

1.

2.

3. 8% “ ”

4.

5.

- 21. 3000
- 22.
- 23. 2018 6 19.2%
- 24. 80%
- 25. 7%

- 1. “ ”
- 2.
- 3. 2018
- 4.
- 5. 2018
- 6. 2018

- 1. Opteon XL41
- 2. “ ”
- 3.
- 4. 5 60
- 5.
- 6. 2019 " "
- 7.
- 8.
- 9.
- 10.
- 11. , &
- 12.
- 13. 2018 “ ”
- 14. .
- 15. Busch Pfeiffer Vacuum Technology

16.

17.

18.

19. 30

”

2018

“

531

20.

166

400W

21.

22.

23.

13.5

24.

25.

26.

LG

27.

40

28.

29.

30.

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4.

“

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5.

6.

1

2020

12 1

G20

1 2000

10%

1 1

25% 2

90

3

225

1%

1.5%

1%

ASX200

1.5% A

2654.80

2.57%

7938.47

3.34%

3

10

IMF

11 28

G20

G20

2020

NFI

<http://news.ehvacr.com/news/2018/1204/105789.html>

2

2018

500

2018

2019

10

1-8

12.99%

3.3%

2015

4000

66

,

22

“

"

“

"

“

”

”

”

2500m³

4 40m³/min

3

“

”

4

11 19

421.14

394.27

33

300

1324.09

4.8

2.6

11 19

10 30

11 15

9	6	3	918				
	10	24		2018			
	147		117	30	6977		
				2603	102		
			55	39	16	1698	
						4.8	
2.6							

7 31

10 31

11 14

1~10

5.7%

1~9

0.3

1~10

3.7%

0.4

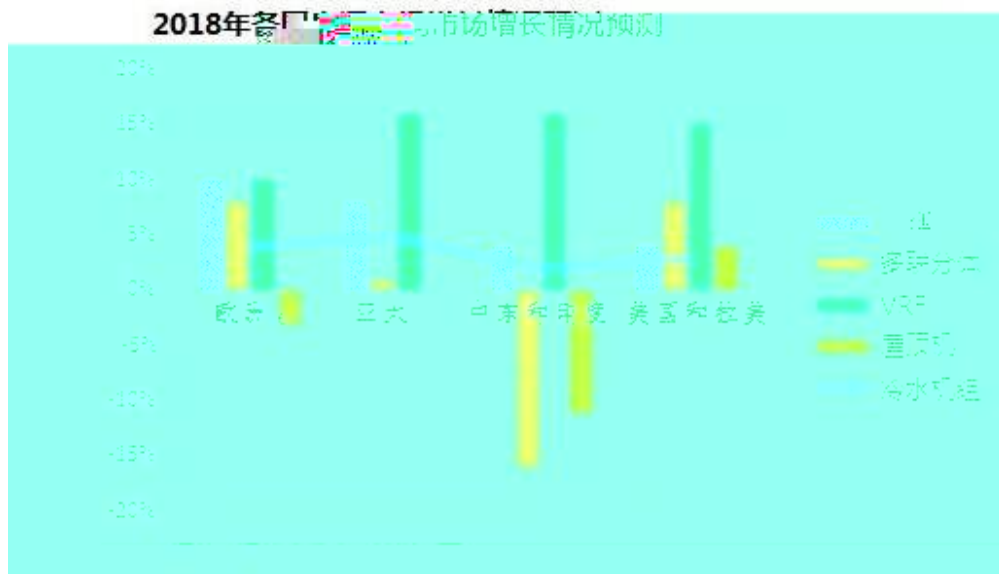
11 15

PPP

<http://news.ehvacr.com/news/2018/1122/105709.html>

5

BSRIA



2018

5

10%~25%

3

VRF

2018

50%

VRFs

VRF

VRF

2018 1

VRF

2018 3 4 5

5

6

2019

6

7

85%

2016

5-10

15-20

200 (

300)

25%

<http://cac.chinaiol.com/s/1127/43204467.html>

7

35

2019 1 21

200

12

35

2019

<https://www.hvacrhome.com/news/show.php?itemid=41639>

8

2030

20

					48%	33%
2016		69		34%	66%	
			59.8%		2007	29.2
2017	81.6	338				29.3%
		30%				
		40%				
2017						
2018		37.6%	2017-2018			25%
			2			18.5%
	35.9		41.2%			
		85%		6000		

2016

206 6.7 3.3%

19.4% 2017-2018 2.08

60%

67% 67%

7400 54.86 27.43

650 2030

20 , 400 PM2.5 1.9

<https://www.hvacrhome.com/news/show.php?itemid=41543>

9

2018



2018

2018

2018

<http://news.ehvacr.com/news/2019/0129/106235.html>

10

30

11 20

20

” 12.6 “ ” 2020 800 “ 30

— -60 100 50 “ ” 50 150 “ ”

<http://news.ehvacr.com/news/2018/1123/105710.html>

11 :

2018-2019

2017-2021

12 15

<http://cac.chinaiol.com/s/1218/39205512.html>

12

10 29

14

2018 190

2018 33

14

500L

500L

2018 12 1

4

12 1

4

4

4

24

1

“

”

2018 35

2018 12 1

“

”

“ ”

2018 12

010-82262225

2018 10 16

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8283>

13 “ ”

1-9

11 14 1-9

4.9% 9.59 14.8% 7121.0 45.2%

2.46 () 1.4% 2.2%

“ ”					
		1-9		2.2%	1-8
1377.2		2.0%	3497.1	2.6%	1309.7
2.7%		1226.7	1.5%	6230.7	0.9%
2509.2		1.1%	1917.8	2.7%	6350.6
	()	5124.5	16.1%	6.47	1.4%
9		4.9%	()	(100%)	
	0.1%	9.4%	3.5%		
	1-9				
	41.2%	1.6		7.0%	0.9
			3.8%		
1.0%	1-9		24.6%		7.2%
		1-9		7121.0	45.2%
			14.3%	100	81.56
	1.05	18.4%		12.75	6.1%
	54.19%	1.16	1-9		7.43%
1.56					
		9		599.2	
20.5%			1.59	3.6%	
93.87		31.4%	482.06	18.1%	1-9
			5216.6	22.8%	8.6
			10.5	12.9%	
962.9		99.8%	4087.7	13.7%	
				1-9	
		26.2%	22.8%	15.0%	

		21.2%		5.8%
			1-9	
	1.7%			
	5.4%	1-8	1.0	
11		2000	/	
		7	23	
			100	
				100
				“ ”
				2017
		35%		
				2
		5		4000
	“ ”			280
			6000	
		“ ”		
	“ ”			

“

”

“

”

2015

() ()

2019-2020

/ /

7400/3400/2000 / 2019

2018

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6000

“

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”

76

2018

2018

“

”

20000h

1

2

PTA

“ ”

20% 40%

3

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=5&id=8362>

14

2018 47

CGMA

033001-2018	2018	10	1	2019	1	1
-------------	------	----	---	------	---	---

GB/T16665

5 1

10%

5

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8308>

15

1.6

2008

39

1.6

2017

2050

20%

11.7%

28.6%

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=108&id=8291>

16 2030

3100

“ ”

2018

2030

4 9275

3042

2017

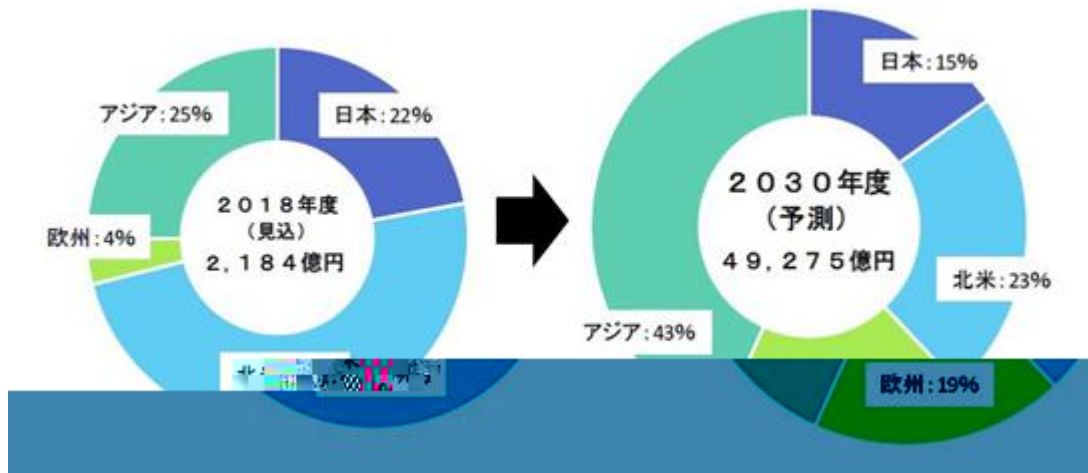
28

2 1301

1317

2017

49 8



2017

1757

FCV

2025

2030

2025 1

618 2030 4 9275 3042



2018

2018 “ NEXO ”

