



2022 11 5

2022 267

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		2
1		3
2		32
3		40
4		83
5		144
6		170
7		197
8		208
		226

1

1

10GW/

PERC P
TOPCon N
N
P 2021
N N TOPCon
2022 N TOPCon
N N
P P PERC
N N TOPCon

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1 11GW N TOPCon N
“ 11GW N
N TOPCon 182mm 26.4%
N TOPCon N
25% PERC
25% N 72
575W
580W P
20-25W 4.5%

7.5GW 5GW	N TOPCon	N	N 2022 1-9 N 0.24
	N TOPCon N		
20GW	N N TOPCon		
N Tiger Neo		N	2022 P 2022 N
P Tiger Tiger Pro		P 182mm 72 550W	1-9 P 430 79

1

2

20GW

7.5GW

5GW

N

2022 1-9

N

0.24

N

P

2022

P

2022

N

N

N

P

79

1

430

P N

N TOPCon

N TOPCon N 2022

N

N

N

N P

					GW
					2022
N		33	16	49	36
		24	11	35	35
		32	-	32	32
		30	10	40	30
P		34	-	34	34
		20	-	20	20
		33	-	33	33
		35	-	35	35

N

10GW 11GW 16GW N

49GW

N TOPCon

N

N

1	N		N	

2 N

N

2022	N	N		
N	79.19		869.22%	2022
1-9	N			

GW						2022
		N	33	16	49	36
		P	34	-	34	34
			67	16	83	70
		N	24	11	35	35
		P	20	-	20	20
			44	11	55	55
		N	32	-	32	32
		P	33	-	33	33
			65	-	65	65
		N	30	10	40	30
		P	35	-	35	35
			65	10	75	65

P
20GW

35GW 33GW

N			N		
	30GW	32GW	24GW	33GW	
	N		40GW	32GW	35GW
49GW	N			N	
	N				

1 2021

							GW
	2022 1-9	36.30	30.06	1.03	82.81%	28.41	91.37%
	2021 4 ref*102						

2022 1-9

82.81%

2021

2

/

	2022	1-9	2021	2020	2019
		4.10			

3 2022 1-9

4.61 / 4.13 / 3.20 / 3.57

/ 2021

2022 1-9

2019 82.98%

68.99%

4

FOB 2-3

DAP

2

	2021	2020	2019
	60.22%	70.24%	68.99%
	60.88%	68.83%	71.72%
	28.08%	25.40%	26.50%
	46.89%	39.32%	38.38%
	28.08%~60.88%	25.40%~70.24	26.50%~71.72%
	49.02%	50.95%	51.40%
	78.31%	81.84%	82.98%

2022 1-9

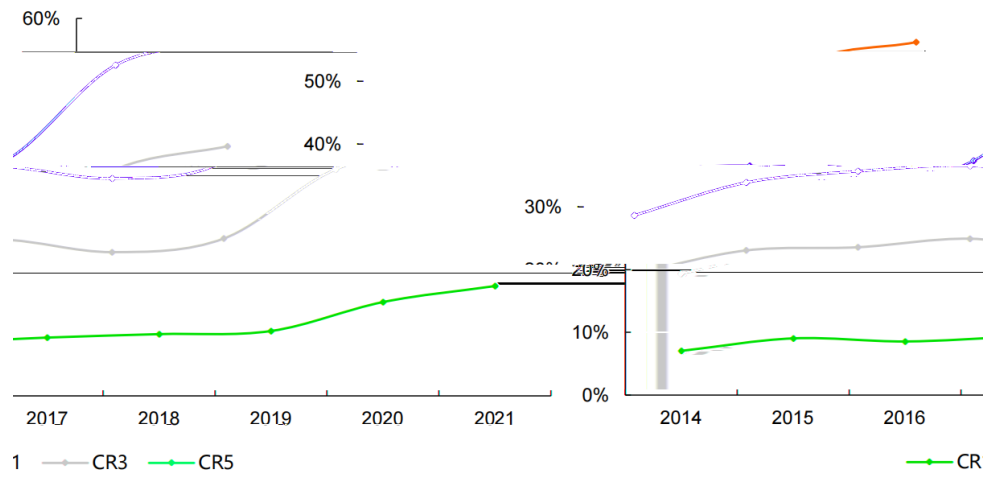
3

1

2022

GW

	2021			2020			2019		
1		38.5	18.12%		24.5	15.59%		14.3	10.83%
2		24.8	11.67%		18.8	11.96%		10.3	7.80%
3		23.1	10.87%						



Wood Mackenzie
2014-2021

2022

3

N

N

N

N TOPCon

26.4%

N TOPCon

23.86%

N

25% N 72

		575W		580W	P		
	20-25W		4.5%				
		N	TOPCon		PERC		
				N			
						iŽ ū€ ů8	
	N		25%	25%		N	72
			575W		580W	P	
	20-25W		4.5%		N		P
0.15							

		GW		
	10GW 5GW	10		TOPCon
	8.5GW	8.5	2022 Q4	TOPCon
	6.5GW	6.5	2023 Q1	ABC
	8GW N	8	2022 Q3	TOPCon
		52.3	-	-
	+	35	2022	TOPCon

			N		
			N		
N			2022	11	2023
	30GW	N		15GW	
2023					2023

“

2022	N			N
79		N	8.17	9
N			N	
		N		
	N			N
	N			
2				
		N		P
			N	
	N			
3				N
		N		
2021				
			N	
				N
4				
				N

N

N

“ ”
“ ” 2022

11

8 20

2022 11 1

2

3

1	2022 0008772					207,921.44	2022 4 18 2072 4 17
2	2022 0008773					15,237.73	2022 4 18 2072 4 17
3	2022 0015638					37,738.06	2022 9 7 2072 9 6
4	2022 0022592					171,263.96	2022 11 30 2072 11 29

