

300487

	2020	2021E	2022E	2023E
()	923	1,390	1,843	2,196
(%)	-8.8%	50.6%	32.6%	19.2%
()	203	343	441	530
(%)	-19.6%	69.9%	28.5%	20.1%
()	0.94	1.56	2.01	2.41
()	80	48	37	31
()	10	9	7	6

2021 11 3

	.....	8
	.....	12
	.....	15
	.....	15
+	.....	18
	.....	25
	.....	25
+	.....	26
+	.....	33
	.....	36
	400	36
	.....	39
.....		42
.....		42

1	.....	8
2	.....	8
3	.....	9
4	.....	9
5	.....	9
6	.....	9
7	.....	10
8	.....	10
9	.....	10
10	.....	10
11	.....	11
12	.....	11
13	.....	11
14	.....	12
15	.....	12
16	.....	12
17	/	12
18	.....	13
19	.....	13
20	.....	14
21	.....	14
22	.....	14
23	.....	14
24	.....	15
25	.....	15
26	2021 10 4	

68	.....	34
69	.....	34
70	.....	35
71	.....	35
72	.....	35
73	.....	35
74	.....	35
75	.....	35
76	.....	36
77	.....	36
78	.....	36
79	.....	38
80	.....	39
81	.....	39
82	.....	40
83	.....	40
84	.....	41
85	.....	41
86 2016	.....	41
87 2016	.....	41
88 2019	.....	41
89 2019	.....	42
90 PE(TTM)	.....	42

2001 4 5
4 / 100 “ ”
30 100

1

2020

2020

1/3.85/1.95/0.94

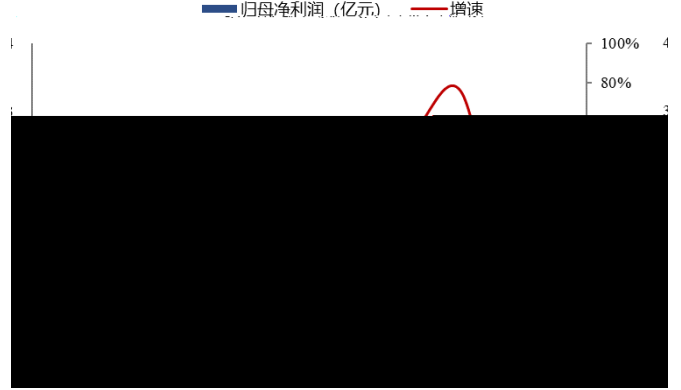
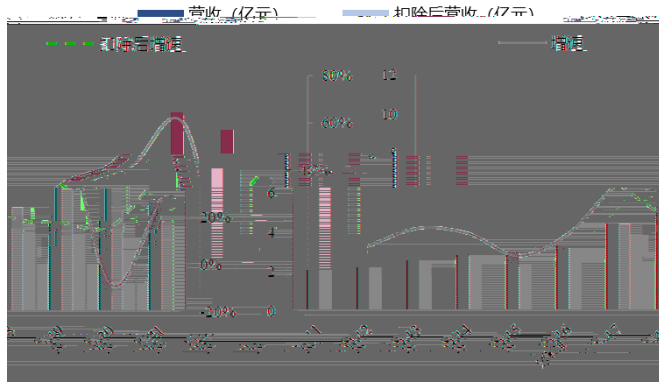
2018 2019 2020 2021H1
2020 18%