2030

PEFC

SOFC

“ ”

<https://libattery.ofweek.com/2019-01/ART-36008-8420-30301262.html>

17	2018	44.26GW
	2018	
4426	2017	
2018		
		2018—2020

	2330	2096			12		
1	74		12384		5061		
	2018		1775		50		1115
	37				1617		1523
	1460	1439					
	2018			18			2 8
		“	”				
	21 4		16	6			10 3
	10	10					
	2018		305		1781		20 7
		906		14			
				258	180	167	164
					50	47	
42	24						135
	95	92	83				

<https://solar.ofweek.com/2019-01/ART-260009-8420-30301903.html>

18 2019

100GW

Wood Mackenzie

2019

100GW

Wood Mackenzie

2017

55

2018

43

30

PERC

36

41

20%

2020

32%

4

2019

2017

2.3

Lightsource BP

300

2019

40 /

51 /

2019

2-3

5

56%

2018

13%

15%

ERCOT

PJM

, 2018

25%

PPA

2.9

PPA

30%

ITC

2019

2019

2018

12

(Renewable Energy Directive)

6

2019

2018

2100

38%—

SunPower

470

;

47%

2018

ITC

7

+

Xcel Energy(30-32

/

)

NV Energy(31-37

/

)

PG&E(

567.5

) 2018

+

+

2019

7

262

1

78

/

1.4

2023

8.8

+

2018

82%

+

CCGT

+

CCGT

20

LCOE-LCOS

+

CCGT

OCGT

LCOE

2019 +

8 Mono PERC Bi-facial

2019 2019 41%

Mono Perc 2018 36%

2019 2019

0.25 /Wdc 0.95 /Wdc—

0.80

—
/Wdc

9

2018 :

(SECI) 1000 ; 2

2019 (RFP)

(500) 6300 84%

2019 1000

(

)

14.7

2019

10

()

Wood

Mackenzie

50

()

CSP

1

2019

https://solar.ofweek.com/2019-01/ART-260006-8420-30301884_2.html

20

2019

2019

2019

2018 11 12

2

2019 1

10% 15%

2019

2018

22%

15%

7%

2019

2019

1%

5%

2018

PC

2019

4

2019

2009

2018

2018

621

2299	200+; Q àzÁ/EP01 Ü? / t018	3000
2014	2017	600 700 2018
846.36		
2018	1-9	4461.5 22.4
22	1791.4	27.6 1147.3
	1522.8	19.1

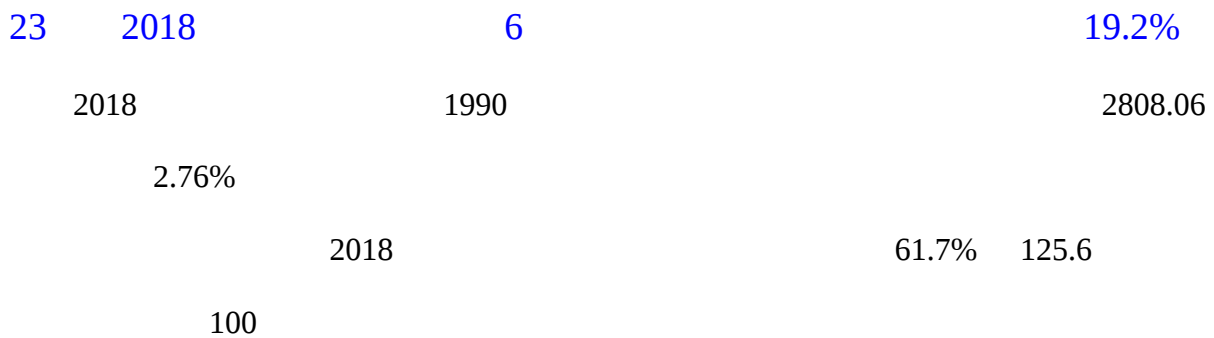
http://www.semi.org.cn/news/news_show.aspx?ID=55141&classid=117

22

	7	
	2019	
	NAND Flash	2018
2018	4 DRAM	
		DRAM
	DRAM	
		NAND 2019



http://www.semi.org.cn/news/news_show.aspx?ID=54980&classid=117



2018年主流新能源汽车企业销量目标完成情况				
车企	目标销量(万辆)	实际销量(万辆)	完成率	
比亚迪	20	247,811	123.9%	
北汽新能源	15	158,012	105.3%	
上汽乘用车	10	96,000	96.0%	
奇瑞	10	90,537	90.5%	
长安	8	42,410	53.0%	
众泰	8	33,872	42.3%	
知豆	8	15,336	19.2%	
江铃新能源	4	近5万辆	125.0%	
江淮	5	63,671	127.3%	
广汽新能源	1.5	20,045	133.6%	
蔚来	1	11,348	113.5%	

数据来源：车企&乘联会 整理

247811 123.9%

2018 12 46,650 55.1%

247,811 118%

20

62,078

5

59,799

225,395

2018

84,327

2018

65,871

35,699

SUV

EV360

35,699

158,012

105.3%

2018

158,012

53.11%

15

EC

EC

2018

90,637

16.6%

57.36%

2019

22

		9.6		96%					
	2018					9.6			
	10		96%						
								5	
				2018					
		eRX5	ei6		Ei5				
		FCV80		3				300	
2019						Ei5			
		12.88	-15.88			2018	Ei5	5000	
		90,537			90.5%				
	2018								
		2018		90,537		146%		10	
90.5%									
		3xe		eQ1 400		5e 450			
		SUV					eQ		
	50%			eQ1		4.4		123%	
		5e	3xe						
		42,410			53%				
	2018			42,410		38.3%			
		8		53%					
	2019							2018	
2019									

		33,872		42.3%	
2018		8			33,872
		42.3%			
		E200pro	ET450	Z500EVPro	
		15,336		19.2%	
2018					
			2018	15,336	63.9%
	8				
		5		125%	
	2018		5	65%	4
	2019		3		
	3				
EV3		EV3		4	
EC3	R1			2	
		63,671		127.3%	
2018			63,671	125.28%	
			5		
2018	12	7			
		20,045		133.6%	
	2018		20,045	4	1.5

GS4 PHEV	10,922	486%
2019		

11,348	113.5%
2018	11,348 ES8

A00	2018
2019	

2019

160

<https://www.d1ev.com/news/shichang/86274>

150

2017

100

2016

“

”

LG

“

”

2017

“

”

“

”

“ ”