20

“ ”

2022 11 1

2

3

1	2022 0030387					96,978	2023 3 27 2073 3 26
2	2022 0032135					157,557	2023 4 14 2073 4 13

2022 0030387 2022 0032135
“ ”

2022 0030387 2022 0032135
“ ”

3

11GW 10GW
“ ”

8

“ ”

5

8GW

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“ ”

5

1

2

2019

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1

2

4,138.78 “

6/ / /1/ 3 ”

3

3

“ 1

2

3

”

1	11GW	2022 72
2	8	2022 25
3	8GW	2022 41
4	20GW 10GW	2022 78
5		

1 - 3

1

2

3 N

4

5

4 - 5

1

2

3

4

5

6

<http://jxgtjy.jxsggzy.cn/>

[2022]EB023

7

8

9

10

11

1 - 3

1				Tiger Neo	N
		N			
	Tiger	Tiger Pro		P	
2		N			
				N	
3					
				5	
	4	-	5		
1					
	5				
2					

2

	1	2022	1	972,285.17
2022	6	30		

7.5GW

5GW

5GW

“

“

”

2022 9 30

782,745.80

80.43%

80.43%

N

“

"

“

"

N

PERC

TOPCon

N TOPCon

	GDR	2022	261.53
		2021	70.00
		2019	50.00
		2018	38.75
			420.28
		2022	88.65
		2021	52.52
		2019	25.31
			166.48
		2022	100.00
		2021	50.00
		2020	52.00
			202.00

1									
2				GDR		A		606,533,086	
2022	9	30			47.91	/	90%		261.53

2018

2022 1

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2

“

”

2021

170GW

30.8%

926GW

“

”

220GW

1

2

3

4

1

2

3

3				
	1	1,000,000.00		“ 11GW
	” “	8		
	” “	8GW		
” “	20GW	10GW	”	
410,000.00	70,000.00	60,000.00	160,000.00	2
	300,000.00		3	
	18.83%	22.68%	5.38	5.93
	1			
				2
		30%	3	
			4	
		1		2
			4	
3		22		
	11GW			
1				

1	IT /	1,021.30
2		5,000.00
-		309,664.02

2

1

			/
1	129,000.00	106,335.28 /GW 1.17	8GW N 1.33 /GW
2	30,850.90	19,795.71 0.25 0.28	8GW N /GW /GW
3	10,000.00		

			/		
6		15,756.00	10	8.78 4,400.00 6,868.00 16	420 6 670 430
	11GW		N	TOPCon	P

30

GW

	2020	8GW	8	52,500.00	0.66
	2020	7.5GW	7.5	78,900.00	1.05
	2020	7.5GW	7.5	75,200.00	1.00
	2021	6.5GW	6.5	136,000.00	2.09
	2021	10GW 2GW	2	43,182.00	2.16
	2020	4.3GW	4.3		
					0.49~2.16
					1.21

2022

					1GW
		3GW			
	2020	5GW	5	180,171.00	36,034.20
	2022	10GW	10	230,712.71	23,071.27
	2020	16GW	16	542,091.64	33,880.73
	2020	10GW 5GW	5	169,948.33	33,989.67
	2020	8GW	8	314,079.05	39,259.88
	2020	7.5GW	7.5	179,101.36	23,880.18
	2020	7.5GW	7.5	188,952.48	25,193.66
	2021	6.5GW	6.5	292,500.00	45,000.00
	2021	10GW 2GW	2	90,000.00	45,000.00
	2020	4.3GW	4.3	123,000.00	28,604.65
					23,071.27~45,000.00
					33,236.24

1.1		77,383.46	85.01%	70,000.00
1.1.1		73,700.85	80.97%	70,000.00
1.1.1.1		12,522.64	13.76%	70,000.00
1.1.1.2		61,178.21	67.21%	
1.1.2		2,939.42	3.23%	-
1.1.3		743.19	0.82%	-
1.2		13,643.94	14.99%	-
-		91,027.40	100.00%	70,000.00

1

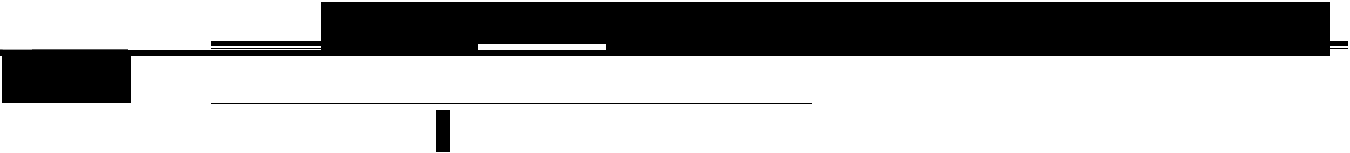
12,522.64

1	8GW	107,051.50	1,050.00	11,240.41
2		73,502.59	85.00	624.77
3		77,348.49	85.00	657.46
-		257,902.58	-	12,522.64

2

60,311.91

/



6	/	585.00

7,647.28 /GW

[illegible]

1.1		65,111.84	82.69%	60,000.00
1.1.1		61,178.21	77.69%	60,000.00
1.1.1.1		-		

			/		
1		102,223.09	1.18	8GW	1.28 /GW
				N	
2		153,924.98		8GW	153,924.98
			172,040.00	N	

			/
2	PMC	25,912.10	20GW 22,389.17 0.13 /GW 0.26 /GW “ 20GW ” 2 10GW 20GW 20GW
3		33,434.07	970 19.48 2.51 12.48 / 3,360.00 8 420 7,150.00 1 7,140 1,594.00 100 16

