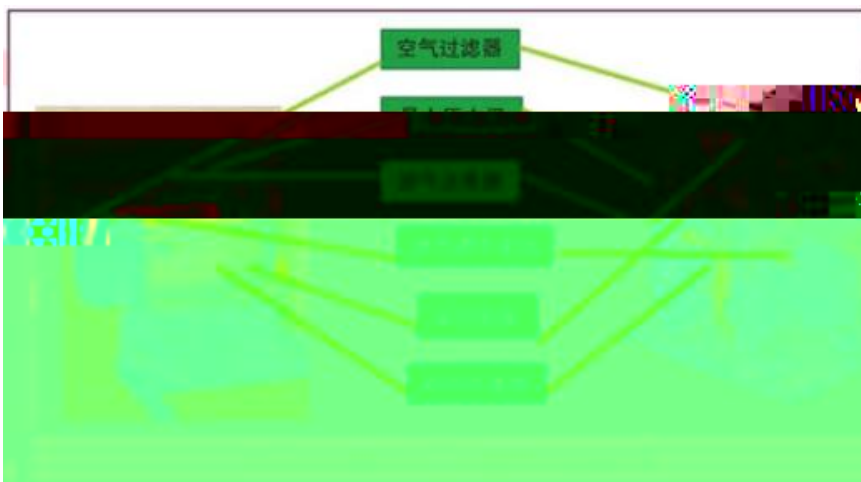
87

● 90

Carrier

2

- 90% 40%
- 15%
-
-
-
-
-
-
-
-
-



4

< >

2013 12

5. 2012

2012 1749 108

6%

1641

94% 1

2012 169581

10430 6% 1498

1%

157.653

93% 2 3

2012 8182 183

2%

9

7990

98% 4

2012 181204

11.951

7%

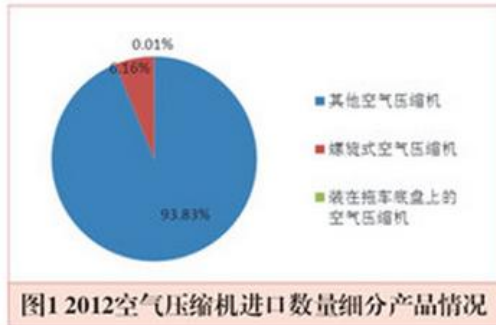
8.536

5%

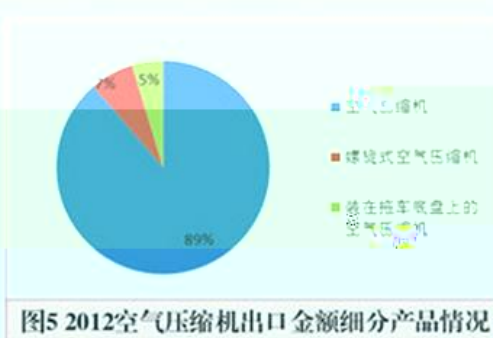
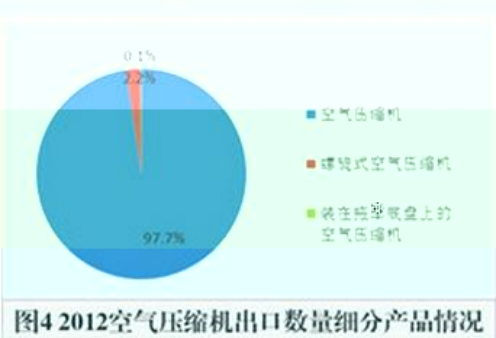
160717

89%

5 6



海关编码	商品名称	2012年进口数量(台)	2012年进口金额(万美元)	备注
84143019	螺旋式空气压缩机	1077295	10430	/
84144000	装在拖车底盘上的空气压缩机	1,752	1498	/
84148090	其它空气压缩机	16,409,091	157,653	含无油空气压缩机、螺杆式空气压缩机、离心式空气压缩机及其他空气压缩机



海关编码	商品名称	2012年进口数量(台)	2012年进口金额(万美元)	备注
84143019	螺旋式空气压缩机	1,828,296	11,951	/
84144000	装在拖车底盘上的空气压缩机	90,205	8,536	/
84148090	其它空气压缩机	79,896,397	160,717	含无油空气压缩机、螺杆式空气压缩机、离心式空气压缩机及其他空气压缩机

2013 12

6. 2013

2003-2009

2009

2012

113.4

8.9

2012

13,153

553

8.4

8.3

73,654

1.6

56

4.5

1

20

80

; 2 12

2016

78.5

159

<http://www.compressor.cn/News/hyqx/2014/0111/71621.html>

7.