<https://libattery.ofweek.com/2018-12/ART-36001-8420-30294068.html>

25

7%

11

21 21

1 11

44 11GWh

79 87

5 109GWh

23 18

76 23

60 69

3 072GWh

63 01

16 05

11

27 03GWh

61 36

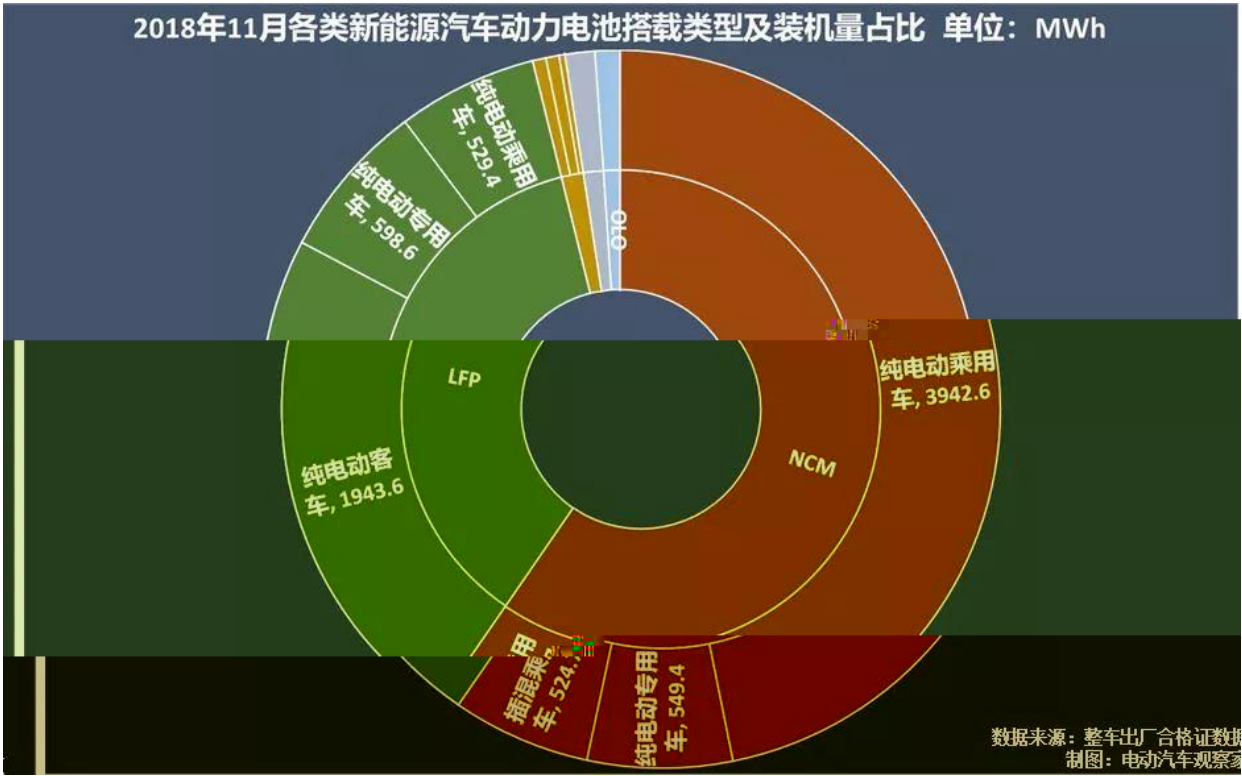
133

10 27

63 28

17 24

19 49



NCA 10 7 6MWh 11

92 5MWh

2 29

NCA

E100 142Wh kg

NCA

NCA

302Wh kg

OLO 11

852 5KWh

12

9

1

5—6

2

2018	7	19	—	500
120			5	126
120		53		
			500	

“ ”

2007 2017 300

2007 15.6%

2017 7% 7.8% 2.8%

2017 300 10 10

1 100

TPO5

“ ” “ ” “ ”

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=6&id=8350>

2

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[1]

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[2-3]

[4]

[5-10]