10GW N N
 P
 20GW N
 20GW N
 30

N					

	74,750.00		62.44%
	20GW		166,400.00
GW	8,320	GW	7,475
10%			
	GW		

12,030.49 /GW

GW

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30%

1 11GW

1

2022 9 264.00 130.40
19.30 133.60

26.59%

23.82%

2

1 2
/
3 4

1

=2024
=

-2021

-

2019 -2021 17.29%
2022 1-9 527.72

117.40%

	2022-2024	52.30
2	/	
	809,180.64	
700,000.00		10.92
3		

1		74,978.81	50,000.00	24,978.81
2		345,210.74	115,800.00	229,410.74
		420,189.55	165,800.00	254,389.55

	50,000.00	115,800.00	
			24,978.81
229,410.74	25.44		
4			
2022	9	111.89	32.95
	15.82	160.66	

	2022-09-30	2021-12-31	2020-12-31	2019-12-31
	75.35%	66.44%	64.43%	48.34%
	60.12%	51.31%	59.38%	52.29%
	67.16%	64.95%	62.40%	59.14%
	77.05%	81.40%	75.24%	79.94%
	9.89pct	16.45pct	12.84pct	20.80pct

Wind

10 2022

1

10

100

70.67%

2

68.67%

771,566.81

2022-09-30

PV Infolink

/

2022 1-9	6.29	-	3.5-8
2021	3.82	3.83	

2020
 2021 2022 9 2021 1-6 2021 -2022
 9

2021 3.82 / 2022 6.29 /

2021 3.5 / 2022 9 8 /

1 “ /

/1 2021

”

3.23 /

2.72 /

20

5

10%

6

10%

	13%	7%
	5%	
	15%	
4		
		665,471.87
		63,339.27
		18.83%
		5.93

2

A

	2021	15GW		35.60%	3.78
	2021	5GW	3GW	25.19%	3.87

	2022	11GW	18.83%	5.93	16.46%

1

2

8

1

11

9

10

3

1

15%

2

100%

1

	T+1	T+2	T+3	T+4	T+5~T+11
	189,823.15	1,186,569.57	1,122,000.21	1,100,477.09	1,086,128.34
/W	1.56	1.46	1.38	1.36	1.34
GW	1.22	8.11	8.11	8.11	8.11

					/W
2022 1-9	1.79	-	1.85	1.81	
2021	1.69	1.57	1.63	1.64	
2020	1.74	1.57	1.66	1.62	

11GW

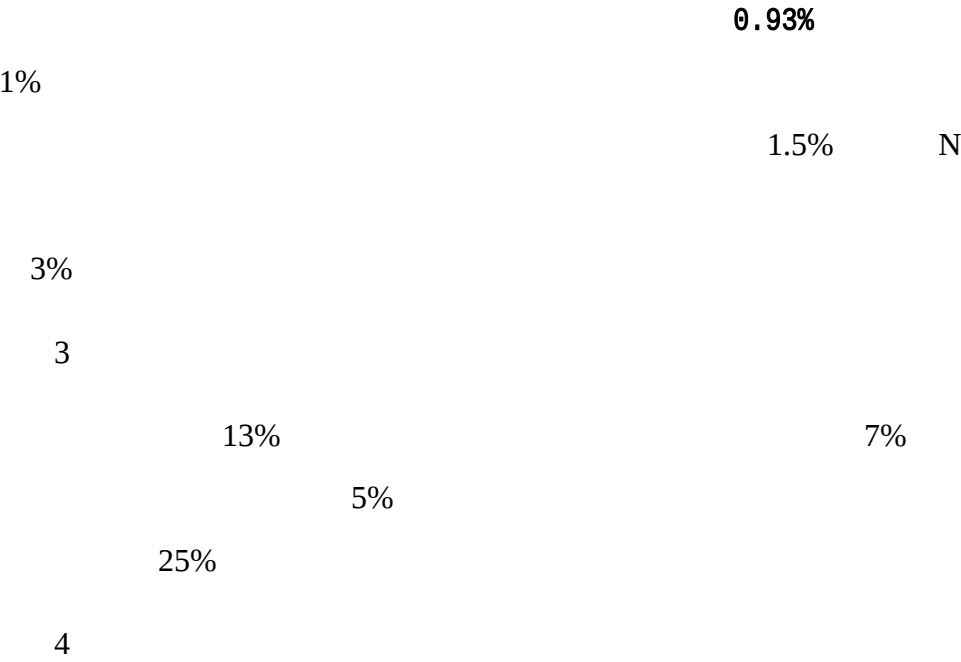
“ / /1/ 1 ”

/	23.38-27.91	23.78-28.36	-	-
/	7.31-13.16	-	7.61-11.35	7.29-13.04

2019 -2022 1-3
2019 -2022 1-6
2019 -2022 1-3

25 / 12 /

	2021	2020	2019	
	2.20%	2.66%	7.22%	4.03%
	2.79%	2.50%	2.23%	2.51%
	1.77%	2.10%	2.30%	2.06%



	1,101,194.53
	17,115.87
	18.92%
	5.81

2

	2020	10GW	17.56%	6.14	14.53%
	2019	3GW	18.85%	5.71	
	2021	15GW	14.00%	6.28	11.30%
	2022	5GW	16.49%	5.90	
			16.73%	6.01	12.92%
	2022	8	18.92%	5.81	7.80%
	2022	8GW	21.73%	5.38	7.88%

1
2

8

8GW

8

8GW

19.92% 14.94% 13.40%

10.24%

1

9

PVInfoLink

1

1.56 /W⁴

2022

1-6

1.77

/W

12

2

1.34 /W

3

2020

8GW

8GW

					=	×					
N						N					
2022			N			PERC P			0.15		
/W		N		P		0.02		/W ⁵			
N					P		PVInfolink				
				P		0.02		/W		N	