()

20%

15

30%~60%

;

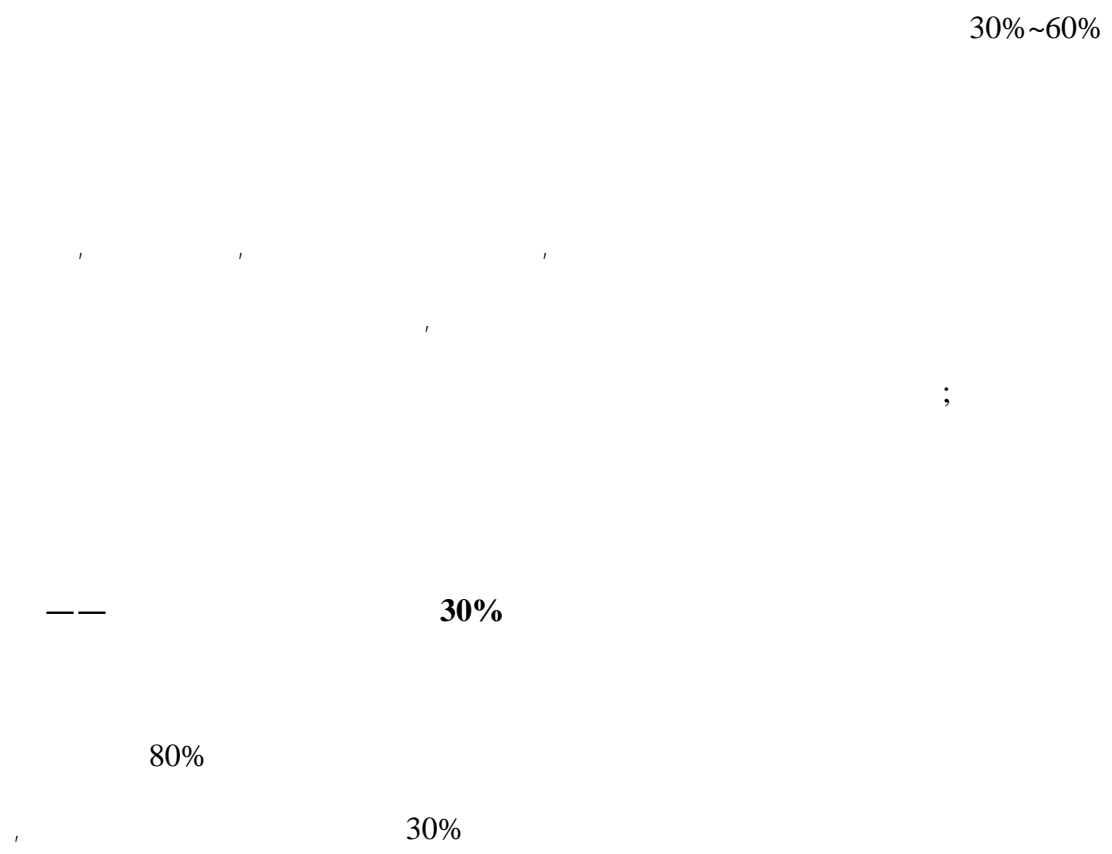
80%

10

;

50%

	2009	5%	2010
30%	5	15%	
	80%		
— , ,			
		100%~5%;	
± 0.5%;			
	3kV~10kV		
	690V		
		50%;	
			V/f
, ,			
, ,			



8. ()

(2009 213)

()

()

()

()

()

20%

()

()

10%

()

()

30%

()

()

()

()

()

()

()

()

()

()

()

()

()

()

()

()