1

2012 6

CPRS

589

468

121

/

2

1985

1989

4

1985

2000

2000

10

10

2001

2005

2004

23

2006

2011

2011

136

1998

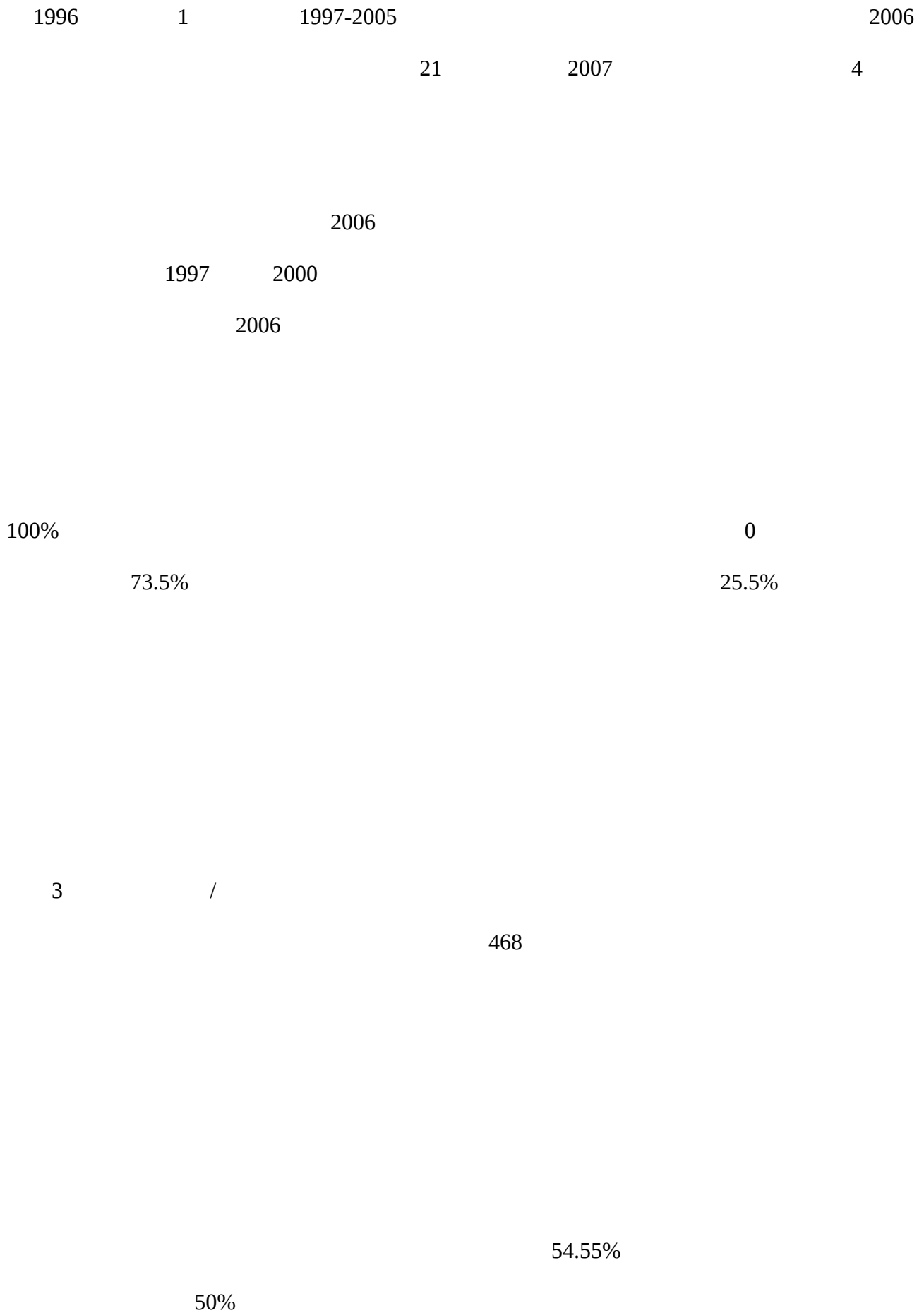
3

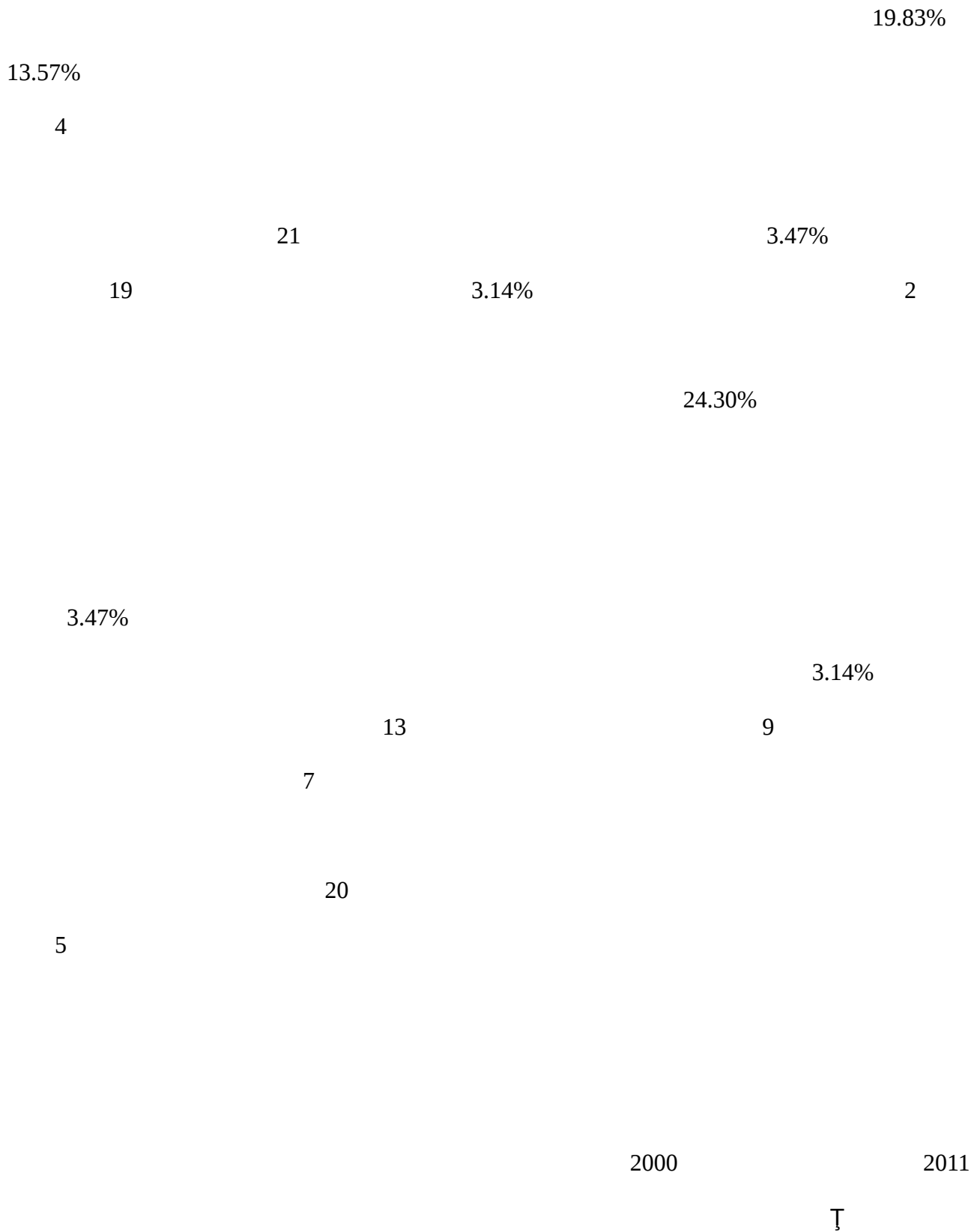
1999-2005

2005-2011

1989

1993-1994





100%

0

73.5%

25.5%

3.40%

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=6&id=8277>

3

2018

2018

2018

5 2018 3

6 2018 1

7 2018 1

8 2018 2

9 2018 4

6 1

10 2018 4

11 2018 5

2018 6

7

4

“

”

28

10

2016 6 5

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8195>

5 2018

2018

2018

时间	政策及要点
1月12日	国家能源局 国家扶贫办 关于上报光伏扶贫项目有关信息的通知（国能综通新能〔2018〕10号） 统计范围包括两类：一是能源局正式发文认可的光伏扶贫模式内的项目；二是各地自行开展的、不属于第一类村级光伏扶贫电站；统计结果应于1月22日前报送国家能源局和扶贫办；逾期不报的不纳入本次补贴目录。
1月19日	国家能源局关于建立清洁能源示范省（区）监测评价体系（试行）的通知（国能发新能〔2018〕9号） 一是建立定期评价与监测机制。二是建立清洁能源示范省（区）监测评价体系。监测评价体系由清洁能源利用目标完成进度、重点任务完成率、清洁能源消纳情况、自评价报告与整改落实情况四部分组成。三是评价结果与考核挂钩。四是评价结果与电价挂钩。五是评价结果与补贴挂钩。六是评价结果与融资挂钩。七是评价结果与保险挂钩。八是评价结果与培训挂钩。九是评价结果与宣传挂钩。十是评价结果与表彰挂钩。
2月28日	国家能源局 2017年度光伏发电市场环境监测评价结果（国能发新能〔2017〕79号） 宁夏、甘肃、新疆全境均被列入红色区域，橙色区域主要是青海、内蒙古、吉林、陕西、云南以及河北部分地区。一类资源区中除上海、福建、海南、重庆、西藏以及陕西部分地区外大部分地区均为绿色。
2月28日	国家能源局 关于印发2018年能源工作指导意见的通知（国能发规划〔2018〕22号） 农村能源建设：年内计划下达农村改造升级工程中央预算内投资120亿元；下达村级光伏扶贫电站1500万千瓦，惠及约200万户建档立卡贫困户。 储能：积极推进抽水蓄能建设，年内计划建成大型100MW/400MWh直流电液储能示范电站，建设24MW/12MWh火电机组配套储能、大型30MW/120MWh风电友好型风电场储能，并开展电网储能等项目。启动建设100MW级压缩空气储能电站和100MW级液流电池储能电站等项目前期工作。北方地区推广储能工程，南方地区推广储能工程，西部地区推广储能工程，东北地区推广储能工程。
3月7日	财政部 国家发改委 国家能源局 国务院扶贫办 关于公布可再生能源电价附加资金补助目录（光伏扶贫项目）的通知（财建〔2018〕25号） 按照国务院要求，为确保光伏扶贫收益及时惠及广大贫困人口，对列入可再生能源电价附加资金补助目录内的光伏扶贫项目，由中央财政、价格、能源、扶贫主管部门共同负责补贴资金的申请和拨付。地方独立电网企业经营范围内的光伏扶贫项目，由省级财政、价格、能源、扶贫主管部门共同负责补贴资金的申请和拨付。
4月2日	国家能源局 关于减轻可再生能源发电企业负担有关事项的通知（国能发新能〔2018〕34号） 发电企业应严格执行国家光伏扶贫价格政策，不参与竞价，优先纳入补贴名单，原则上次年一季度前发电企业应全额支付补贴资金。发电企业应严格执行国家光伏扶贫价格政策，不参与竞价，优先纳入补贴名单，原则上次年一季度前发电企业应全额支付补贴资金。
4月11日	工信部 住建部 交通运输部 农业农村部 国家能源局 国务院扶贫办 关于印发《智能光伏产业发展行动计划（2018-2020年）》的通知（工信部联电子〔2018〕68号） 1、加强组织协调和政策协同。六部门将建立统筹协调工作机制，协作配合，形成合力，同时充分发挥相关主管部门力量，确保行动计划各项任务措施落实到位。 2、推动智能光伏试点应用。培育一批国家智能光伏示范企业，支持若干行业特色智能光伏项目建设智能光伏建设先进模式并加强全国推广。 3、加大多元化资金投入。建立智能光伏领域产业发展基金，引导多方资本促进智能光伏产业发展。用多种渠道，加大对智能光伏产业扶持力度。

2019

			43GW	18%
170GW	23GW	31%	20GW	5%
531				

<https://solar.ofweek.com/2019-01/ART-260006-8480-30299367.html>

6 2018

2018 2 13

“

” “ ”

2009 “ ”

2020 “ 200 500 ”

2018

2017 2018

2017 2018

333 532 622 811 NCM811

2020

SMM

<https://libattery.ofweek.com/2019-01/ART-36001-8420-30294755.html>

1 Opteon XL41

2019 1 10

CC

Opteon™ XL41 R-454B

Sindelfingen

BITZER

ORBIT

ORBIT

R-410A

GWP

ORBIT

ORBIT ORBIT + ORBIT FIT

O

Teflon TM	TM	TM	Ti-Pure TM	TM	Krytox TM	Viton TM
TM	Opteon TM	TM	Freon TM	TM	Nafion TM	
35		7000			5000	

CC chemours.com
http://bao.hvacr.cn/201901_2080191.html

2 “ ”
11 30 2017-2018 “ ”