2021H1 4.6

38%

3

4



$\tilde{n}$

∂

2021H1

73%

25.19%

2011

24.7%

3%

2021H1

2011

11pct

47%

4pct

27%

2011

36%

2021

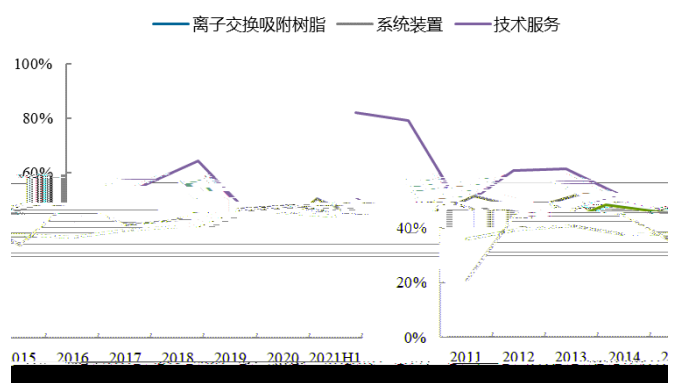
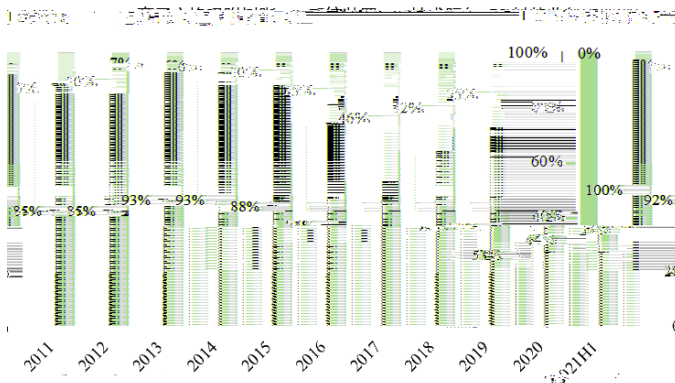
45%

2011

31pct 52%

5

6



7

8

2017

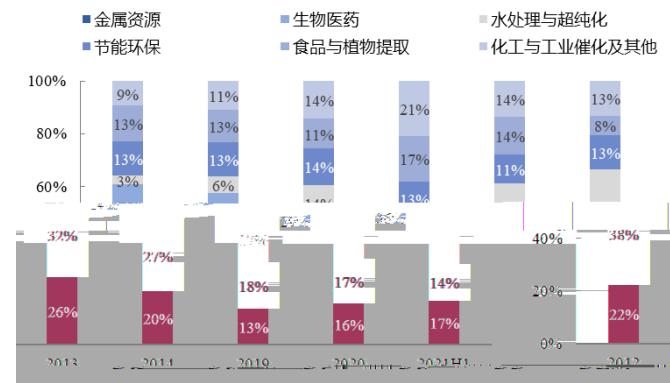
1.57 /
184% 173%

2012-2020 6% 2020
2018 2014-2020

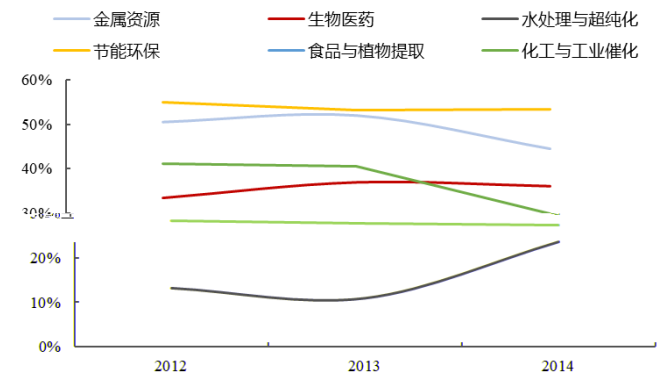
9

10

11



12



2015-2018

2015

13

	2020		2021Q1		2020		2021Q1		
	7996	2740	-	-	-	-	-	-	7135
	680	88	408	53	60.00%	60.23%			1013
	45	167	22	129	48.89%	77.25%			6446
	823	771	425	421	51.64%	54.60%			1341
	533	164	451	151	84.62%	92.07%			644
									1169

