



2019

4

64

www.hanbell.com.cn

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ir@hanbell.cn

021-51365368

- 1. 2019
- 2. 7
- 3.
- 4.
- 5.
- 6.
- 7.
- 8. 10
- 9.
- 10.
- 11. 7 PPI 0.3% 0.2%
- 12. 8 PPI 0.8% 0.1%
- 13.
- 14.
- 15. 2019 1-7 1346
- 16. "
- 17.
- 18. :
- 19. 337
- 20. 0.12 kWh

21.

22.

23.

- 10.
- 11.
- 12. ABB Björn Rosengren
- 13. HiLobe®
- 14. 1000 kmh -
- 15. 18.22
- 16.
- 17. 45.86 15GW
- 18. CO
- 19.

- 1.
- 2.
- 3.
- 4.
- 5. 2050
- 6.
- 7.
- 8. 9327.84 10.77%

1.

1	2019					
	2019	7	1680.3	11.7%	1615.2	
	12.73%			2019		
19	11	-3	4			
					2019	
	20617.7		2.97%	20719.5	1.66%	
	2019	6	4000			
	2019	8	957			
2.9%						

<http://acc.chinaiol.com/t/0815/99214092.html>

2	7			
	2019	7	29.75	20.45%
1.98%		29.38%		

<http://acc.chinaiol.com/t/0830/01214631.html>

3

2019 5

300

,

200

1000

1500

50 80

2014

Mirai

Mirai

500

3

Mirai

Mirai

2017

3

300

3

2018

0.8

41

2018 1

2020

500

3

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8738>

4

12 31

2

20

3%

80%

3

2019 225

2015

12 31

2

20

3%

80%

3

2015 19

2019-2020

2017 1701

5-10

2018 943

2025

+

<

>

2017 67

2020

12

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8770>

6

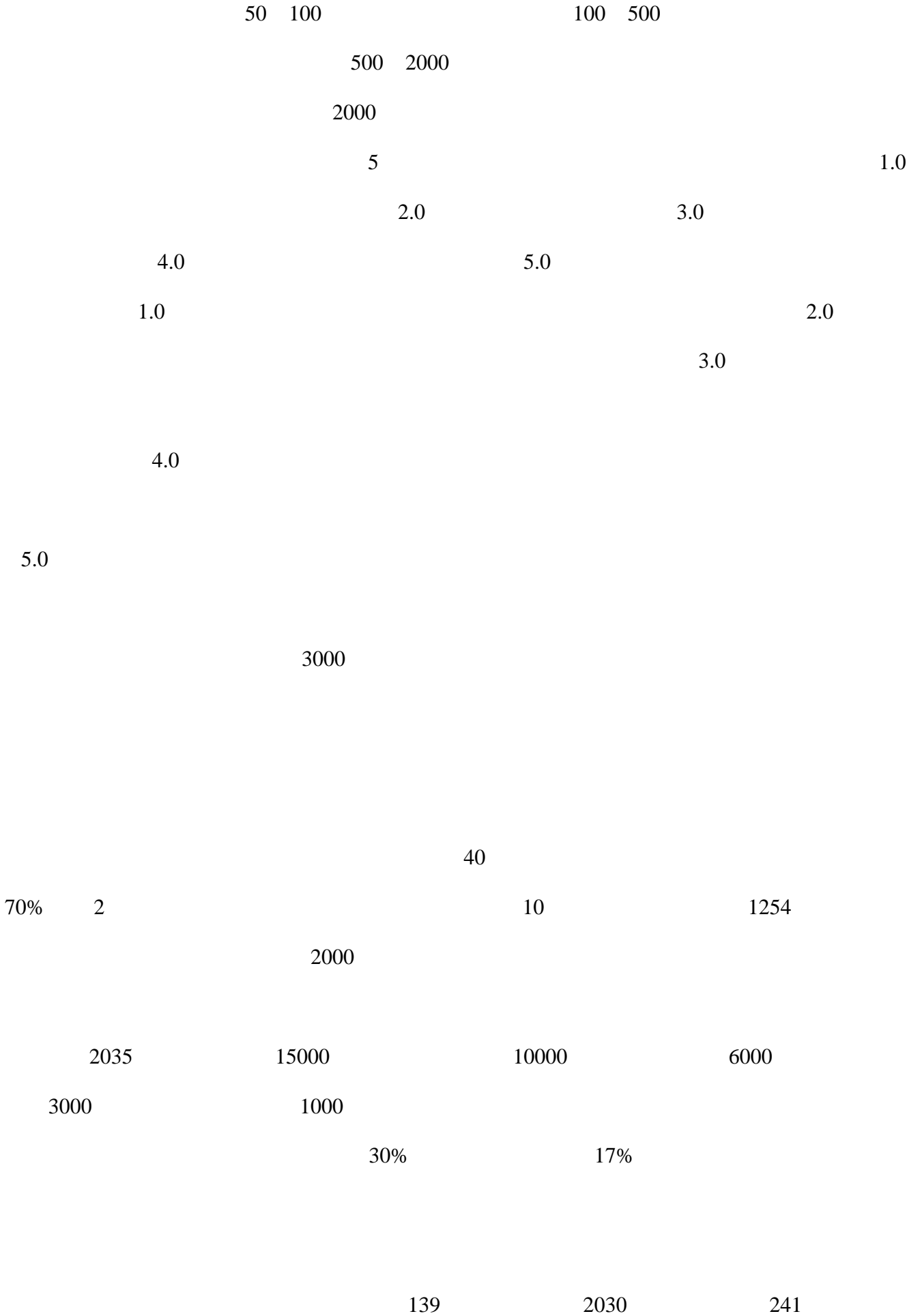
1974
ACUUS 1986

ITA 1996
ISTT 1991

1/3

120

11 12



160

40

15

1/4

2017

33

LED

70%

6 28

700



77%

3000

5000

2014

2017

80%

6 4

16 2017 60%

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8743>

8 10

2050 10

(Shell)

SCGP , ,
 313 , 99.5%(mole)

PSA

3 / LNG

4 /

1. 9 Nm3/h 12.4

6 +10% 1.5 / 1.36

/m3 805 / 2.58 / m3

2.

3.

4.

2009~2013

/ 1

10

2012 5

/

130 / 6200~6500 / 40

E-Gas

10

				85.84%		99.5%		3000
		33%	35%					
2014	7	14						
SEBS		7	17	SEBS		2000		180
	9.32			SBES	260	100%		120
		SEBS				2006		SEBS
SEBS				2014	4	20		
		SEBS				97.5%		
			SEBS					SEBS
				3200		1800		
						2014	11	13
							4	2
46		(CO+H2)/						
		32.1	/					50
	/	35	/		3	/		
2017	10	20						
						5.3	/	

CO2

CO2

CO2 H2 N2

CO2 H2

Fe2O3

Al2O3

FeO

75%

2016 12 25

20