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1997

21

<http://news.xjtu.edu.cn/info/1007/103781.htm>

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12 19

2016

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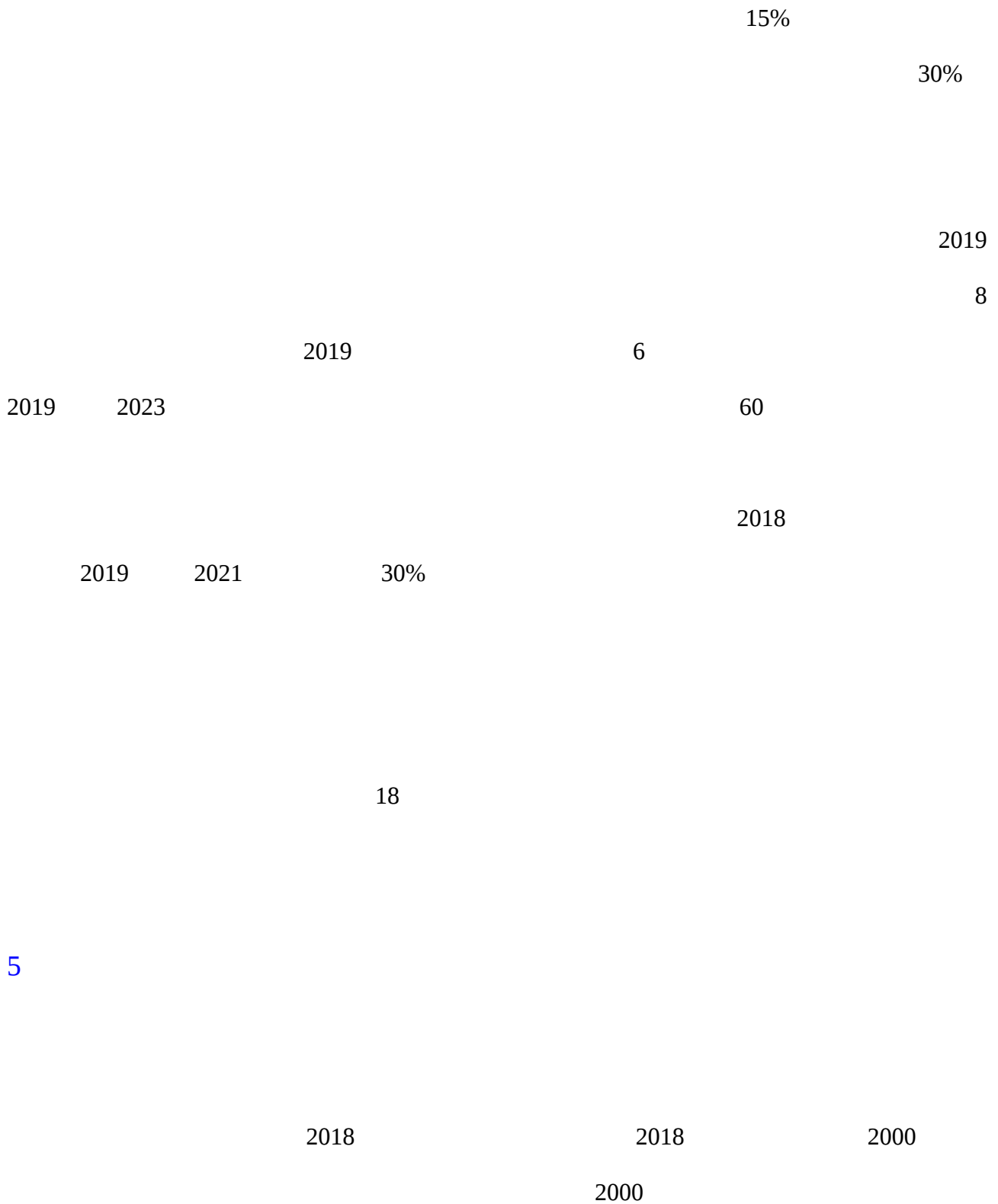
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60

32.03%

7.18%



	1995	2015	2018
13			
21.9%		7	

-35

-25

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IH

G-IEMS

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2013

2013 1

2018 5

2011 114

2018 222

<https://www.hvacrhome.com/news/show.php?itemid=41613>

2018

IPD

PDT

SQE

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2019

2019

2019

140

25

2018

2019

2019

2019

" "

<https://www.hvacrhome.com/news/show.php?itemid=41504>

7

www.hvacrhome.com

30%

57%

2018

1000

2019

<https://www.hvacrhome.com/news/show.php?itemid=41670>

<http://cac.chinaiol.com/s/1220/27205627.html>

9

www.hvacrhome.com

700

ICU

1500kW

1550kW

<https://www.hvacrhome.com/news/show.php?itemid=41426>

10

www.hvacrhome.com

1 15

AHR

The Air-Conditioning, Heating, and Refrigeration Institute ,

AHRI

Mr. Bill

Tritsis

AHR

1

0

3/4

-32

0

-20

-35

Ultra Heat GMV

Ulrra Heat Heat Pump Water Heater

AHRI

Mr. Bill Tritsi

AHRI

Mr. Bill Tritsis

AHRI

AHRI

AHRI

AHRI

AHRI

AHRI

2018

Wyndham

<https://www.hvacrhome.com/news/show.php?itemid=41509>

11 , &

“ ” --- 2019

1 20 90

<http://www.compressor.cn/News/qyzc/2019/0121/109140.html>

12

1 16

15

13

2018

“ ”

2018 “ ” ()

2018 402 2018

“ ”

707

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“ ” “ ” “ ”

” “ ”

72

<http://www.compressor.cn/News/qyzc/2019/0125/109207.html>

14

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IPV

Varisco

IPV 2017

5000 5 20

IPV “

” Andrew Walker

“ ”

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<http://www.compressor.cn/c.php?id=555>

15

Busch

Pfeiffer Vacuum Technology

Busch Pfeiffer Vacuum Technology Pfeiffer Vacuum

IT Busch SE Pangea

GmbH Pfeiffer Vacuum 50%



Source: Busch Dienste GmbH

IT

Busch		Pfeiffer Vacuum	50
	Busch	Pfeiffer Vacuum	
Busch	Pfeiffer Vacuum		
	Busch		
Pfeiffer Vacuum			
"		Pfeiffer Vacuum	
"	Busch	Sami Busch	"
		Pfeiffer Vacuum	Busch
	50		Pfeiffer Vacuum
"			
"	Busch	IT	

"Pfeiffer Vacuum

Eric

Taberlet

"

1.5

"

<http://www.comvac.cn/qydt/qykx/2018/1203/53594.html>

16

2015

Edwards

Edwards

15,000

22,000

Edwards

Edwards

.

Geert Follens

Paul

Rawlings Edwards

Edwards

Bram Claes

Edwards



Geert

Follens

Paul Rawlings Edwards

Edwards

Sarah Goodwin

Geert Follens

Edwards

Bram Claes

Edwards

Geert Follens

Geert

Edwards

Edwards

Edwards

<http://www.comvac.cn/qydt/qykx/2018/1030/53495.html>

17

a10 25

70

Division

2018

2018

Koen

Lauwers

LRP VSD+



10 26

2018

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Koen Lauwers

2017

31

18

DHS DZS Ex LRP VSD+

0

4.0

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10 26

<http://www.comvac.cn/qydt/qykx/2018/1218/53637.html>

18 ” “

2019 1 2 ” “

0 13MW Hi MO1 365W

2019 1 2 ” “

0 13MW Hi MO1 365W

SUNPOWERCo Ltd “ SUNPOWER ”

SUNPOWER 1998

34

60

9 12

2015

“ ”

2030

115

2018

25 36

22 55

●

“

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2018

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26 61

27 61

25 36 22 55

●

2018

24 44

25 44

29 47

26 58

2018

17 093 42

7 099 38

46 13 61 52

25 000

—35 000

46 13

61 52

2018

8

8 5

17

22

	2018		1	12		8	8	5	
	17	22							
			2018						
					5	2	5	3	
	1	31					2018		
				2	500		3	500	
	33	410		34	410				
				55	871				
		52	371		53	371		1	358
	2	358							
					70				
	100			25			30	304	
	9	8							
				51	01				
				21	362				
				0		10			
	1	18		2018			71	406	88
-78	547	57		0		10			

2018

1 UPS IDC

2018

2 2018 16 000

2018 22 65 41 99

2018 15 000 20 000

41 99 22 65

1

2 N N

TOPCon IBC

3 6 654 51

2018 2017

2018 10 31 5 34

609 450 000

2018 12 31

2017

<https://solar.ofweek.com/2019-02/ART-260006-8420-30302318.html>

20

166



保利协鑫能源控股有限公司
GCL-Poly Energy Holdings Limited



铸造单晶（鑫单晶G3）产品介绍

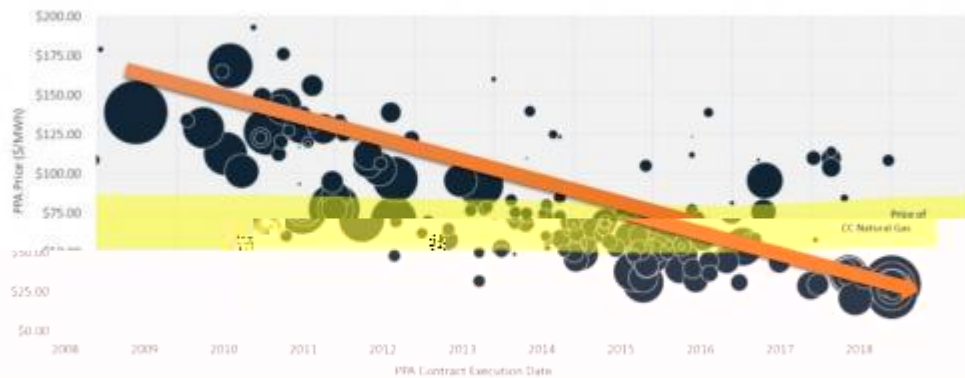
2019年1月

2018 531

531

光伏超低价时代来临

Utility PV PPA Prices by Contract Execution Date



• 2018年6月, **MimutEngy**签署了25年的电力合同在内华达州2.376美分/千瓦时



• 2017年11月, **Neoen**作保投标的墨西哥项目价格为19.18美金/千度

2018 6

25%

2.376

/

0.13 /

0.16

“ ”