	T+1	T+2	T+3	T+4	T+5~T+11
	189,823.15	1,186,569.57	1,122,000.21	1,100,477.09	1,086,128.34
/W	1.56	1.46	1.38	1.36	1.34
GW	1.22	8.11	8.11	8.11	8.11

					/W
2022 1-9	1.79	-	1.85	1.81	
2021	1.69	1.57	1.63	1.64	
2020	1.74	1.57	1.66	1.62	

2

6

PV Infolink

P 0.05 /W N

11GW

“ / /1/ 1 ”

/	23.38-27.91	23.78-28.36	-	-
/	7.31-13.16	-	7.61-11.35	7.29-13.04

2019 -2022 1-3
2019 -2022 1-6
2019 -2022 1-3

25 / 12 /

11GW

10

10%

6

10%

5

	2021	2020	2019	
	2.20%	2.66%	7.22%	4.03%
	2.79%	2.50%	2.23%	2.51%
	1.77%	2.10%	2.30%	2.06%

3%

3

13%

7%

5%

25%

4

	1,101,194.53
	17,824.00
	21.73%
	5.38

=

×

PV Infolink

	T+2	T+3	T+4~T+12
	531,693.51	480,151.07	417,272.35
/W	0.59	0.48	0.42
GW	9.00	10.00	10.00

“ / /2 ”

2

PV Infolink

/

2022 1-9	220.26	50-270
2021	158.41	
2020	61.17	

2020

2020 2022 9

2020 -2022 1-9

2022

220.26 /

1“ / /1

2021

”

196.60 /

101.77 /

è

0.5%

1%

0.5%

	2020	10GW	17.01%	7.01	19.53%
TCL	2021	50GW G12			

1

2

300,000.00

30%

30%

4

3

4

5

22

4			
4.1			
	1	19.92%	14.94% 13.40%
10.25%		2	

	2022 1-9	2021	2020	2019
--	----------	------	------	------

2019

2020

2020

EVA

58.37 / 61.17 /

158.41 / 220.26 /

2021 2022 1-9

2

/

	2022 1-9		2021		2020		2019	
	5,088,492.10	100.00%	3,766,312.66	100.00%	3,252,518.73	100.00%	2,828,353.47	100.00%
	1,511,162.20	29.70%	727,837.96	19.32%	517,936.41	15.92%	382,671.42	13.53%
	3,577,329.90	70.30%	3,038,474.70	80.68%	2,734,582.32	84.08%	2,445,682.05	86.47%
	1.79		1.69		1.73			

2020-2021 2022 1-9
0.08 / 0.09 / 0.13 /

	2022 1-9	2021	2020	2019
1	-	17.06%	20.53%	24.57%
2	11.82%	12.43%	14.90%	17.30%
3	-	14.15%	16.09%	21.02%
	-	-2.43%	0.41%	7.24%
	-	10.30%	12.98%	17.53%
	10.40%	13.40%	15.08%	19.99%

P

N

N

N TOPCon

2022

N

PERC P

0.15

/W

N

N

2023 1

2030	12	33.60	2022
------	----	-------	------

2030	12	33.60	2022
------	----	-------	------

2030	12	33.60	2022
------	----	-------	------

9	2026	12	38.28
---	------	----	-------

9	2026	12	38.28
---	------	----	-------

Wacker

TOPCon

N P

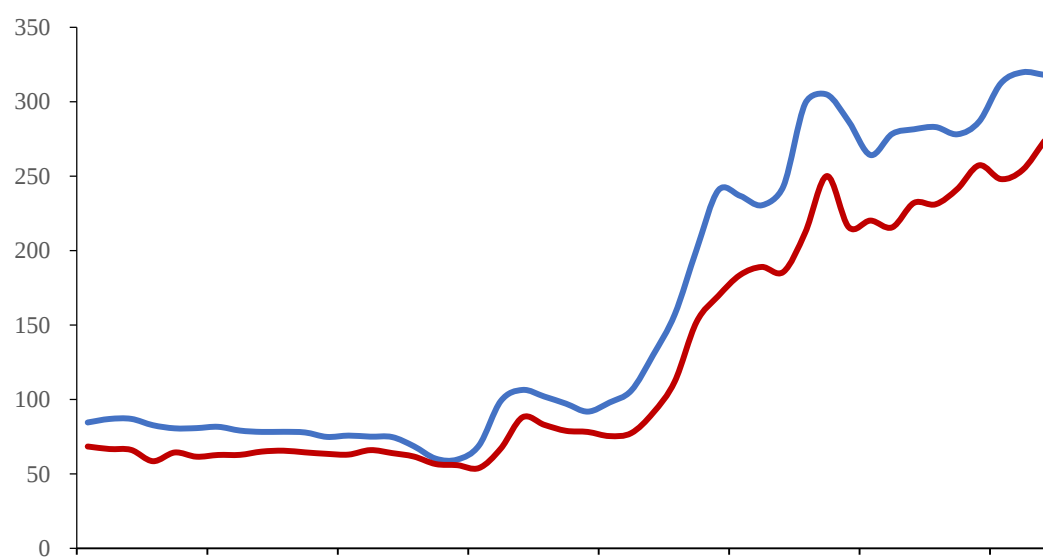
2020

EVA

11.02% 15.69% 36.90% 37.12%

58.37 / 61.17 / 158.41 / 220.26 /

/



Wind

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	2021	
	2022	

2

	2022 1-9	2021	2020	2019
	377,353.56	201,653.94	146,055.34	128,827.28
	5,185,592.52	3,935,226.06	3,319,014.48	2,929,439.37
	7.28%	5.12%	4.40%	4.40%