374.3 22.1MPa

PM2.5

96% 99%

0.58

0.05

()

1.5

10

50MW

11

/

/

11

1

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8737>

9

6 10

6 14

GB12021.3-2010.

L L L

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8779>

10

2019 5 10 2000
10% 25%

2019 5 13

2019 6 1 0 600
 25% 20% 10% 5%
 5%

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8718>

11 7 PPI 0.3% 0.2%
 2019 7 0.3% 0.2%
 0.6% 0.2% 1 7 0.2%
 0.7% 0.4
 0.51 3.2%
 2.9% 0.2% 0.8% 0.1
 0.20 2.0%
 1.3% 0.8% 1.2%
 5.7% 3.9% 2.4%
 5.4% 2.5% 2.1%

<http://acc.chinaiol.com/t/0809/42213893.html>

12 8 PPI 0.8% 0.1%
 2019 8 0.8% 0.1%
 1.3% 0.2% 1 8 0.1%
 0.2%
 1.3% 0.6
 0.98 2.8%

3.5%	0.8%	0.7%	0.1
	0.18		2.6%
0.9%	0.6%	2.0%	
	3.8%		2.9%
6.8%	3.2%		2.3%

<http://acc.chinaiol.com/t/0910/95215020.html>

13

9 12

6283

2017

8

5

2018

2017

2019 7 22

<https://solar.ofweek.com/2019-09/ART-260006-8480-30407118.html>

14

8 27 29

S?o Paulo

InterSolar

8 28

Greener

24%

1.26

gigawatt

Jinko

BYD

JA Solar

Trina		Canadian Solar	
Greener	2018		30%
?	-	Ávaro Garc ía-Maltr ás	
	20%		2%
1.5	100%	10	9
	?	Adalberto Maluf	
			11.4
24	2017	53	
	Vallya	?	Larissa Wachholz
	CGN	Enel	
	ePowerBay	330	MW
284	Actis	Atlas 255	Engie 251
			Enel

http://www.semi.org.cn/pv/news_show.aspx?ID=22483&classid=12

15	2019	1-7	1346			
1-7						
1-7			40652	4.6%,		4.4
	1-7		421	5.2%		
1.0%			27712	2.8%		4.2
			68.2%		41.6%	6668
		9.1%		5.1		16.4%
			30.9%		5851	8.8%
		4.8			14.4%	
26.3%						
	1-7					
				4.6%		15.1%
						12.2%
11.1%		10.8%	8.7%	8.3%	8.0%	7.5%
7.4%		7.3%	6.6%	6.2%	6.0%	4.8%

7		6672		2.7%		76
	5.4%		4626		1.2%	1110
	7.6%		859		4.6%	
7				2.7%		16
10%	15.7%	13.2%		12.4%		10.4%
	-0.1%	-0.3%		-0.9%		-1.1%
						-1.3%
	-1.4%	-5.2%	-5.3%	-6.2%		-7.3%
1-7		27223		2.6%		4.4
		67.0%			37.8%	7
4550		1.0%		3.5		
68.2%						
1-7		20387		3.6%		3.4
7		3193		4.3%		103.0
/	4.6	/		1.1	/	
1-7						
11305		3.6%		1.3		
	27.8%			21.9%		2597
	1.8%		0.3			2034
	5.9%	0.4				3260
6.5%		4.3			3414	1.0%
	0.7					
7		1713		5.0%		0.8
		25.7%			390	6.0%
	6.7		329			4.7%
2.4			494			10.1%