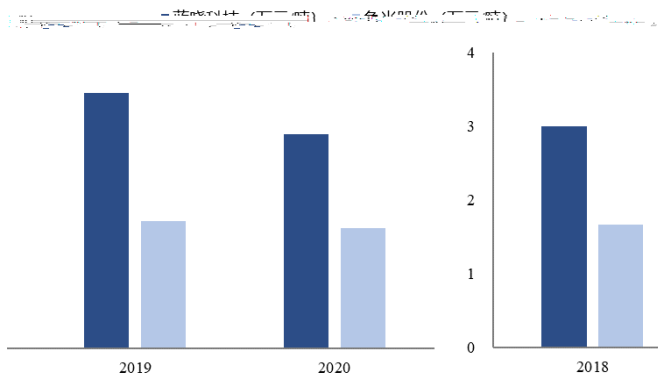
1.3-1.7

66%

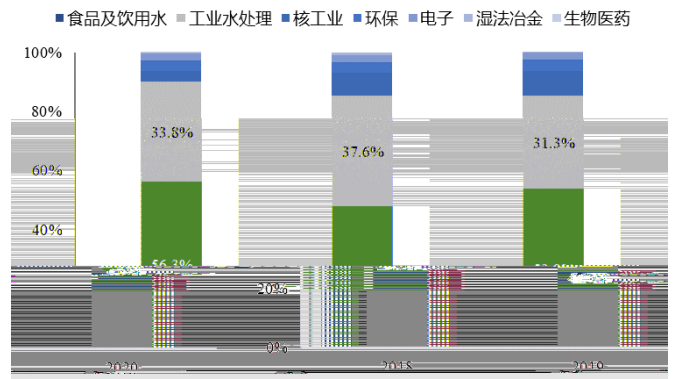
45%

10%

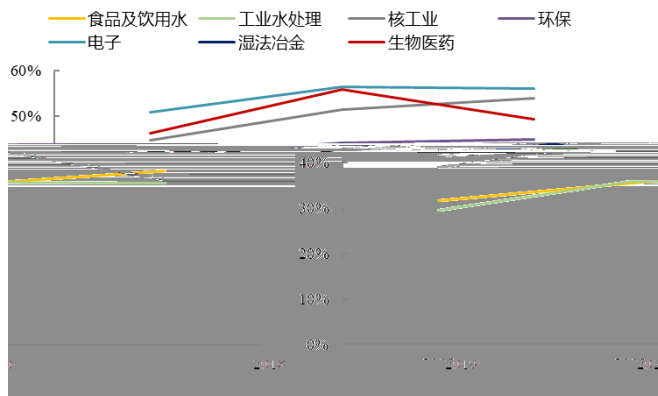
14



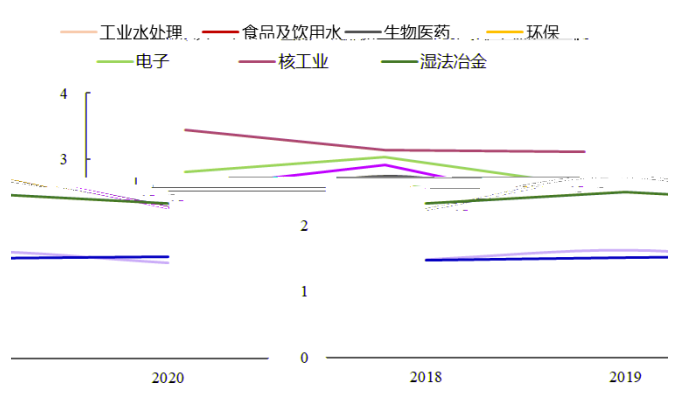
15



16



17



18

19

20

21

	1			2
		10-30%	3	
	2021Q1		1	3
1			5.78/4.68/0.23	2021H1
“		”	600	
10000	/	ED		
Vulkan			SQM	Ansson
	2020	2021Q1		

+

4.686.24

3000

3

4000

		-		+	“
					”