<http://www.compressor.cn/News/hyqx/2013/1210/71210.html>

9. 2014

49GW

NPD Solarbuzz

PV

2014

2014

45GW 55GW

49GW

Finlay Colville

PV

2013

NPD Solarbuzz 12GW 2013

PV 36GW

2/3

2014

PV

2014

2013

10

2014

PV

22GW

NPD Solarbuzz

2005

2009

22GW

6

120MW

PV

5MW

49GW

90%

Colville

2011

2013

PV

2014

PV

30%

NPD Solarbuzz

0.05

18

2014

50GW

IHS Mercom

EnergyTrend

2014

40GW

43GW

NPD Solarbuzz

PV

<http://news.ehvacr.com/news/2013/1231/89794.html>

10.2013

	2013	11		99.7%	2012	0.3%
	2013	11		8 422.99		
0.23%	1	2013	1-11		2012	
				9.8%	2012	
0.3%		165.57		4.23%	2012	0.58%



图1 2012年2月~2013年11月通用机械行业主要产品产量同比增速

2012

2012 (2)

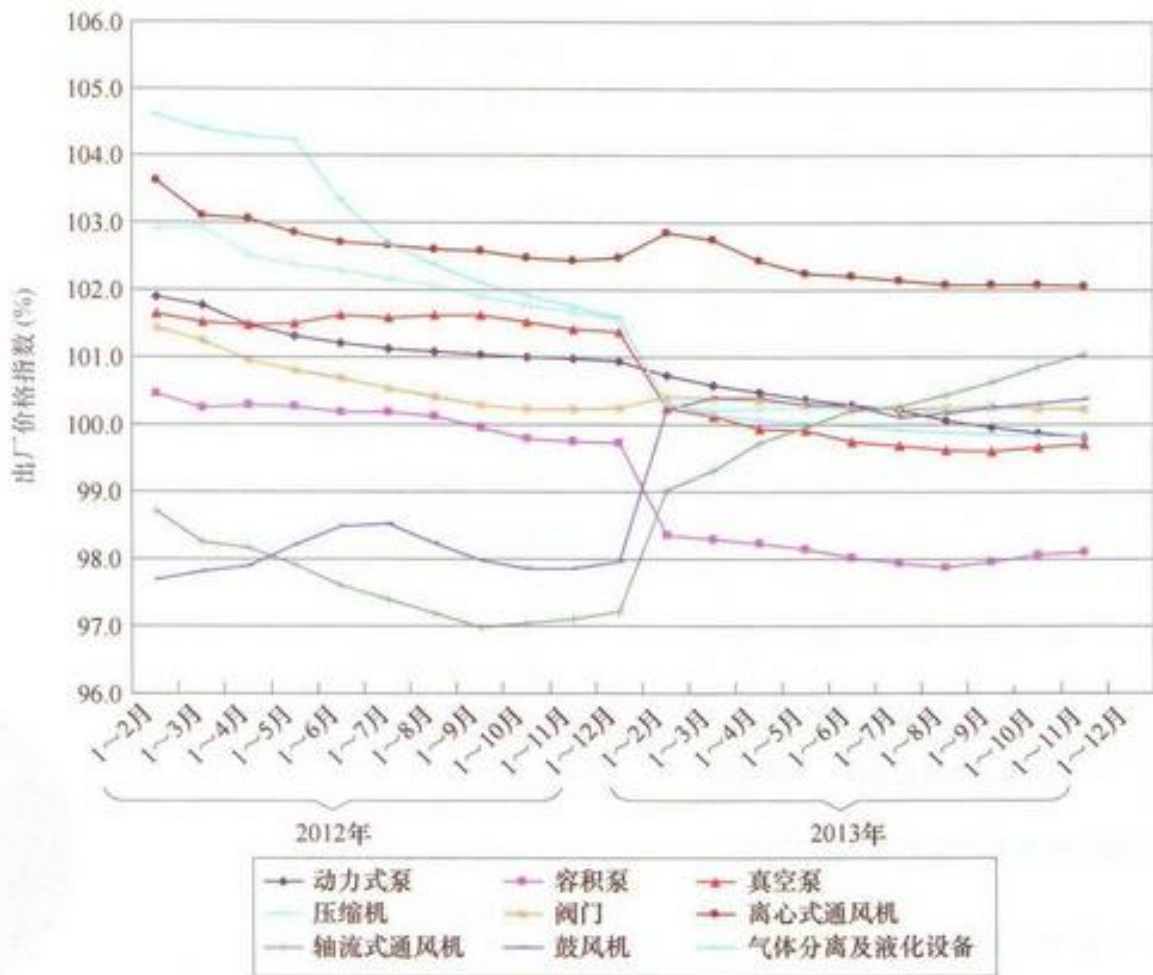


图2 2012年2月~2013年11月通用机械行业产要产品出厂价格指数

	2013		4
2012	11	99.7%	2012 0.3%
	2013 10		
10%	2013 1-10		7270.81
12.38%	2012 1.44%		
12%	468.85	11.02%	2012 0.58%
	7%	11%	2012