2.4			500			0.2%		6.3
7	6000			18.5		5.5%		816
		0.4		3.1		2.8		
11.6		10.2		8880		4699		
1.9		1.4	1-7			40301		
	3.0%		4.8					
1-7			6514			10.7		
7.2				1577		1437		
	759					57.9%	4.0%	19.3%
-8.2%								
1-7			29089			0.1		
7.2			17					20%
	133.8%	21.1%		10%		14.0%		13.0%
14								
10%	-17.2%	-13.7%	-13.6%	-13.3%	-12.3%	-12.0%	-10.4%	
1-7		1913			22.2%			9.3
1-7	6000			2393		9.5%		
18.4								
1-7			2184			40		
	1-7			2118		194.8		
	10							
				200		1174	924	553
							465	

271	244			2442			
		2512	1485		87		12
						2800	
			2600		938	168	
10					329	310	
		200					427 422 365 320
312						200	
	4006		129				1259
	33			770			29
	1-7		2840			11.8%	
29		44.3%		288			41.5%
		16.4%		190		6.7%	124
		3.2%		765		17.4%	487
		6.8%					
	1-7		7969			12.7%	1157
		11.8%		931			21.5%
		14.4%		660			2.1%
		23.3%		449			4.9%
		30.7%		412		6.9%	388
		14.8%		346		26.9%	334
		24.3%		293		9.9%	
7			598			14.4%	60
		37.0%		59		52.8%	38
41.1%		26		9.3%			124
	18.6%		141		13.7%		
7			1561			15.4%	207

32.3%	203	7.9%	192
10.3%	135	17.6%	108
13.9%	105	51.8%	78
15.5%	67	27.5%	65
6.1%	65	98.4%	

1-7

35

406

9

10

2019 11 2020 3

2020 1

3

5

7

200

http://www.semi.org.cn/pv/news_show.aspx?ID=22506&classid=12

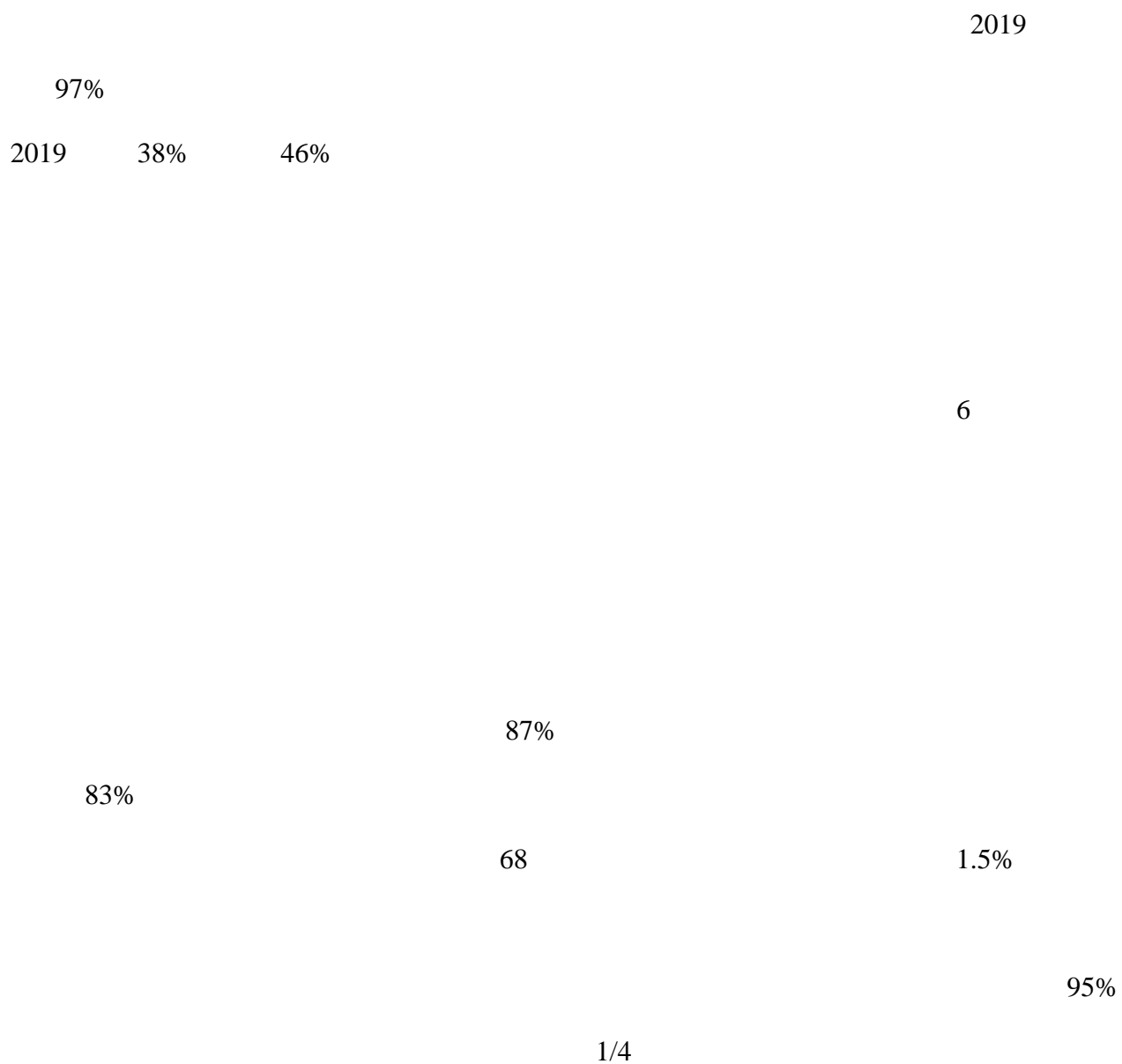
18 :