29 2020

30 2021

32

33

WIND, USGS,

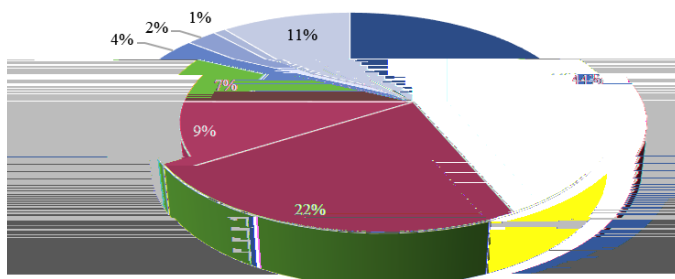
65% ,

34

		Li/%	Li/10 ⁶ t	2018	LCE
Uyuni		0.053	10.2		
Atacama		0.157	6.3	SQM 7 t/a,ALB	4.4 t/a
Antofalla		0.035	2.22	Advantagelithium Orocobre	2019 2 t/a
Centenario		0.032	1.86	Eramet 2022 2 t/a	
Rincon		0.033	1.56	Rincon 2022	2.8 t/a
SaldeVida		0.063	1.36	Galaxy 2018	2.5 t/a
Olaroz		0.06	1.21	Orocobre	1.25 t/a
Cauchari		0.052	1.06		