2019

2020

	2022 1-9	2021	2020	2019
1	0.13	0.09	0.07	-
	0.13	0.09	0.08	0.09

1

2

	2021 2022	165.69% CCFI 2,615.54 2021
		97,193.53 2020 198,253.64 329,691.17
		2022 2022 6 2022 6
	2021	

3 2022 9

256,159.43 107,206.87

200,628.29 721,915.76 8.14% 3.11%

4.21% 9.67% 2022 9

2022 9 2022

			2021	158.41	/	2022
1-9	220.26	/				
	2022	9				

2022 9

PV Infolink

PVInsights Energy Trend

2022 9

1.82%

2022

2020

1

2

3

2022

2022

1-9

1.79 /

5.39%

28.50GW

2022

“ 4.1/

”

“

2020

58.37 / 61.17 / 158.41 / 220.26

/

201

22.74% 22.60% 20.18% 17.22%

”

				896,846.14	687,910.62
	607,604.57		684,285.69		30.41%
20.44%	14.98%	12.97%			

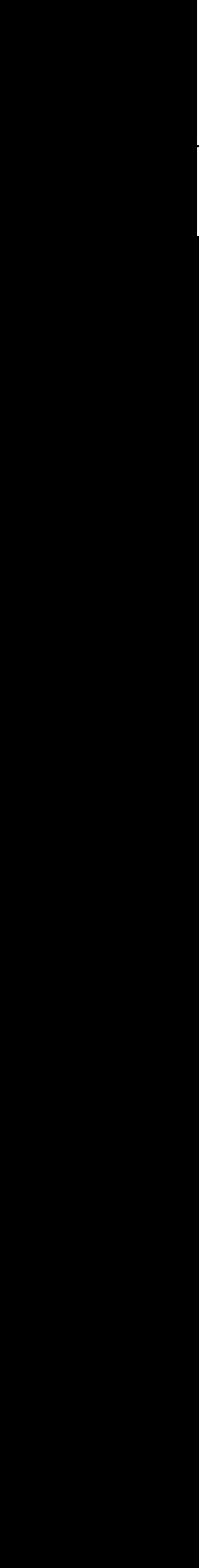
	5	SPOWER, LLC	10.54	3.57%	2015	SPower Alberta Investment Management Corporation 2017 (IPP)		2018 300MW	Spower 2019 SPRWY	1.5GW

1

NEXTERA
ENERGY, INC.

18.49

2020



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2021



2021

2

3

4

2022

5

6

2021

3

1

2

3

1

96.55% 98.00% 95.71% 98.13%

2022 1-9

1,511,162.20 382,671.42 517,936.41 727,837.96

23.90%

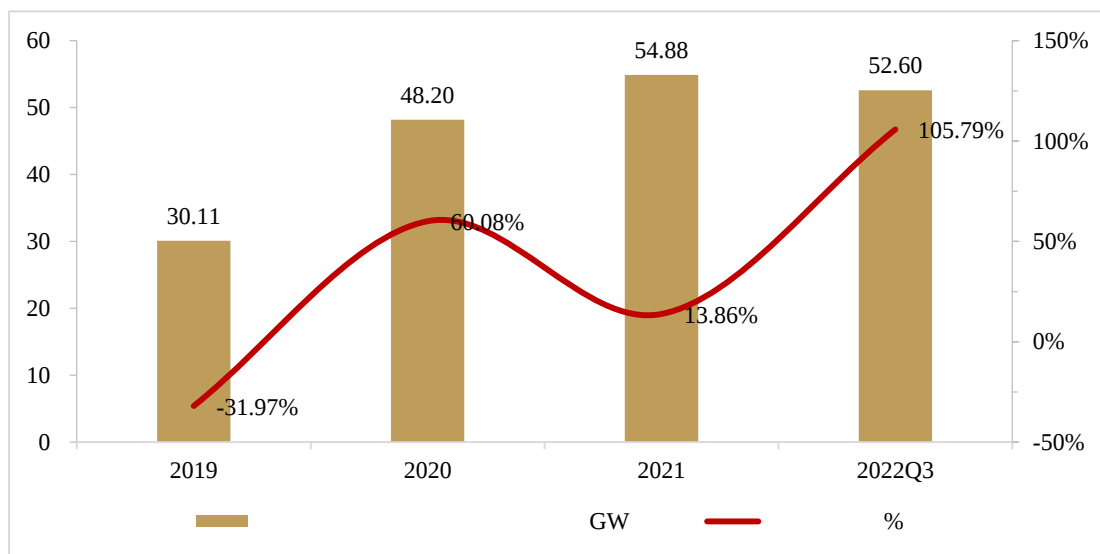
80.68% 70.30%

86.47% 84.08%

2

2022

30.88GW 137.40%



2022

2022 1-10 1,574

326.7%

3

“ ”

2021

170GW

30.8%

2021

89.64%

2021

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52.00

47.75

74.79

133.40

18.39% 14.68%

19.86%

26.22%

2021

2022

1-9

2

26.71% 17.13% 2021

25.69% 29.27%

						44.41
	29.74	62.34	100.39			
15.70%	9.14%	16.55%	19.73%	2021	2022	1-9

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2022 5 “ ” REPowerEU Plan
2030

2,006,384.72

78.30%

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		PVA TePla Ferrotec Radyne	

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2018

2018 823 “5·31 ” “5·31 ”

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	2022 1-9	2021	2020	2019
A	3,584,541.66	3,058,264.36	2,740,297.89	2,447,100.23
B	3,310,895.85	2,543,126.94	1,955,906.15	1,885,770.33
C	2,884,195.47	2,471,823.22	1,960,802.64	1,838,731.40
D	373,063.48	316,377.74	242,144.95	265,417.81
E=D/C	12.93%	12.80%	12.35%	14.43%
F=A-B	273,645.81	515,137.42	784,391.74	561,329.90
	22,894.93	328,606.49	695,088.92	549,500.68
	177,572.09	84,707.62	37,714.39	37,232.72
	73,178.79	101,823.31	51,588.43	-25,403.50