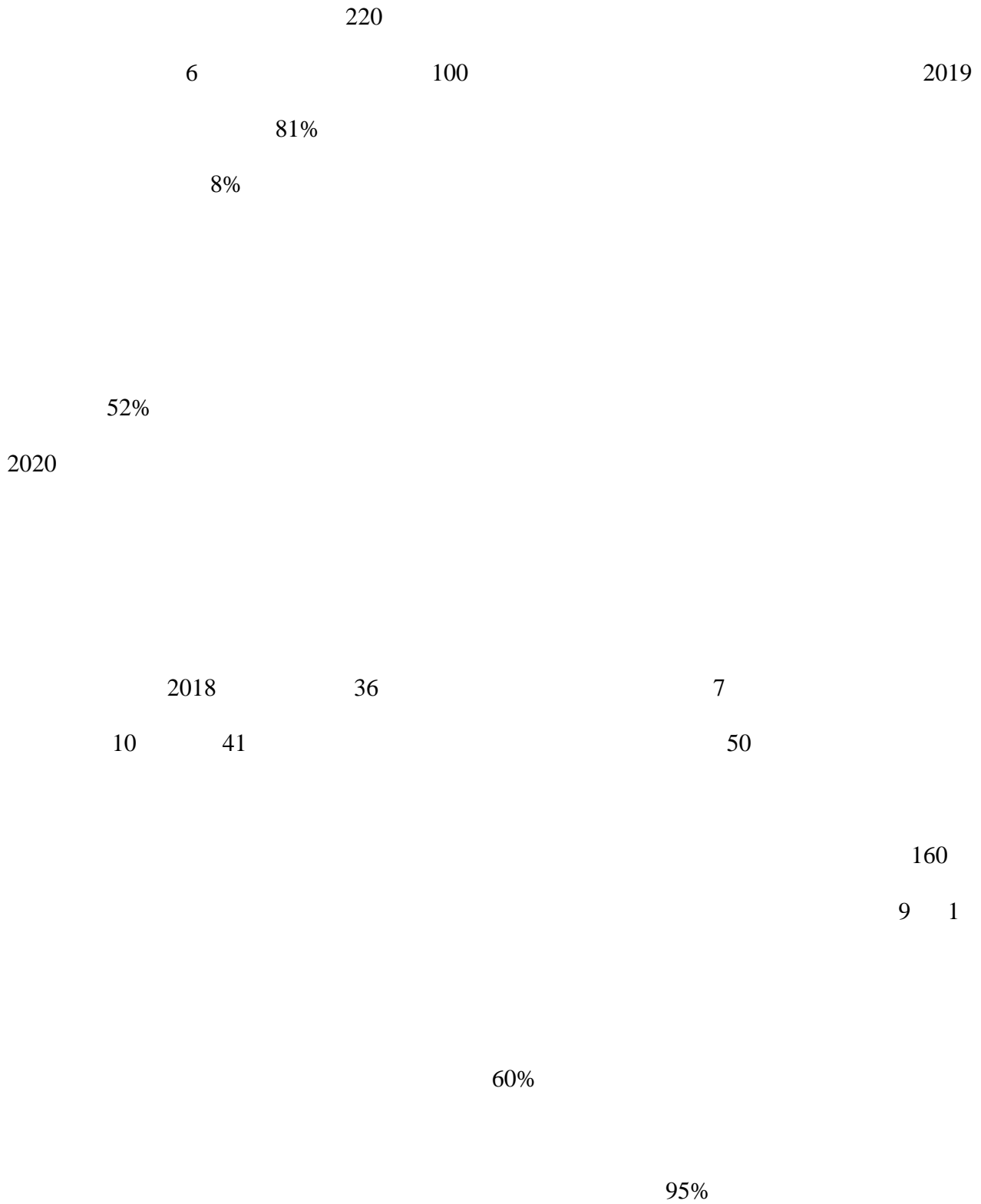
87%

83%

68

1.5%





http://www.semi.org.cn/news/news_show.aspx?ID=57258&classid=117

19 337

2019 8 26 Globalfoundries 1930 337

ITC 337

Certain Semiconductor Devices, Products Containing the Same, and Components

Thereof ITC 337 TCL

One Plus

http://www.semi.org.cn/news/news_show.aspx?ID=57265&classid=117

20 0.12 kWh

1 75

0 12 KWh

20 20

2030 30 20 16

2018 4426 1 74

9

5

<https://solar.ofweek.com/2019-07/ART-260009-8130-30397429.html>

2017 29

2020

SAC/TC269/SC5

2018

3

230

GB/T 28577-2012

GB/T28843-2012

GB/T 31086-2014

WB/T 1054-2015

WB/T1060-2016

WB/T 1059-2016

[2017]1096)