19.82

0.71%

3



图3 2012年2月~2013年10月通用机械行业主营业务收入同比增速

			1 577.27		10.82%		2012
3.61%		109.04		14.52%		2012	1.69%
2013	1-10		6.44%	2012		0.8%;	
6.95%	2012	0.1%					
2014							
			2014	GDP		7.5%	
			2013				
			2014		10%		

1.

Interclima

2013 11 4 11 8 Interclima

90

3000

Jean-Pierre Baleyrier

1994

2013

Interclima

177

3000

40

Interclima

ECOLINE

ORBIT 6

ORBIT 8

ECOSTAR CSV

12%

ECOLINE

COP

COP

12%

R134a

R404A, R407A, R407C, R407F and R507A

R404A

R22

ECOLINE :

ORBIT 6

50Hz

27

51Kw

20 38

R410A

ORBIT 8

ECOSTAR

ECOSTAR

Modbus

ECOSTAR

ECOSTAR

ECOLINE

ECOLINE

CSV

CSV

ESEER

5

CSV

http://bao.hvacr.cn/201311_2041699.html

2.

()

CURTIS

ELLIOTT

30%

-65°C

1953

<http://www.etyjx.com/2013/12/03699907137.shtml>

3.

2013 10 16

1,600

13,120

6,560

800

6,560

3,280

2013 11 20

2013-068

2013 12 19

1 , Refcomp

2

3

4

800

500

300

2013 12 27

<http://money.163.com/13/1231/05/9HD9BJMI00253B0H.html>

4. , R32

60

, R32

2013 12 19

, R32

R32

R22

/

/

R32

R22

2013

ICPF

, KSB

,

KSB

16

KSB

D.-H. Hellmann

KSB

,

, KSB

, KSB

KSB

KSB

FGD

<http://news.ehvacr.com/company/2013/1224/89654.html>

6.

400

1987

<http://news.ehvacr.com/company/2013/1224/89649.html>

7. 23XRV

2013 12 17 — — 23XRV 2013

— — —
23XRV 2010

2110

23XRV

23XRV COP 6.6 IPLV 11.7

HFC-134a

23XRV

2008 23XRV 2012

<http://news.ehvacr.com/company/2013/1219/89591.html> Top

8.

12 12

COP IPLV

2009

2012

2011 11

2625

2013 3

3 21

UL

GB/T18430-2007

COP 7.11W/W

17%

ARI550/590-2011

IPLV

11.62

IPLV

6.7

50%

4,000

800RT

10

<http://news.ehvacr.com/company/2013/1216/89523.html>

9.

60%

150

700

100

IT

<http://news.ehvacr.com/news/2013/1203/89244.html>

10.

11 27

(Trane)

BSE

SMARDT

R410A CGAM 17 (BSE)
(SMARDT)
Turbocor
HCFC
GWP R32 R410A
R32 OEM
R32 GWP

<http://news.ehvacr.com/company/2013/1202/89212.html>

11.

EVI

TM

TM

25

TM

20%

-25

50

± 0.5

55

TM

DSH

30%

6

Dave Bersaglini

TM

<http://news.ehvacr.com/company/2013/1212/89466.html>

12.

11 12

40

7

10

(11 1 10)

	kW/h	Kw/h	Kw/h	
KE185	40007	32065		
KE450	90825	72016	178004	684
KSGe469	87211	73923		
		10	684	
22.8		178004		360
	2.24		: 5300	
	ORC			

<http://www.compressor.cn/News/scdt/2013/1205/71162.html>

13.

