

联合资信评估股份有限公司
China Lianhe Credit Rating Co.,Ltd.

专业 | 尽责 | 真诚 | 服务

2023
2024

信用评级公告

2024 7528

2023							
23	ABN001	A1	23	ABN001	A2		
	AAA _{sf}						

Add: 17/F, PICC Building, 2, Jianguomenwai Street, Beijing PRC:100022

地址: 北京市朝阳区建国门外大街2号PICC大厦17层 邮编:100022

电话 (Tel): (010) 85679696 | 传真 (Fax): (010) 85679228 | 邮箱 (Email): jianhe@lhratings.com



2023

2024

23	ABN001	A1	10746.00	27000.00	29.21%	52.01%	15.05%	8.50%	AAA _{sf}	AAA _{sf}
23	ABN001	A2	20500.00	20500.00	55.73%	39.49%	15.05%	8.50%	AAA _{sf}	AAA _{sf}
23	ABN001		2500.00	2500.00	6.80%	4.82%	--	--	NR	NR
			33746.00	50000.00	91.74%	96.32%	--	--	--	--
			3037.59	1910.44	8.26%	3.68%	--	--	--	--
1			36783.59	51910.44	100.00%	100.00%	--	--	--	--

1.

2 NR

2023										2023/11/15
										2030/01/19
										2023/09/28 2024/04/19
										2023/07/20
										2024/04/01
										2024/04/19
										39049.37
										36781.17
										12
										18
										%
										17.67
										%
										6.61
										%
										5.69
										25.68
										21.18
										A ⁺ _s ² /A _s
										AA ⁻ _s /A ⁺ _s
2023										2023
23	ABN001	A2								23
										ABN001
										A1
										AAA _{sf}

										AA ⁻ _s /A ⁺ _s
										23
										ABN001
										A1
										8.26%
										23
										ABN001
										A1
										23
										ABN001
										A2
										15.05%
										6.56

1

36781.17

2.42

2

s

2022

AAA

				72.32%											
				88.51%											
17.67%															
67.25%				2023				75.17%							
6.38%				2021				2023				6.80% 8.12%			
								54.24% 62.48% 34.15%							
								9.65% 12.27% 11.80%							
						V4.0.202312									
						V3.0.201909									

	2021	2022	2023	2024 3		2021	2022	2023	2024 3
	454.91	435.27	348.56	309.04	%	15.64	16.34	15.19	13.57
	3450.12	3478.05	3500.35	3566.60	%	6.80	8.12	6.38	--
	781.17	858.67	869.28	883.59	%	77.36	75.31	75.17	75.23
	1162.55	1186.97	857.69	809.47	%	71.29	66.57	67.25	68.11
	777.43	522.78	927.23	1077.64	%	72.92	70.57	79.75	84.50
	1939.97	1709.75	1784.92	1887.11	%	8.47	18.05	12.81	--
	2208.38	2017.22	1710.69	335.89		0.39	0.37	0.41	0.38
	89.68	121.48	89.80	8.54	EBITDA	3.08	3.77	3.96	--
EBITDA	277.11	324.41	285.46	--	/EBITDA	7.00	5.27	6.25	--
	153.63	359.26	207.57	-15.80	--	--	--	--	--

1. 2024

2.

4. --

3.

	23	ABN001	A1	23	ABN001	A2
2023/09/27		AAA _{sf}			AAA _{sf}	

2024 7 30

guoyan@lhratings.com

zhanggt@lhratings.com

lianhe@lhratings.com

www.lhratings.com

010-85679696

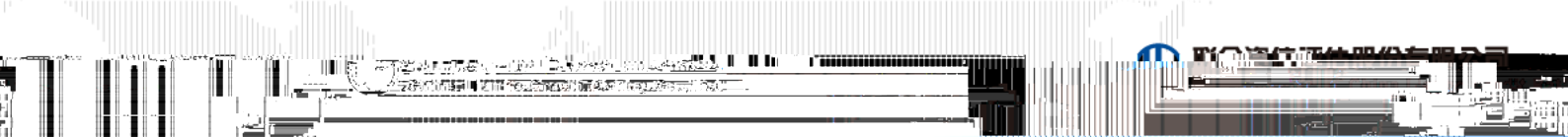
010-85679228

2

17

100022





2023

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2023 11 1

4	18	18		32.48	40.90
%	17.67	14.83		1.84	10.26
	2430.00	2430.00	5	A ⁺ /A _s	A ⁺ /A _s
%	6.61	4.68		AA ⁻ /A _s ⁺	AA ⁻ /A _s ⁺

1. = / 2. = - 5. /365×12 3. = - +1 /365×12 4.