<http://www.lenglian.org.cn/news/2019/26863.html>

22

2019 9 3

EMR



三大环节冷链方面的主要挑战



23

7 25

<http://www.zhileng.com/news/hy/2019/0731/63728.html>

24

2019

2021

1100

2017-2021



2017

1

2019 4

2020 5 1

2016-2018

15%

0.6-0.7%

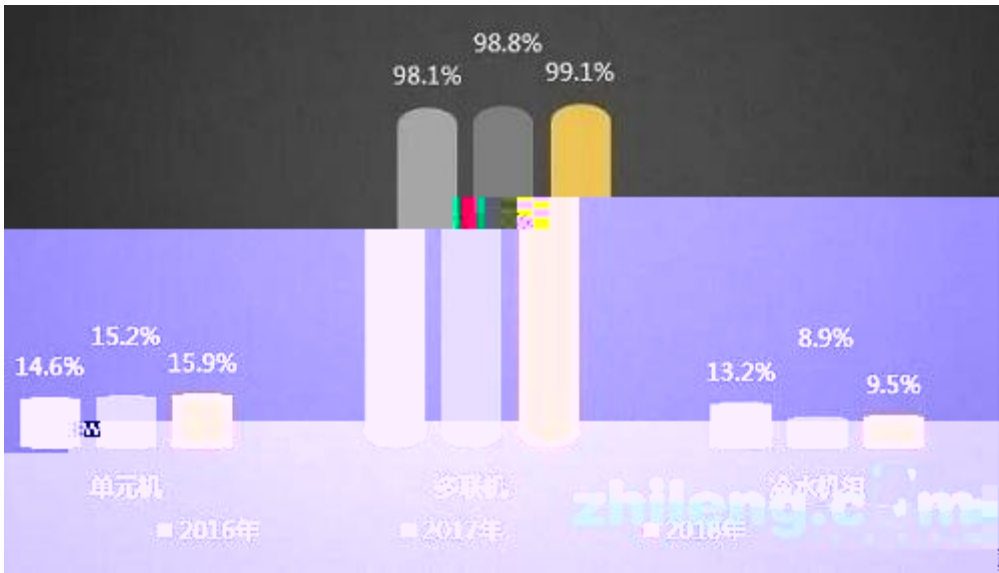
98%

2017

2018

9.5%

2016-2018



2017

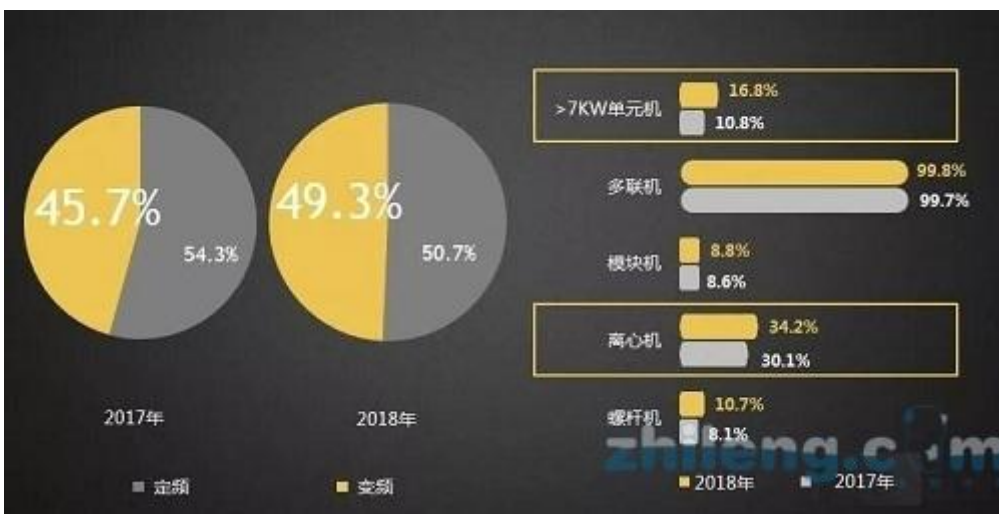
45.7%

2018

49.3%

3.6

2017-2018



2018



2018 2018 2018 50% 44 3.9

+

<http://www.zhileng.com/news/hy/2019/0729/63717.html>

25

				CBEM	2017
	2.01	tce		21%	2001 ~2017
	50	m2	140	m2	2
2001	23kgce/m2	/	2017	14kgce/m2	1

2004



20

2016 2019

2016 12 21 * . * . *

6

2017 3 5 * * *

*

2017 12 5 *

2017 ~2021

20

20

140 m2

200 m2

50%

80%

35 GJ

160 m2

0.22GJ/m2 /

0.23GJ/m2

0.02GJ/m2		110	m3		160	m2	
		110	m2				400
kWh					1200	kWh	
	1600	kWh	110	m3	5300	tce	
3.5kgce/m2			1/4				
	20%	40	m2				
					800	kWh	200
	5500	tce			200	m2	
1.08	tce	140	m2	54%			
							150
			90%		70%	*	
					30%	*	10%

<http://www.zhileng.com/news/hy/2019/0724/63698.html>

26

WTO

11

DS437

11



<http://www.zhileng.com/news/hy/2019/0722/63685.html>

2.