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13% 2019

16%

13%

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	2022-09-30	2021-12-31	2020-12-31	2019-12-31
	69.79%	71.41%	65.56%	65.00%
	63.37%	70.65%	60.21%	70.92%
	75.35%	66.44%	64.43%	48.34%
	60.12%	51.31%	59.38%	52.29%
	67.16%	64.95%	62.40%	59.14%
	77.05%	81.40%	75.24%	79.94%

Wind

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IPO

	GDR	2022	261.53
		2021	70.00
		2019	50.00
		2018	38.75
			420.28

		2022	88.65
		2021	52.52
		2019	25.31
			166.48
		2022	100.00
		2021	50.00
		2020	52.00
			202.00

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 2
 2022 9 30 GDR 47.91 / A 90% 606,533,086 261.53

 3 A

2022-09-30/2022 1-9

	1	1~2	2~3	3	
	1,118,908.17	-	-	-	1,118,908.17
	158,242.63	-	-	-	158,242.63
	-	139,359.79	86,732.33	103,389.17	329,481.29
	-	26,594.45	6,383.69	21,398.70	54,376.84
	-	186,537.25	191,849.69	873,820.40	1,252,207.34

2022	1-9	2021	2020	2019
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1		74,978.81	50,000.00	24,978.81
2		345,210.74	115,800.00	229,410.74
		420,189.55	165,800.00	254,389.55

	2022 9 30					
		2023 10 1	2024 10 1	2025 10 1	2026 10 1	2027 10 1
		-2024 9 30 1-2	-2025 9 30 2-3	-2026 9 30 3-4	-2027 9 30 4-5	5
	54,376.84	26,594.45	6,383.69	6,201.12	6,268.75	4,490.54
	1,252,207.34	186,537.25	191,849.69	312,694.17	385,624.29	175,501.93
	1,636,065.47	352,491.49	284,965.71	393,364.36	405,529.92	195,275.71
	100.00%	21.55%	17.42%	24.04%	24.79%	11.94%

32.63

1 IPO
104.54 23.97

2 153.42

3 24.64 25.08 32.29 ,
27.34

4 100
30 91.05%

	2022-09-30/ 2022 1-9	2021-12-31/ 2021	2020-12-31/ 2020	2019-12-31/ 2019
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	2022-09-30			2021-12-31			2020-12-31			2019-12-31		
	A	B	A/B	A	B	A/B	A	B	A/B	A	B	A/B
	520.06	33.68	15.44	291.72	55.25	5.28	269.63	45.23	5.96	193.36	43.26	4.47
	161.73	152.65	1.06	106.90	112.92	0.95	94.29	95.65	0.99	58.27	93.10	0.63
	41.39	4.74	8.74	26.15	3.18	8.23	19.94	1.90	10.49	15.44	3.19	4.84

1

	2022-09-30/ 2022 1-9	2021-12-31/ 2021	2020-12-31/ 2020	2019-12-31/ 2019
	1,401,516.07	1,102,657.60	839,495.01	745,429.08
	1,058,352.92	625,648.57	478,917.28	377,103.89
	2,604,696.88	1,113,212.30	819,071.32	640,280.78
/	40.63%	56.20%	58.47%	58.90%

58.90% 58.47% 56.20% 40.63% 2019

2021 2022 1

2022 1-9

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2022 1-9

2022		6,315,724.59
2022		414,108.39
2022		289,579.06
2022	= + -	6,440,253.92
		100.94
		49.43
		70.83
	= + -	79.54
	=360 ÷	4.53
	= ÷	1,422,886.19

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2022 1-9

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2022	36.06

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 2 2022 =2022 +
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A

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B

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C

36.06

123.85

124.87

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950,609.55

		2022-09-30/ 2022 1-9	2021-12-3 1/2021	2020-12-3 1/2020	2019-12-3 1/2019
		950,609.55	916,771.57	400,378.50	402,601.69
		671,273.80	111,472.00	193,774.70	528.00
	= -	279,335.75	805,299.57	206,603.80	402,073.69
		348,721.91	970,916.70	220,692.94	523,388.35
/	= /	80.10%	82.94%	93.62%	76.82%

1	=	-				
2	=	+	+	-	+	
-	+	+		+	+	
+			+	"	"	+

76.82% 93.62% 82.94% 80.10%

	2022-09-30			2021-12-31			2020-12-31			2019-12-31		
	A	B	A/B	A	B	A/B	A	B	A/B	A	B	A/B
	520.06	33.68	15.44	291.72	55.25	5.28	269.63	45.23	5.96	193.36	43.26	4.47
	161.73	152.65	1.06	106.90	112.92	0.95	94.29	95.65	0.99	58.27	93.10	0.63
	41.39	4.74	8.74	26.15	3.18	8.23	19.94	1.90	10.49	15.44	3.19	4.84
	112.60	53.98	2.09	132.19	90.94	1.45	94.93	56.30	1.69	57.21	81.05	0.71
	208.95	61.26	3.41	139.24	65.57	2.12	119.70	49.77	2.41	81.07	55.15	1.47
	264.00	145.74	1.81	184.09	122.80	1.50	160.29	77.97	2.06	135.42	86.98	1.56

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	1,372,884.73	1,593,613.95	2,564,494.37
2,913,216.28			