4

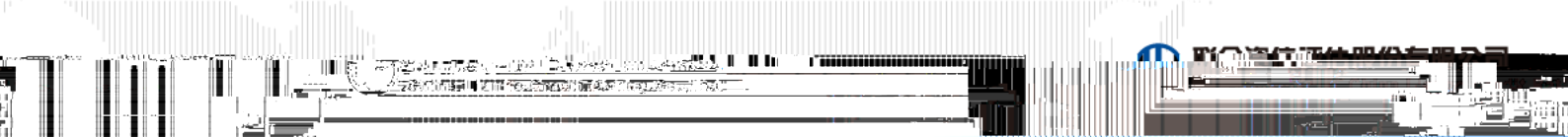
1	2	6498.96	17.67%	1	2	7697.41	14.83%			
2	2	5324.69	14.48%	2	2	7672.55	14.78%			
3	2	5222.80	14.20%	3	2	6959.75	13.41%			
4	2	4369.08	11.88%	4	2	6946.83	13.38%			
5	3	4226.15	11.49%	5	1	5489.32	10.57%			
--	11	25641.68	69.71%	--	9	34765.86	66.97%			

5

	5	11223.73	30.51%		5	15597.33	30.05%
	4	7956.81	21.63%		4	11765.90	22.67%
	4	7418.43	20.17%		4	9197.06	17.72%
	2	5324.69	14.48%		2	6959.75	13.41%
	2	4369.08	11.88%		2	6946.83	13.38%
	1	488.42	1.33%		1	1443.57	2.78%
	18	36781.17	100.00%		18	51910.44	100.00%

6

	8	13271.90	36.08%		8	20383.67	39.27%



11

	6	17838.09	48.50%		8	18280.00	35.21%
	8	11618.82	31.59%		6	23789.92	45.83%
	4	7324.26	19.91%		4	9840.52	18.96%
	18	36781.17	100.00%		18	51910.44	100.00%

12



1

100

24.52%

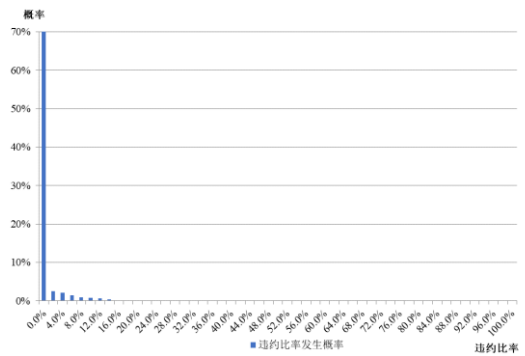
14 •

	TRDP	TRDR	TRLR
AAA _{sf}	0.02%	21.63%	16.85%
AA ⁺ _{sf}	0.09%	16.86%	14.17%
AA _{sf}	0.12%	16.86%	14.17%
AA ⁻ _{sf}	0.18%	16.42%	12.77%
A ⁺ _{sf}	0.42%	13.52%	11.36%
A _{sf}	0.54%	13.15%	9.92%
A ⁻ _{sf}	0.83%	11.66%	8.57%
BBB ⁺ _{sf}	1.24%	10.08%	7.53%
BBB _{sf}	2.09%	7.89%	5.58%
BBB ⁻ _{sf}	2.52%	6.87%	5.36%