1

(2017-2019)

4300

2013 2016 146%

IDC

3% APP

2017 11 +

2025 3 5 APP

2018 5G

APP

ZStack

CEO

3

10

30

7

3

HanClouds



APP

0 1 1-N

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8780>

2

278 273

7.2 135.5

2018

41

2018

109

1527

1418

2020

2018

5000

2019

6

200

5000

2020

2

1

2

1

2

2.

3

6

1

1

[1]

[J].

2015

02 1-13.c

1	5		41.61		5.1%	35.10
		5.4%	5.72%	0.43		
5			113.35		6.3%	64.39
		5.3%	48.96	7.7%	56.8%	0.6
5						

5 6.2% 6.7%

5.1 5.6 4 15.1% 8.4%

5 132.8 11.1

5 17.5

0.1

5 56.8% 0.6

58.3% 1.4

1 5 2.3% 1 4 1.1

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8775>

5 8%

500 220

2018 70%

30%-40%

2020 (220kW) 8%

8% 8% ?

2018 10 5

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8719>

6 [GCCA](#)

GCCA

+ +

GCCA

GCCA

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8823>

7 [2035](#)

Statkraft

2035

40

Statkraft 2050 70

80

Statkraft HenrikS?tness

Statkraft 2018 25 2050

40

30

2050

2050

Statkraft

Statkraft David

<https://solar.ofweek.com/2019-09/ART-260009-8420-30407143.html>

8 1650GW

2019

2009 414GW 2019

200 N IBC

N IBC

23%

IBC

IBC

IBC

http://www.semi.org.cn/pv/news_show.aspx?ID=22501&classid=12 Top

3.