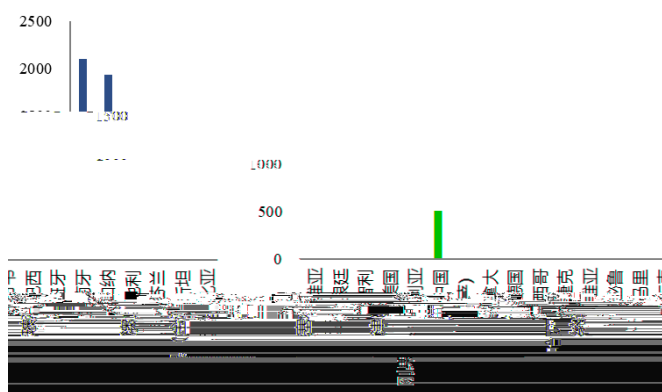
35

■ 智利 ■ 澳大利亚 ■ 阿根廷 ■ 中国 ■ 美国 ■ 加拿大 ■ 津巴布韦 ■ 其他国家



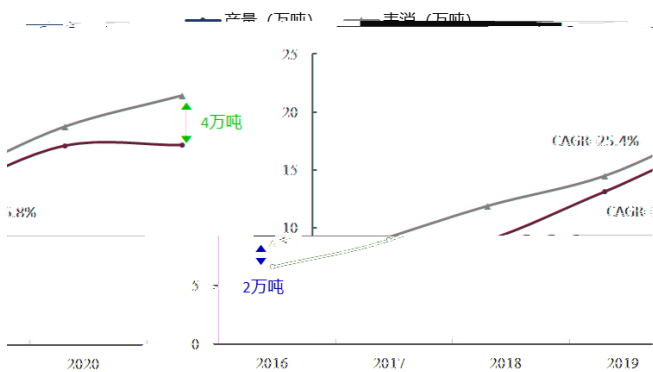
USGS

36



USGS

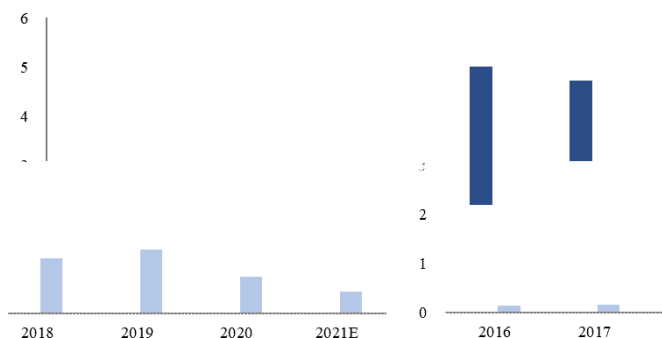
37



,

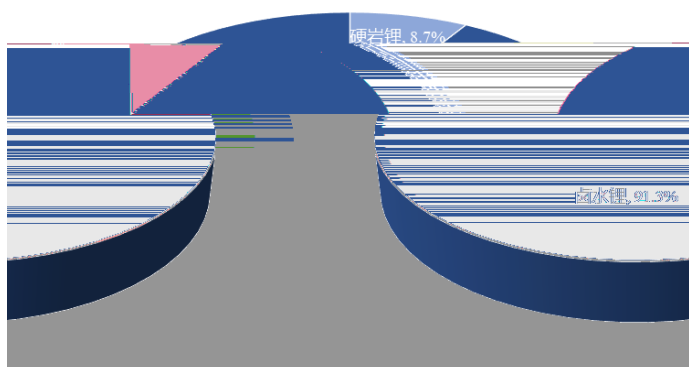
38

■ 进口量 (万吨) ■ 出口量 (万吨)

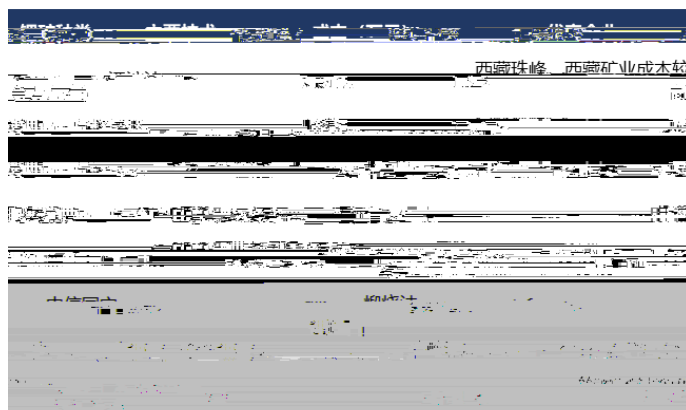


,

39 2018



40



20:1-1600:1

0.01:1

1545.42	LiCl
2348.8	Li ₂ CO ₃
309.09	LiCl
189.25	Li ₂ O
14.27	Li ₂ O
2.2	Li ₂ CO ₃
0.2	Li ₂ CO ₃
42.76	Li ₂ O
7.02	Li ₂ O
35.54	Li ₂ O
4.14	Li ₂ O
16.94	Li ₂ O

7

44

23

			3	
			4	

SMM,

+

1

25

18.25 MΩ cm

TOC

11446.1-2013)

: (GB/T
(ASTM-D5127-13)

ASTM

50 ASTM

Parameter	TypeE-1	TypeE-1.1	TypeE-1.2	Sunresin
Linewidth (microns)	1.0-0.5	0.35-0.25	0.18-0.09	-
Application	PCP LED	OLED	Mircons	OLED/Microns
Resistivity,25	18.1	18.2	18.2	18.2
-line))	5	2	1	0.45-0.70
	25	10	3	0.9
On-line particles/L(micron range)				
0.05-0.1	-	1000	200	30-50
0.1-0.2	1000	350	<100	10-25
	3	1	0.5	0.10-0.12
	0.1	0.1	0.05	<0.05
	0.05	0.02	0.005	<0.005