20 21 22 23 24

PERC PERC

N—PERC 23 24

156.75 157.75 158.75 161 166

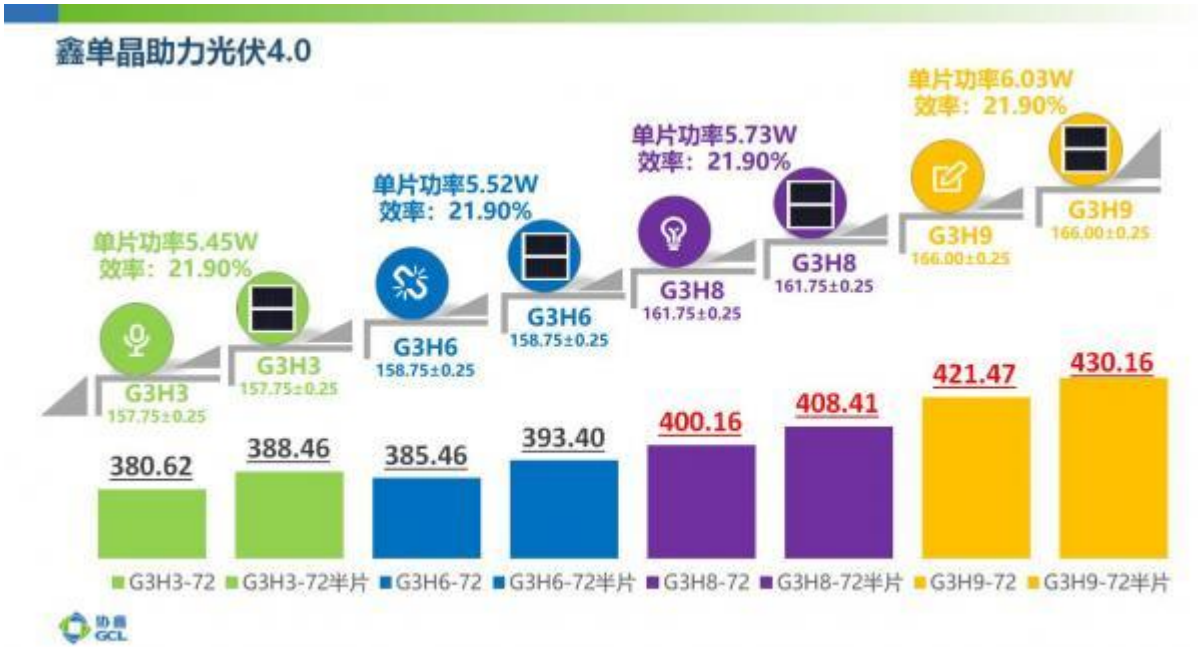
φ Š Ġ Ĩ

平价上网组件价格趋势预测



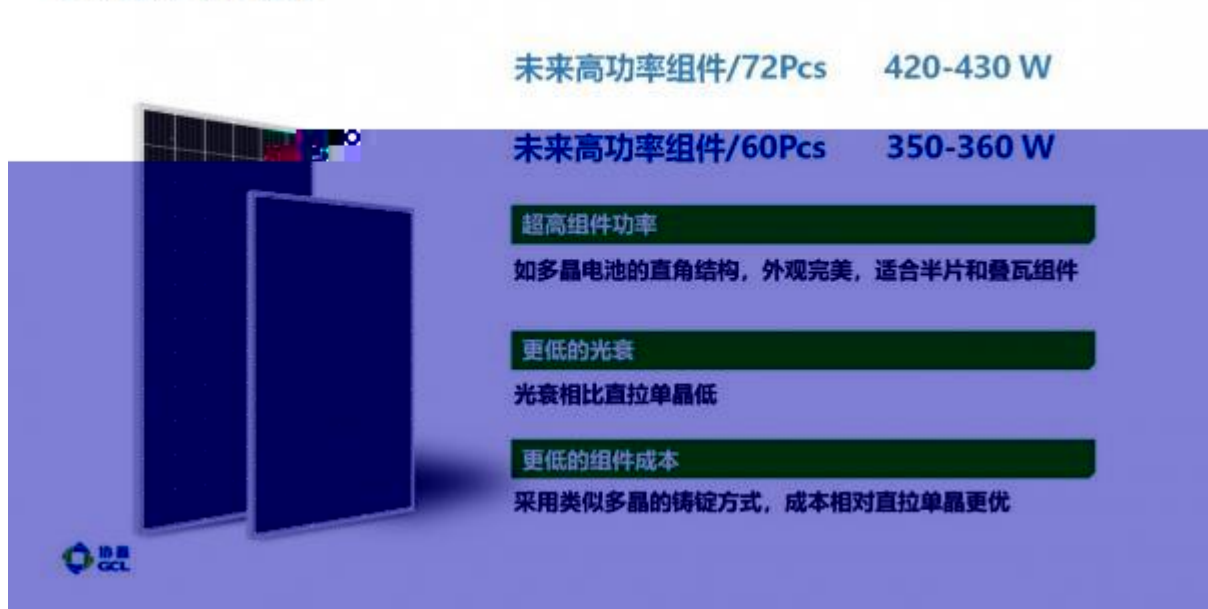
• 平价上网倒逼组件价格，3.0组件将无利可图，4.0组件将强势占领高端市场

			300		3.0
400	4.0				
2018	2019		300	400	
0.3	2019		0.25		
2020			1.7		400
	1.9		2021		200
	300				400
		400			



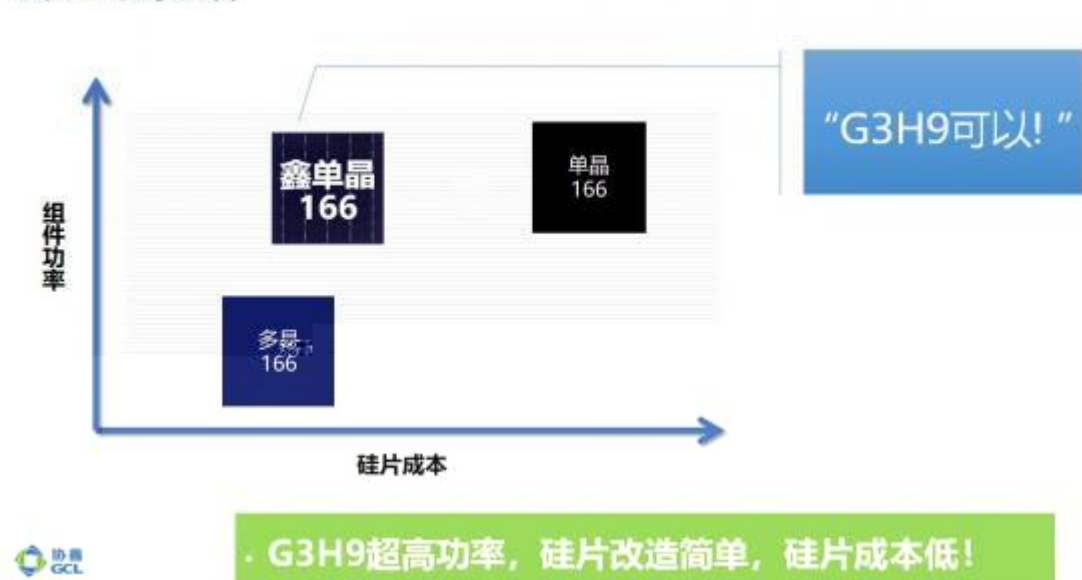
		G		157.75
	158.75	161	166	157.75
			158.75	
161			161	166
			166	
157.75	21.9%		PERC	MBB
			158	