15 •

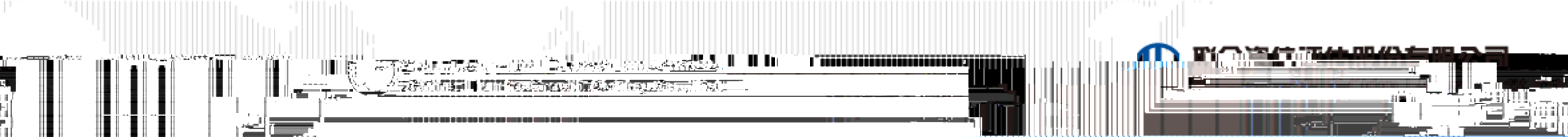
1	52.58%
2	41.91%
3	5.51%

16 •



15.05%	AA ⁺ _{sf}	23	ABN001	A1	23	ABN001	A2	23	ABN001
A1	23	ABN001	A2	AA ⁺ _{sf}					

2



ABN001 A1

TRDR

20 • 23 ABN001 A1 AAA_{sf}

		AAA _{sf}	TRDR	
		34.47%	21.63%	12.85%
2		33.44%	21.63%	11.81%
4		32.37%	21.63%	10.74%
10%		31.87%	21.63%	10.24%
20%		27.48%	21.63%	5.85%
2	10%	31.63%	21.63%	10.00%
4	20%	27.48%	21.63%	5.85%

5.85% 23 ABN001 A1 AAA_{sf}
 23 ABN001 A1 AAA_{sf}

21 • 23 ABN002 A2 AAA_{sf}

		AAA _{sf}	TRDR	
		22.98%	21.63%	1.35%
0.00%		17.56%	21.63%	-4.06%
10%		22.29%	21.63%	0.66%
20%		21.65%	21.63%	0.02%



10%	2	10%	22.05%	21.63%	0.42%
20%	4	20%	21.18%	21.63%	-0.45%

22 • 23 ABN002 A2 AA⁺_{sf}

			AA ⁺ _{sf}	TRDR	
			22.98%	16.86%	6.12%
10%			22.29%	16.86%	5.43%
20%			21.65%	16.86%	4.79%
2			22.82%	16.86%	5.96%
4			22.67%	16.86%	5.81%
10%			22.88%	16.86%	6.02%
20%			22.78%	16.86%	5.92%
10%	2	10%	22.05%	16.86%	5.19%
20%	4	20%	21.18%	16.86%	4.32%

	AAA _{sf}	23	ABN002	A2	4.32%
23	AA ⁺ _{sf}	23	ABN002	A2	
23	ABN002	A2	AA ⁺ _{sf}		
ABN001	A1	23	ABN001	A2	
			A _{sf}	A _{sf}	

23

1

	/	/	"	"	
			2017	10	
			"	"	10.00
2018	3	2024	3	10.00	100.00%
				"	"

2024 3

99 17F01-02

1

2

2024 3

3

2023
2024 1 3

1

2

2023

3

2023

67.34%

1

2018

10.00

1

2

/

/

/

/

"

"

2020 10

39.05

"

"

70.06% 16.29% 13.65%

2020 10

"

"

"

"

70.06%

2020 11

"

"

2022 6

39.05

41.49

70.41%

15.33%

12.85%

1.42%

2024 3

41.49



1		2023				75.17%	67.25%
2					2021	2023	
	8.12%	6.38%					6.80%
	62.48%	34.15%					54.24%
3					2021	2023	
	426.59	412.92			9.65%	12.27%	11.80%
							332.81

AAA

								23	ABN001
A1	23	ABN001	A2	A _{sf}					
AAA _{sf}				"		2023		"	23
ABN001	A1	23	ABN001	A2		AAA _{sf}	23		ABN001
	23	ABN001	A1	23	ABN001	A2			

2017 10

" " "

10.00

2018 3

2024 3

10.00

100.00%

"

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2024 3

99 17F01-02

2024

2024

5%

GDP

5.3%

5.2%

GDP

2024

2020

2020

9839

993

10.09%

AAA

2023

8846

2022

2023

2024

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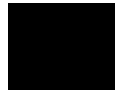
2024

2024

2024 3

52.24

2023



		23		24	1	3
6						

	2021	2022	2023	2024 1 3
	24.84	21.94	29.34	2.70
	20.65	21.94	29.34	2.70
	4.19	0.00	0.00	0.00
	53.18	50.71	55.35	52.24
	49.09	50.71	55.35	