	2022-09-30/ 2022 1-9	2021-12-31/ 2021	2020-12-31/ 2020	2019-12-31/ 2019
	1,118,908.17	1,168,997.30	727,703.58	810,730.68
	158,242.63	170,070.56	82,514.02	81,524.45
	9,002.66	19,081.51	12,330.67	20,688.09
	125,787.21	141,245.42	70,183.36	60,836.36
	23,452.76	9,743.63	-	-
-	-	10,000.00		-
-	-	88,051.53	46,208.94	37,144.80
	329,481.29	39,933.44	39,616.19	38,350.30
	54,3761.3 5			

2 2022 1-9

4.23% 5.12% 4.34% 4.13%

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34

2019 2020 2021

	2021	2020	2019
	4,056,961.83	3,365,955.42	2,948,957.62
	2,219,382.18	2,423,965.80	2,355,691.24
	54.71%	72.01%	79.88%
	2,032,920.49		

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Düsseldorf Higher Regional Court

2023

the European Patent Office

EP2220689

2022 9 28 29

oral proceeding

the European Patent

Office opposition division

EP2220689

2019 1 30

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2022 10 10 21 SIAC

HRD

“ X-Elio ”

X-Elio	X-Elio	2
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X-Elio

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X-Elio

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9,430,580.91

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SW FZE										”									
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European Commission 2018 8 2013

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2021 3 2022

4 1 40%

25% 2020 7

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70%

HRD

	X-Elio 11,529,491.40 2021 0.54% X-Elio 100 840 X-Elio 270 840 100 50% X-Elio 100.00 8,430,580.91 4,715,290.46 3,046.12	“ ” “ ” 2019-2021 1-9 117.40% 527.72 17.29% 2022	940.00 5 9,430,580.91	

	SW FZE SW FZE 1 SW SW FZE 2 1 307,112,787.38 3 4,281,606.00 3 2 32MW 14,145,335.16 SW FZE SW FZE SW FZE SW FZE SW FZE 2 14,145,335.16 2021 0.67%	“ ” “ ” 2019-2021 17.29% 2022 1-9 527.72 117.40%	SW FZE	
“ ”	2011 11 Importer of Record DOC	“ ”		

	2022 7 27		44		
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39

	2022 1-9	5.71%			
	357.73	78.30%			
	75.50	100.76	66.12	36.76	
			2022 1-9	357.73	
			78.30%		
	2022 1-9	7.22%			
		357.73			
	78.30%				

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2019 1 30

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SW FZE

SW FZE

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4,281,606.00

307,112,787.38

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102,010.91 148,678.37 156,781.64 9,187.20

2,665.12 342.97 5,739.69 14,458.60

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18,788.80 2,083.33 3,307.89 12,500.83

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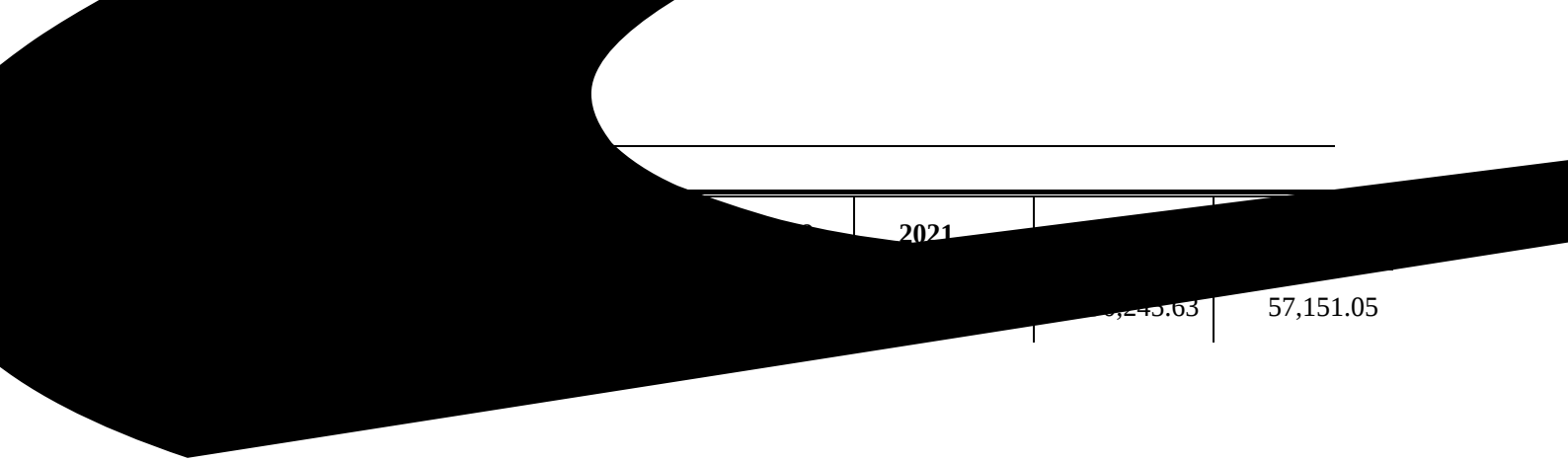
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			2022 1-9	2021	2020	2019



	2021		
		8,243.63	57,151.05

LONGGEN ZHANG	2014	2020	12	JinkoSolar Holding Co., Ltd.
2022				
2		2021	9	
3				
4				2022 1
5				
6				
2020 11	2021	12		
7				
			100.00	

A

PV Infolink	PVInsights	Energy Trend
	2019	2020 2021
		6.90% 1.49% -8.65%

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	2019	2020	
		9.48% -16.18%	-2.58%
-0.89%	2020		

2019 2020 2021 2022 1-9

-4.42% -4.79% -12.08% -4.15% 2021

“ ”