鑫单晶光伏4.0组件



161	400	408	166	420
430	500			
PERC	2019			400

光伏4.0竞争分析



1/3

166

3

166

166

166

PERC

166

400

20.6%

400—405

166

166

166

5—7

166

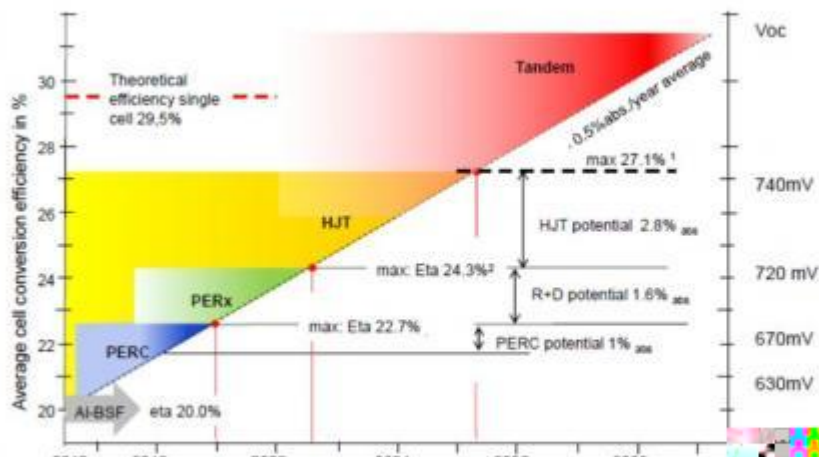
0.3%

166

G3H9

420

鑫单晶电池效率预测



20%

PERC

22%

2019

PERC

22.19%

HJT

PERC

HJT

https://solar.ofweek.com/2019-01/ART-260018-8400-30298230_2.html

21

“ ”

20

2019

112

16

1

“ ”

2019

CEO

“

‘ ’

“ ”

”

EPC

13

“ ”

“ ”

1GW

<https://solar.ofweek.com/2019-01/ART-260009-8460-30299449.html>

22

“ ” “ ”

17 2

PERC 19 60 285W 315W

“

98

”

200MW

<https://solar.ofweek.com/2019-01/ART-260008-8460-30301283.html>

23 13.5

28

100%

13.5

10

2

6

12

7.3

2 14

11

IC

IC

IC

http://www.semi.org.cn/news/news_show.aspx?ID=55268&classid=117

110

60

56

139

300mm

2 25

2021 2

480 300mm

35

2018

)

http://www.semi.org.cn/news/news_show.aspx?ID=55170&classid=117

26

LG

LG

80

LG

2020

5

LG

50

LG

SDI

2020

2017

50

2020

30

<https://libattery.ofweek.com/2019-01/ART-36001-8420-30294571.html>

27

40

1 4

“ ” 40

LCK6105FCEVG1

“ ”

40

7500

2018 3 23

80 2018 12 31 247 623 641 32

1 406 318 18 246 217 323

7500

1994

2014

Vision

SENRY

Euroba

600 KVAH

11 Wh

<https://libattery.ofweek.com/2019-01/ART-36008-8460-30295634.html>

28

2018 12 20

1.17

“ 1.17 ”

2018 12 25

631.25

3.03

25

2022

“ ”

2004

2016

“ ”

10kW 30kW 60kW 200kW

“ ”

“ 2018

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EqJShcSpPE04RTVfBufH6;ÂD%0

8.5 100

2018

74

14 250

2.5 60

5 UNDP “

”

400

1
3 150
20 6000 1500

“ ”

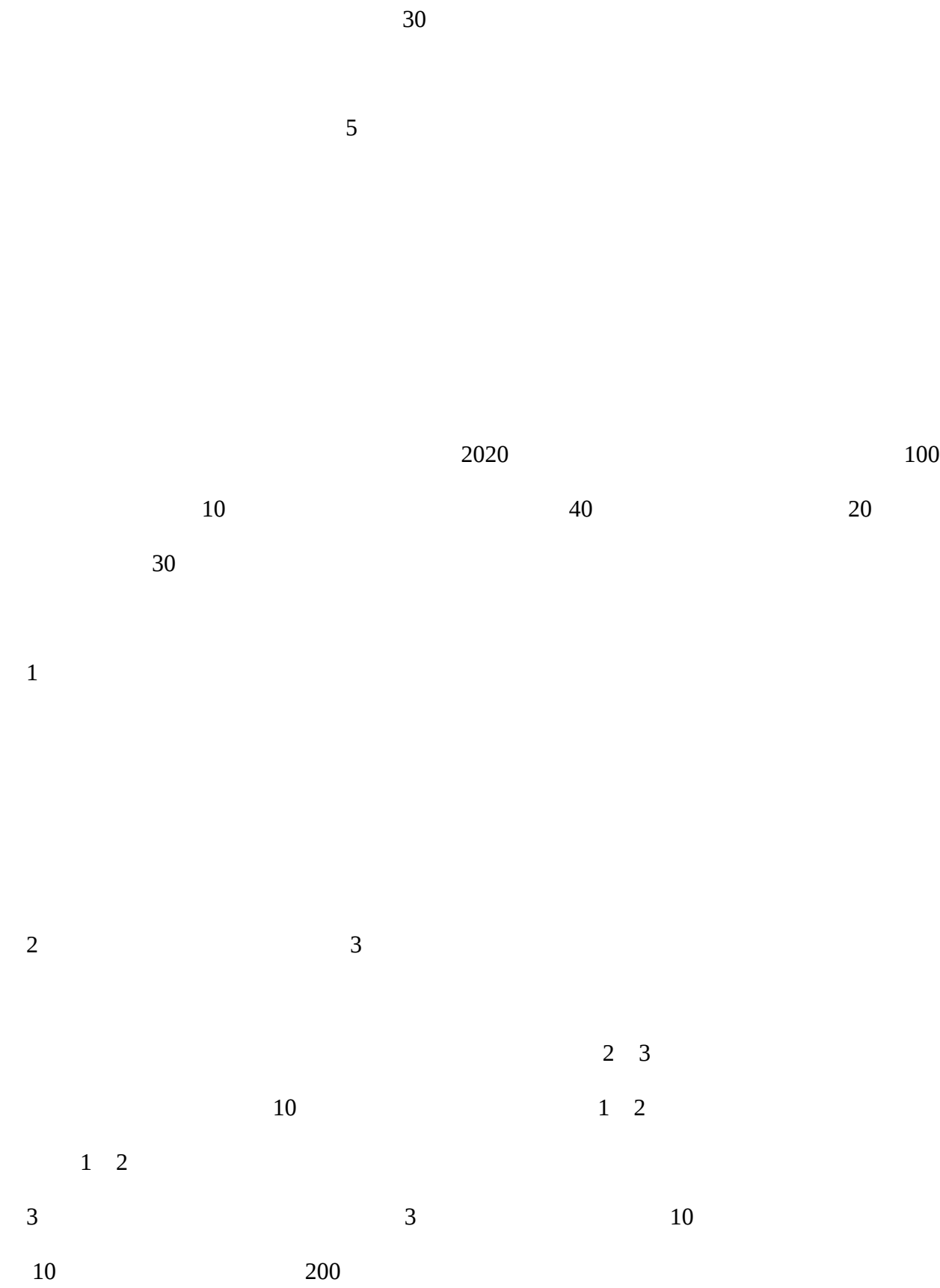
“

”

“ ”

<http://china-hydrogen.org/hydrogen/mix/2019-01-02/8948.html>

2018—2020



1		500kg/d	35MPa		200kg/d	70MPa
		30%		300		1000kg/d
35MPa		400kg/d	70MPa			30%
	500					
2						
3						
					“	”
				10%		100
						10%
	500					
1						20%
	500					
2						
					“	”

30

“ 2018 ”

11 19

”

2007 9

800

6

20

“

”

‘ ’