2013 12 20	Wilrijk	4	
GA VSD+		37kW	50%
		13%	
	1994	VSD	

35%

GA VSD+

50%

GA VSD+

13%

GA VSD+

Sanjeev Sharma

8

VSD+ 18-37kW

GA VSD+

37kW

75%

37kW 50hp

7-15kW

GA VSD+

4

“

”

GA VSD+

Elektronikon?

50%

<http://news.21-sun.com/detail/2013/12/201312240821087.shtml>

14.

V

V

85%

V

70oC

V

160kW

8000

<http://www.etyjx.com/2013/12/23703641689.shtml>

<http://www.compressor.cn/News/hykc/2013/1220/71371.html>

16.

TV15

EV18

EV45

2013

<http://www.compressor.cn/News/qyzc/2013/1227/71448.html>

17.

1998

2012

45

2.5

2013 5 23

2

2008

2013

/

3000

GREATALL

HIBON

SAUER

BOGE

LMF

RIX

31

<http://www.compressor.cn/News/qyzc/2013/1229/71452.html>

18.

<http://www.etyjx.com/2013/11/25697189873.shtml>

19.Edwards

nXDS

nXDS-R

nXDS

Edwards

David Steele

nXDS-R

5

nXDS-R

52 (A)

20

<http://www.chinesevacuum.com/ShowArticle.aspx?id=43136&pid=39>

20.

NEWRI

NTU

NEWRI

Ng Wun Jern

Ng

Lux Research

Ng

30

Rod Minett

NTU

NEWRI

(NTU)

33500

NTU

NTU

(NEWRI) NTU

(<[A href="mailto:ERI@N">ERI@N](mailto:ERI@N))

(ACI)

NTU

www.ntu.edu.sg

A)

20600

100

2013

			400	60	Edwards
3200					
Edwards					
	Edwards				
Edwards 2012	5.95	64			
EBITDA	19.1%		10.6%		
	4%				
	10.50			106	
16	28	4		Edwards	
9.25	2013			1.25	
	2013		EBITDA		
5.875	6.50		EBITDA	1.139	1.45
			Edwards		
	1.25	/			2013
8	16		Edwards 30	8.33	
	11%	26%			
			Edwards		
			Edwards		Edwards
		2014	Edwards		
84%					
Edwards					

Busch

Busch

50

<http://www.chinesevacuum.com/ShowArticle.aspx?id=42612&pid=39>

25.

9

KYKY

KYKY

<http://www.chinesevacuum.com/ShowArticle.aspx?id=42460&pid=39>

26.

IDP-15

IDP-15

IDP-15

IDP-15 15.4 / 256 /

IDP-15

IDP-15

TriScroll 300

1. 2013

2013-11-08

2013

1994

1996

2000

2007

2007

10

30%

LB

RG

LT

RE R134a
R134a

RE

20%

http://bao.hvacr.cn/201311_2041318.html

2.

2013-11-05

10

,IPO

60%

,PEG

-1.07%,

35

75p 125p

20

http://bao.hvacr.cn/201311_2041262.html

4. 2013

2013-11-07

2013

2013

<http://www.shanghai.gov.cn/shanghai/node2314/node2315/node15343/u21ai808892.html>

5. : , ---

2013-11-01

: 2013 , 6.21 , 17.65%,

1.12 , 33.08%, 2013

1.23 1.44 , 15% 35%

3.73 ,

6.21 , 17.65%, 1.12 ,

33.08% 35.61%, 3.73 ,

38.93%, ,

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20% 30% ,

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， (30%)，

2013-2015 EPS 0.58 0.74 0.95 ，
25 20 16 ，
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<http://sc.stock.cnfol.com/131101/123,1764,16286446,00.shtml>

6. : , ---

2013-11-01

: 2013 , 6.21 , 17.65%,
1.12 , 33.08%, 2013
1.23 1.44 , 15% 35%
3.73
6.21 , 17.65%, 1.12 ,
33.08% 35.61%, 3.73 ,
38.93%, , ,

，
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)，
20% 30% ，
，

, (30%),

2013-2015 EPS 0.58 0.74 0.95 ,

25 20 16 ,

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<http://sc.stock.cnfol.com/131101/123,1764,16286446,00.shtml>

7. :

12 20 , , (): , () () ; , ()

12 20 , , (): , () () () ; , ()

, , 40%

,2013 ,

2013 40% ,

2014 30~40% ,

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2014 ,

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