2019 2020 2022 1-9

4.77% 6.89% -0.25%

					OEM													
					2022		1											
OEM																		
		OEM		2019	2020	2021												
7.01%	4.24%	-3.22%																
					/													
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					10%-20%													
					/													
					2021		6											
		2022		9														
					PV Infolink PVInsights													
Energy Trend																		
		2022		9														
					1.82%													

EPC

0.09% 0.01% 0.07% 0.46%

2022 1-9

A.2022 “ ” “ ”

2022

30.88GW 137.40%

2022 1-6

5.20 2022

10.40 2021 7.09 46.73%

B. 2022

C.2022

2022 1-9

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2022

JKM540M-72HL4-V/Silver/F35/A	2.39%
JKM550N-72HL4-V/Silver/F35/A	0.88%
JKM555N-72HL4-V/Silver/F35/A	-2.53%
JKM545M-72HL4-V/Silver/F35/A	0.48%
JKM540M-72HL4-BDVP/B	-3.44%

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2022 9

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11,850,748.46

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1		3,000.00	2019-08-30	12 2021 1	5.20%
2		1,000.00	2019-09-02		
3		1,500.00	2019-06-11		
4		5,000.00	2021-		

[illegible]

			8,833.14	
			250MW	
			5	
			2020	7 31
			“	”
			2020	8 31
			2020	8 31
			1	
			6	
			2020	7 8

1			28.67%	20,838.00
2			100.00%	1,540.00
3			100.00%	1,010.00
4			25.00%	62,150.00
5			25.2101%	48,300.00
6			1.07%	1,320.00
7			100.00%	178.80
8			99.99%	99,990.00
9			100.00%	630.10
10			100.00%	2.04
11			100.00%	40.00

			3.69	5.12		
	2021	2022	1-9			
			145.42	264.20		
					0	11.55
3						
1						
	2019	2020				
			227,441.11	151,955.71		
116,956.20		51,180.07				
		2019	2020			
					130,969.29	
101,155.07			30,802.79	588.59		

0.64% 0.06% 0.08% 0.33%

2020

2020

80.33 /KG

61.17 /KG

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2019 12 10

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www.landchina.com

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			1	2022	6	30		4,165.64
				41,910.11			10.00	2
2022	6	30			2			

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2022 7 28

2022

2022 8 26

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2022 9

1		7,285.83	
2		12,996.01	
3		10.00	
4		85,795.70	
5		161,826.37	
6		101,825.87	
7		54,067.28	

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B
T02LK180002

55.52% 52.88%

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2022 9

161,826.37

1		155,753.85
2		5,904.39
3		168.13
		161,826.37

6

2022 9

101,825.87

1		13,766.50
2		88,059.37
		101,825.87

7

2022 9

54,067.28

	2022 9		
	34,624.43		
	19,442.85		
	54,067.28	-	-

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2021 8

2022 9

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2023 1 2030 12

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2021 12

10 2022 10

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2022 9 2026 12

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2022 9

123,917.11

1		123,917.11
		123,917.11

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Wind 2021 1 1 2022 9 30
23

	0.36%	0.50%	0.20%
	0.56%	0.70%	0.40%
	1.03%	1.20%	0.60%
	1.68%	2.60%	1.20%
	2.22%	3.40%	1.60%
	2.60%	3.50%	2.00%

1,000,000.00

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	2022	1-9	2021	2020	2019
	1,165,016.77		568,363.55	290,843.12	458,925.99
	20,345.38		-3,330.39	-294.84	-1,920.72
	500,256.54		-25,157.27	154,653.52	312,970.76

2019	2020	2021
138,081.32	104,156.17	114,140.99
246,423.16	250,786.91	322,874.71
118,792.83		273,361.59
		14,065.22
		19,833.33

	2022	9	493.67
340.25		153.42	

1,000,000.00	1,000,000.00	2021	1	1	2022	9
30						

1	2020	6
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50%

2

	2022-03-31		2022-06-30		2022-09-30	
		%		%		%
	6,681,100	3.42	7,360,164	3.68	7,467,776	3.72
	38,221,853	19.58	42,108,880	21.08	50,503,605	25.19

2022 9 30

586,207.20

58.62%

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2022 10 29

17.00 /

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1,000,000.00

58,038.31

1,058,038.31

%

		%
3		3.18 3.86
-		18.16 29.29

2022 6 30

1	Brilliant Win Holdings Limited	20,146,088	10.08%
2	Yale Pride Limited	14,602,628	7.31%

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“ 2022 9 30

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2022 9 30 6,925.00
172,000 19.20
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23.48%

23.48%

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关于本次回复报告的声明

本人作为晶科能源股份有限公司的董事长，现就本次回复报告郑重声明如下：

“本人已认真阅读晶科能源股份有限公司本次回复报告的全部内容，确认回

发行人董事长：_____

李仙德

晶科能源股份有限公司

2023年12月3日

(本页无正文, 为《关于晶科能源股份有限公司向特定对象发行人民币普通股股票的公告》
分申请文件审核问询问题的回复报告) (公告编号: 2023-010)

保存代表人签字:


陈 强


张世举

中信建投证券股份有限公司



关于本次回复报告的声明

本人作为晶科能源股份有限公司保荐机构中信建投证券股份有限公司的董事长，现就本次回复报告郑重声明如下：

一、本人及本人所任职的机构均与晶科能源股份有限公司不存在任何关联关系，不存在任何利益冲突，不存在任何影响本人及本人所任职的机构独立、客观、公正执业的因素，不存在任何虚假记载、误导性陈述或重大遗漏。

二、本人及本人所任职的机构出具的本次回复报告，是依据国家有关法律、法规和证券监管部门的相关规定，本着客观、公正、独立的原则，对晶科能源股份有限公司本次回复报告的内容进行了审慎核查，不存在任何虚假记载、误导性陈述或重大遗漏。

中信建投证券股份有限公司