1

2008

45MPa 70MPa

45MPa

2000kg/

2018

2018

2019

8

10

30

SH/T3143-2012

5.3.2

12

7MPaG

130

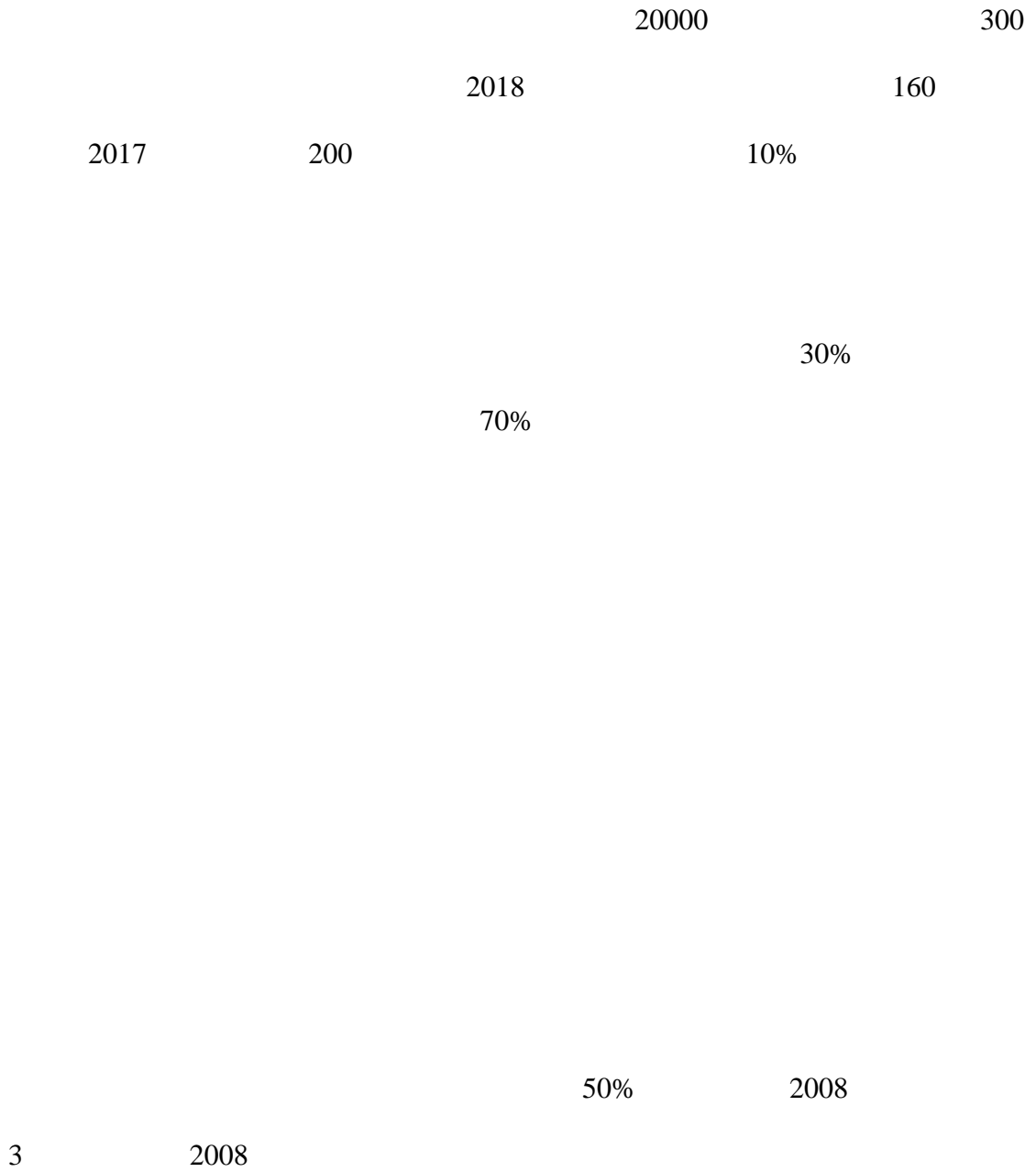
10

20

90MPa 70MPa

5000

8000



4. R 12%

R RS90-160kW

R 12%

2015 R

R RS90-160kW R

12% R 9%

RS90-160kW PACTM

RS90-160kW

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8787>

5.

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8794>

6. HGT

7 19

1250

1250

1250

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8810>

7.

8 11

2019

2

1.5

47

2

600

8. CP

CP

CPVS

CPMV

3%

350

CP

75kW

7.5kW

7-22kW

45-75kW

8

30kW

37kW

CPM11-22kW

9.

ASME

ASME

U

U

2019 8 6

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8817>

10.

-20 /

45 /

PO/SM

ETI

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=108&id=8809>

12. ABB Björn Rosengren

ABB Björn Rosengren 2020 2 1

ABB 2020 3 1

ABB Björn Rosengren

Björn Rosengren 60

2015

2011-2015

13

1998-2011

Björn Rosengren ABB

ABB

Björn Rosengren

Björn Rosengren

ABB

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=108&id=8808>

13. HiLobe®

8 13 9 1 HiLobe®
 20% 50
 520 - 2,100 m³/h
 HiLobe® 20
 HiLobe® 50
 IE4 1 · 10⁻⁶
 Pa m³/s
 HiLobe® 40 °C
 HiLobe®
 Monitoring Condition
 HiLobe®
 HiLobe® 2004
 HiLobe®
 2016 2017
 2019 4 HiLobe ®
 ComVac
<http://www.comvac.cn/qydt/qykx/2019/0826/54231.html>

14. 1000 kmh -

Hyperloop
 Busch

SpaceX

Elon Musk

Hyperloop



2017
Hardt

"SpaceX

"

Hyperloop

" "

30

3

Busch

40

130

1

99.9%

Hardt

Busch

<http://www.comvac.cn/qydt/qyqx/2019/0910/54269.html> Top ↑

15.