<http://china-hydrogen.org/hydrogen/mix/2018-12-06/8810.html>

2018-11-20

4

2

2018-11-12

11 9

000811 9.94% 5.31 6814 2.06%

10.14% 2.75

0.4% 300464 ,

300257

5 1035.9

1031.49

2018 11 08 34552.48

0.48 453.53 72.22

2018 24.43 1.96

0.30 10.83

3.34 1.41%

3

2018-11-12

10 12 2018

6 AMOLED

2015 OLED

6

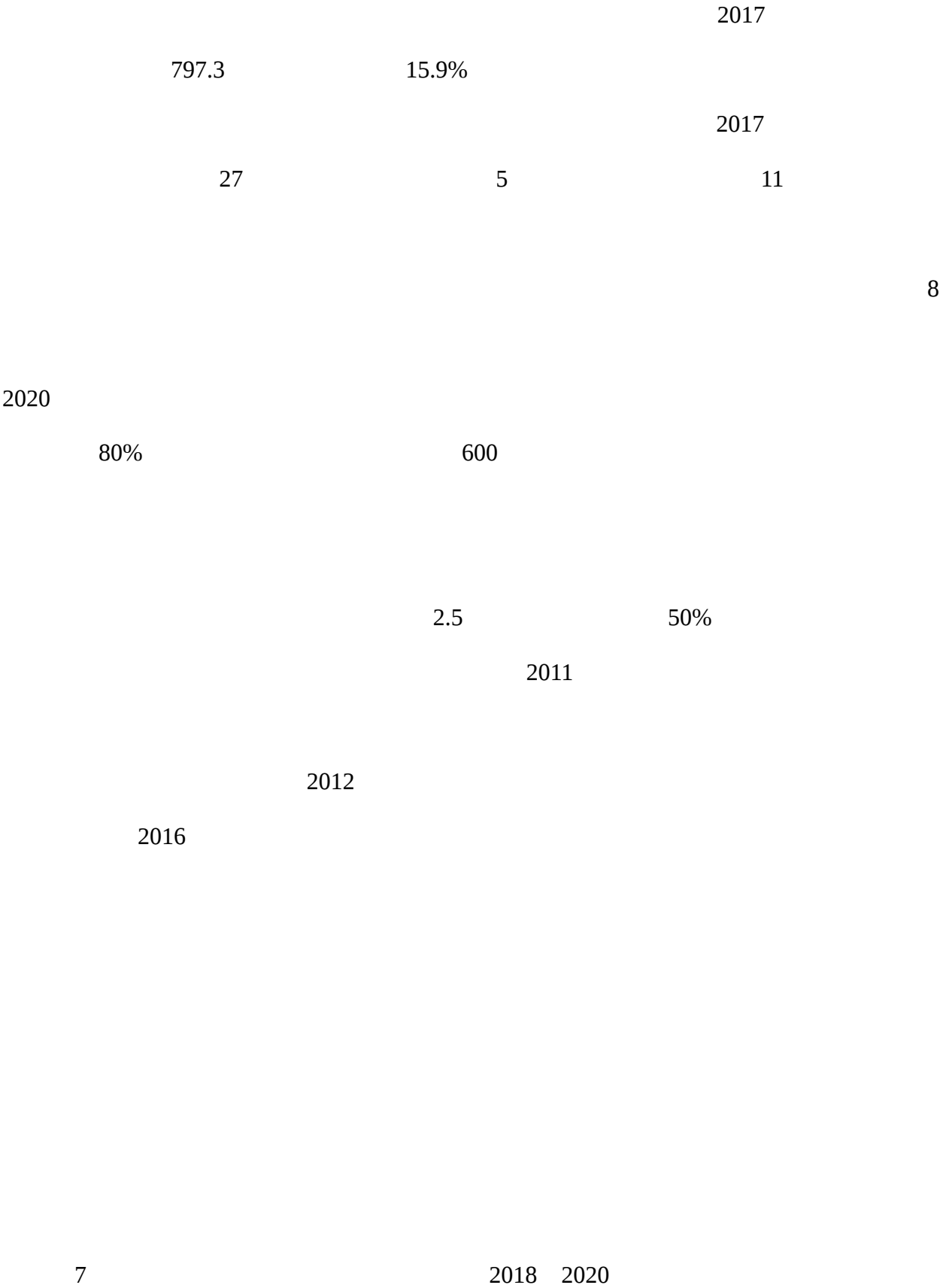
OLED

2018

OLED



C919



15

10

30-50

8 30

58

1

800

30

0 1

9

Sand River

Sand River

6

2003

22

6504

25.65

30

21 66

30

180

7 25

5

2017

23

23

423

397

94%

383

355

372

263



50

2017

413

59.4%

484.7

44%

14.2%

2.2

4

“ ”

2018-11-12

5.16%

2018

2135

27%

10.4

28%(2017 24%)

GMV

6.06% 4.73%

4.59% 4.55% 4.12% 3.54%

3.53% 3.04% 3.02% 3.02% 3.00%

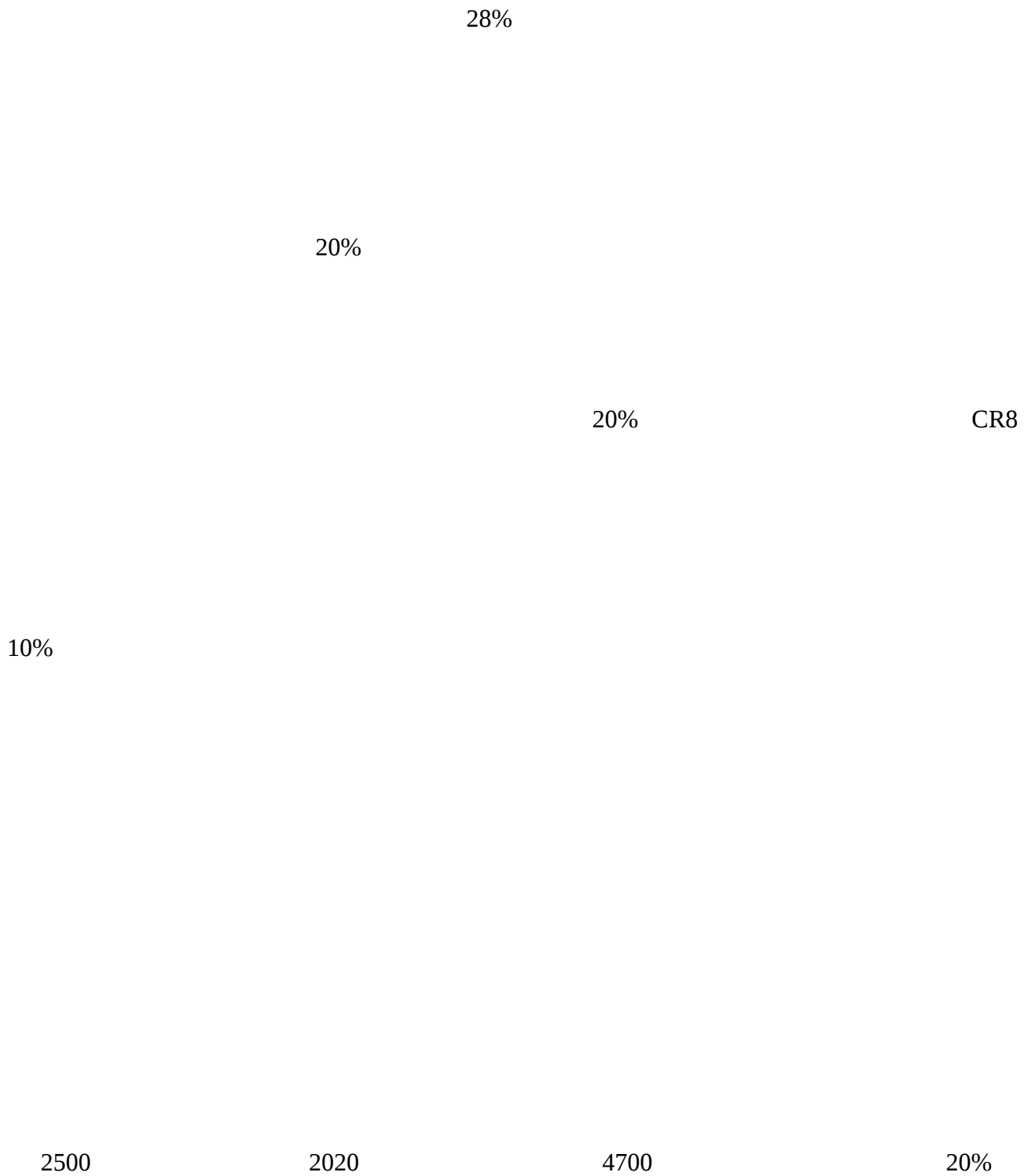
28%

20%

20%

CR8

10%



7

2018-11-29

() 11 220

92%

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8

2018-12-06

12 4

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9 “ ”

2018-12-25

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10 10 64

2018-12-03

10 64 4585.30 4.06

10 11 19 ~11 30

176 64 4585.30 4.06

80 1.50 12.95

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1050.00 8465.00

805.70 6477.83 10 5328.36

10 13

10 8

10 9

7

10 26 24

14

10 6 6

10	7.35%
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3.39%

10

13.95%

5.95% 4.08%

42.68% 18.48%

10

13

5357.57

14.49

6.00

11

2

2018-12-29

20%

90%

2003-2012

10.25%

2013

126.7

2018

1948

72.7%

2008

CR3

45%

(1)

(2)

(3)