1 Resistivity 18.2MΩ.cm H+ OH- 18.20

2 TOC :

3 Dissolvedoxygen

4 On-lineparticles/L(micronrange)

5 SilicaDissolved

6 AnionsandAmmonium

7 MetalsbyICP/MS

51

Dupont	
--------	--

59

60

2035
2020
2020
9.5%
496/715GWe

WIND
3926
2553
2030 2050

		75%		1.3×10 ³
MCDI	+			18

4

“ ”
’
D %

66



DOWEX

60-95

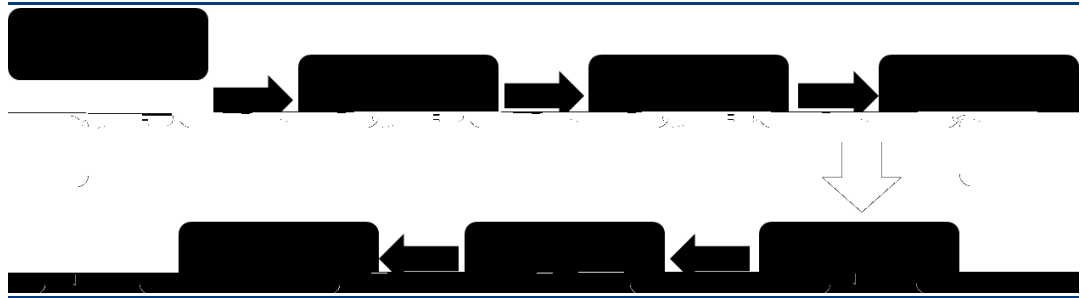
95%

1.1-1.15

<1.1

1

67



+

1

2019

6021.2

2021 7

22.72

68

69

WIND,

2

80%

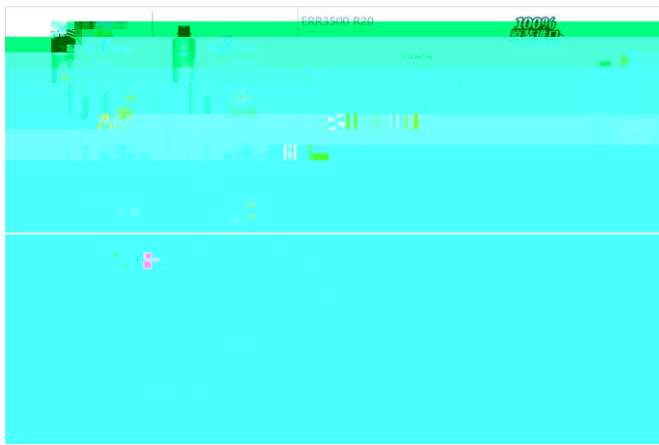
25% 2012-2020 CAGR

5

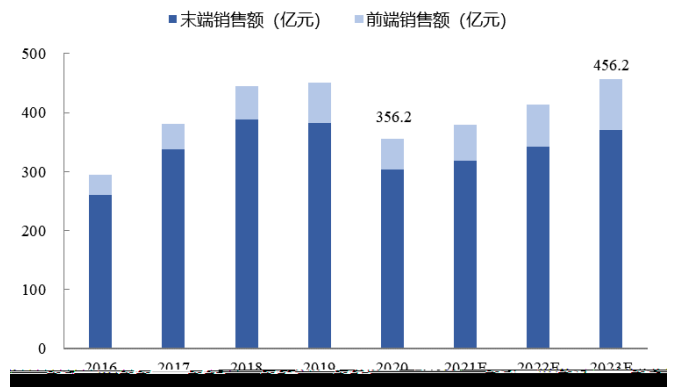
2020

67% 2020 356.2 2023 456.2 1679.3 1699.6 101% 10-

70

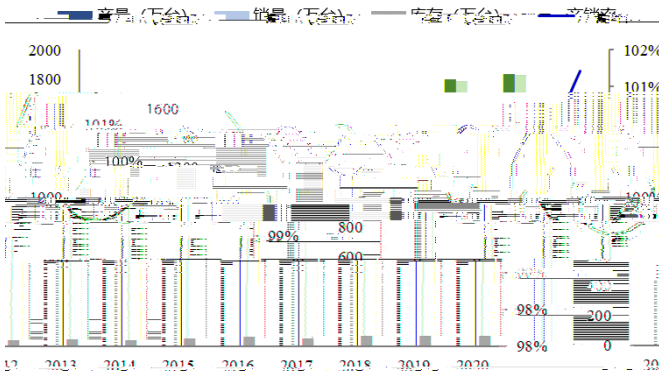


71



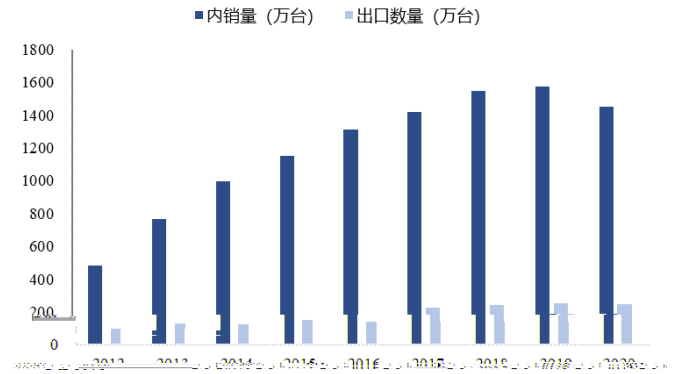
2020

72