	9.18		6.67		9.01		9.02
	9.30		5.91		6.70		6.77
	6.34		4.99		4.99		6.71



2021 2023 2024 1 3 2021 2022 2024 1
 2023 2023 2021 2023 2024 3
 3

1

2023 2024 3

2023 59.94 7.99%
 8.03% 91.34%

2024 3 58.40

2023 2024 3 2024 3 1

2023 2024 3 2022 2024 3 22.16 36.96%

7

	2021		2022		2023		2024 3	
		%		%		%		%
	57.96	99.25	54.94	99.35	59.93	99.55	56.44	99.52
	0.43	0.75	0.36	0.65	0.27	0.45	0.27	0.48
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	58.39	100.00	55.30	100.00	60.20	100.00	56.72	100.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%		1.08		1.27		1.57		1.67
%		--		--		--		--

2

1

2023

2024 3

2023 13.62 7.63%

68.20% 28.17% 3.75

2023

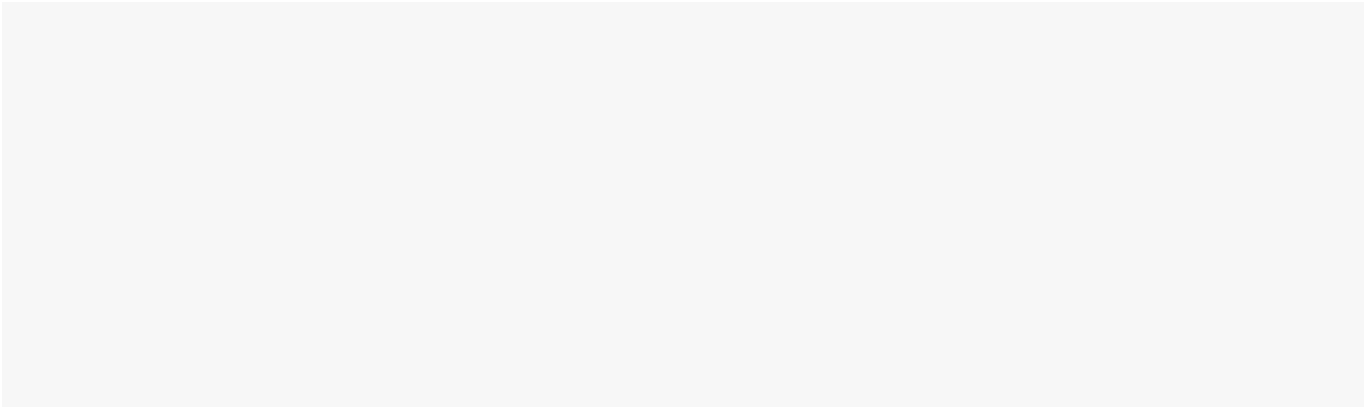
2024 3
3.52

14.84

1.23%

8

9



2023

2024

3

2023

8.10%

ABN PPN

2023

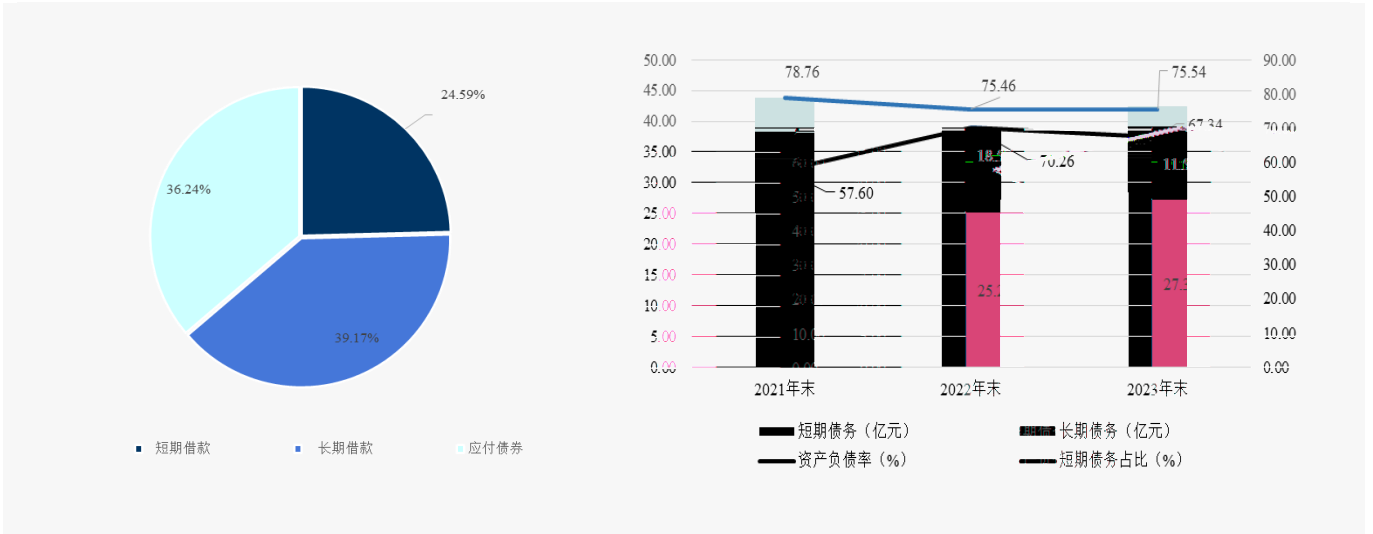
4.10%

5.25%

26.16%

10

	2021	2022	2023	2024 3



3

2023		2024 1 3
2023	" "	
	2023	8.29%
2023	23.71%	
	2023	
	14.79%	
2023	/	
	2023	31.82%
	2023	
2024 1 3		2.52%

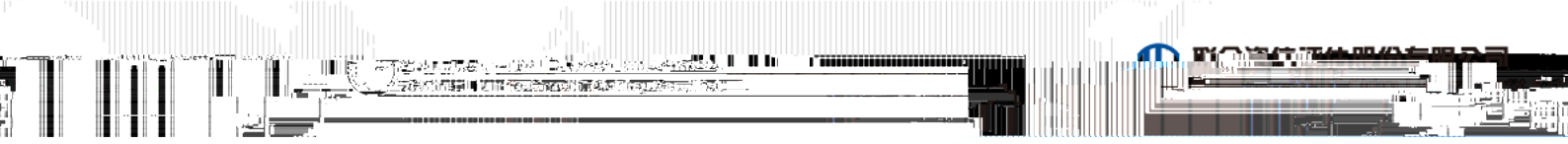
13

	2021	2022	2023	2024 1 3
	3.62	3.55	3.88	0.79
	1.82	1.97	1.81	0.42
	0.57	0.46	0.57	0.12
" "	0.11	-0.08	-0.24	-0.01
	1.33	1.13	1.63	0.25
	1.44	1.05	1.39	0.24
	1.07	0.78	1.04	0.18
/ %	3.93	4.85	4.06	/
%	1.87	1.34	1.80	0.31
%	8.57	5.86	7.35	1.23