18.22

9 9

18 22

9 9

66000

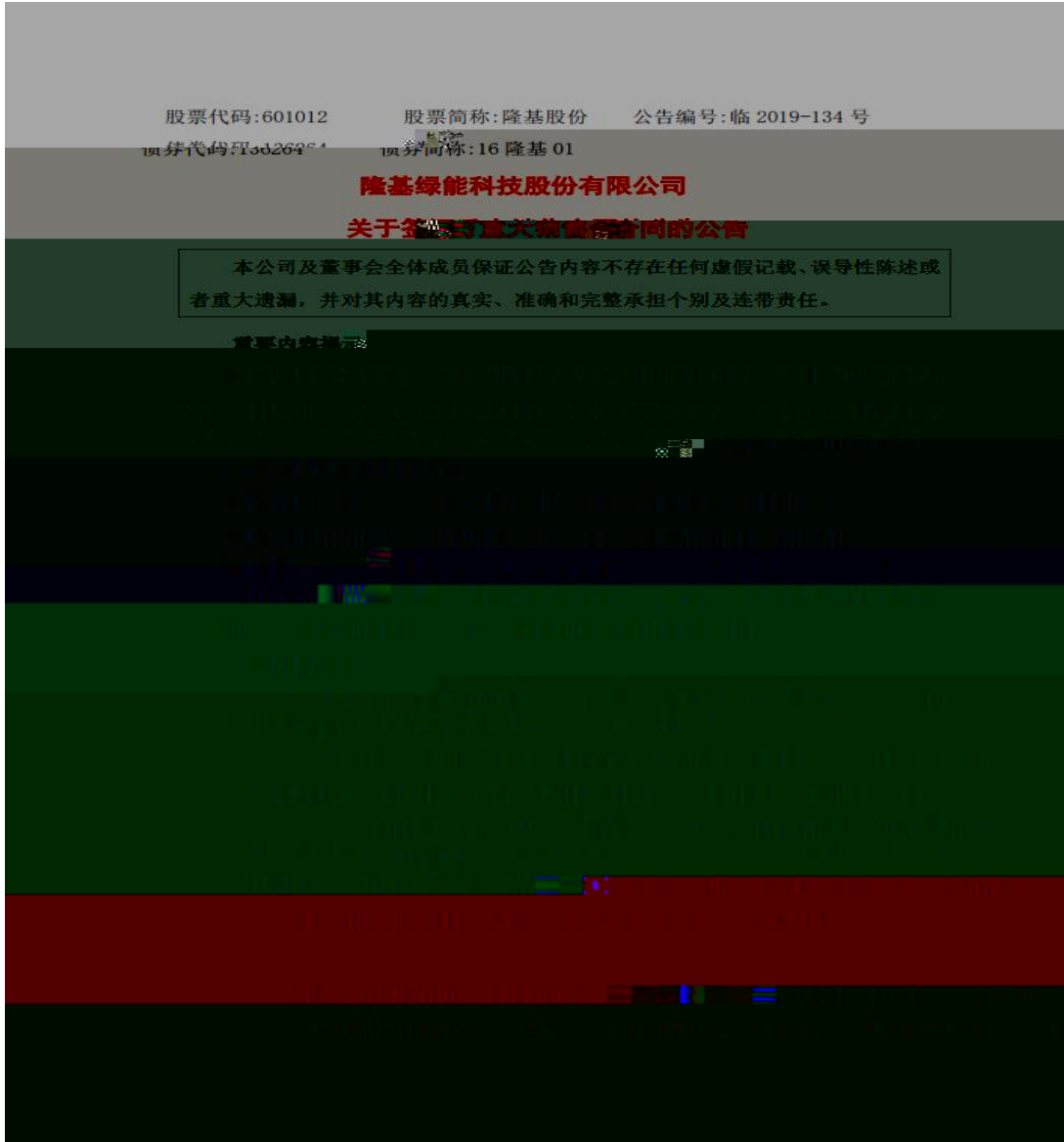
18 22

2018

8 29

2020 1 1

2022 12 31



2019

EPC

2019

199 636 78 59 15 26 22
3 6 10 71 1 87
2019 40GW

http://www.semi.org.cn/pv/news_show.aspx?ID=22478&classid=12 Top

18 CO

8 2 (iTOMIC)



CO2

90

CO2



iTOMIC CO?

iTOMIC 23 (1948)

2002

CO?

CO?

2006

2019

CO?



i-Glow CO2

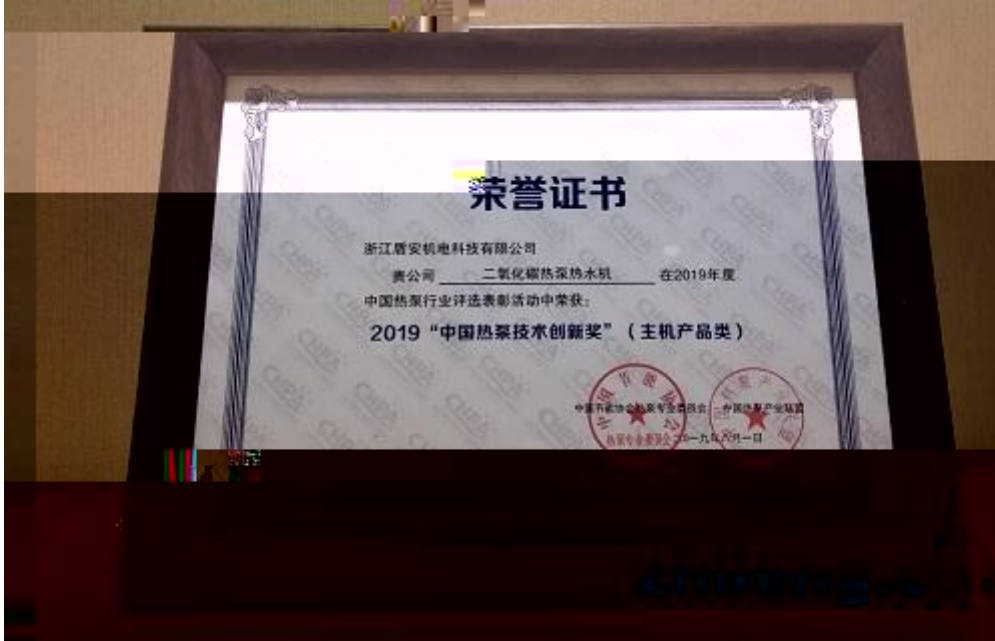
COP

CO2

CO2

5 -20

90



<http://www.zhileng.com/news/mq/2019/0805/63743.html>

Top

19

7 16



()



()

22

2013

()

<http://www.zhileng.com/news/mq/2019/0717/63664.html> Top

4.

1

10.77%

7.57%

0.85pct

6.77%

1.30pct

22.27%

3.00pct

ROE

8.38%

1.66pct

33.77%

12.77%

0.12

3

2019-08-01

7 30

()

1

2 *ST

2%

1

2

3

4

5

6

:

6%

4

2019



80-7000m³/h

CVD/ETCH

SEMI

<http://acc.chinaiol.com/t/0801/14213563.html>

5 2050

2019-07-15

							2025	2035
2050				5	130	500		
	60kW	2025	2035	2050			144	720
990	2019							

()

6

2019-07-19

3%

4%

7

2019-07-25

7.4%

6%

2019						6
	508	484		9.8	14.6	1~6
1170	1102		7.2	7.8		

2019

+

/ 10 100 /

8		9327.84	10.77%
	2019-07-26		
7	25	2019 1-6	7.42
9.06%		-1.67%	9327.84
	10.77%	15.62%	
		742,387,914.85	9.06%
	111,595,377.72	10.36%	
93,278,424.57		10.77%	11.47%
	0.84%		
		9.06%	10.77%