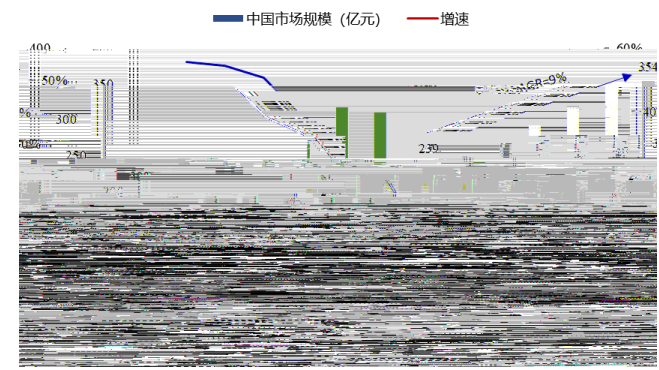
WIND,

73



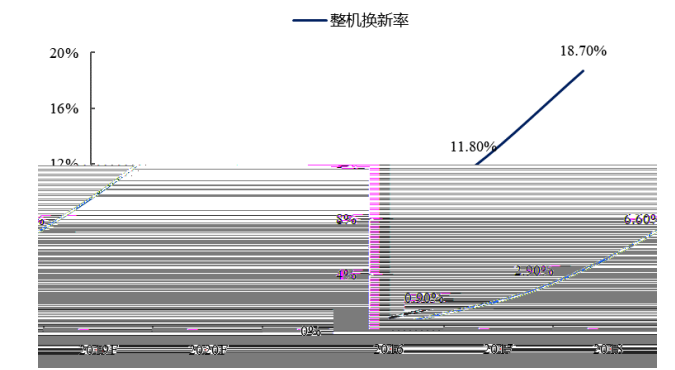
WIND,

74



2020

75



76

77

2020

Allied market research,

400

200

100

Oligonucleotide			
		S-	

			3
	EPC	-	

“ + ”

“ + + ”

1 3000 +

+ +

2021 6 30

38 32 5 1 PCT 5

46

80

--	--	--	--	--	--	--	--	--	--

84

85

				6.5	1.30%	0.03%
			154	375.5	72%	1.86%
			158	415	79.90%	2.04%
2019-07-16	16.35	Jean-Marc Vesselle		11	2.20%	0.05%
		LIN XIANGZHOU		2	0.40%	0.01%
2020-01-20	19.47			1	0.20%	0.00%

2018

2020

2021

2021

(300)

6

20%

6

10% 20%

6

-10% 10%

6

10% 20%

3-6

5%

3-6

-5% 5%

3-6

5%

“ ”

“ ”

26	1061	33
C 3A	A 19	12
100033	518034	200120
010-66500801	0755-82027731	021-20572500
010-66500900	0755-82828562	021-20572522