2024

4

2023



2024 1 3



2024 3

72

ESG

ESG

2024 3

3

ESG

2023

3500.35

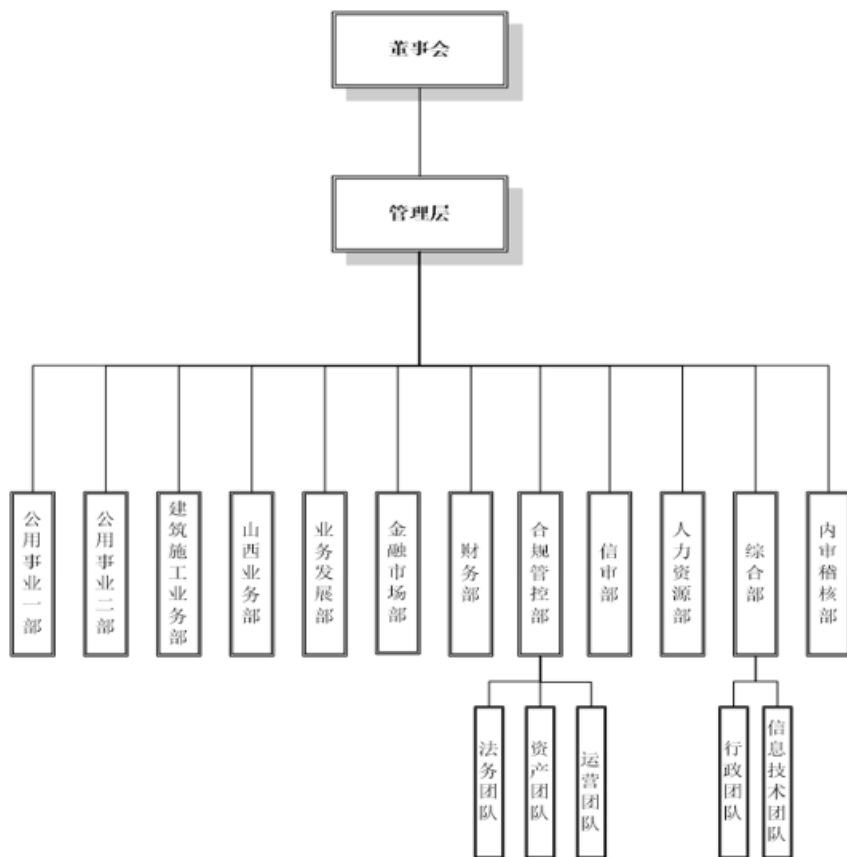
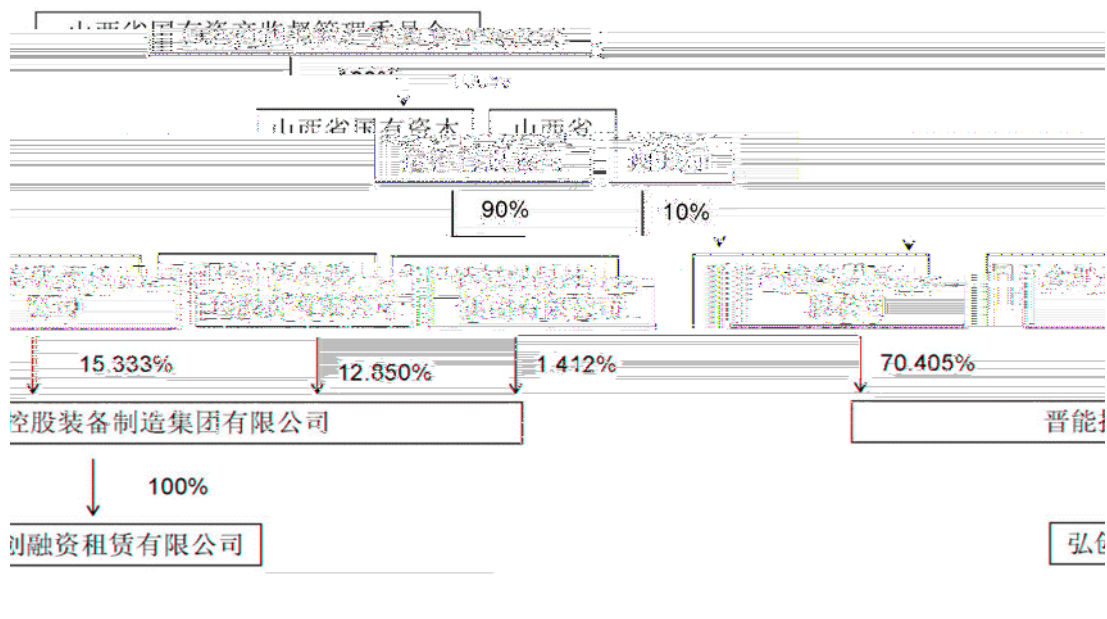
869.28

2023

7-08\

1710.69

89.80



1-4

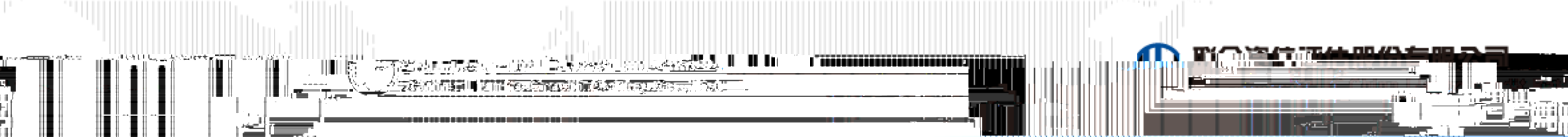


	$\frac{1}{2}$	$=$	$\frac{-}{n}$	$/$	$\times 100\%$
	$\frac{2}{n}$	$=$	$[(\frac{-}{n})^{1/(n-1)} - 1]$		$\times 100\%$
			$[\frac{-}{n} + \frac{-}{2}]$		$\times 100\%$
			$[\frac{-}{n} + \frac{-}{2}]$		$\times 100\%$
	$[\frac{-}{n} + \frac{-}{2}]$			$+$	$[\frac{-}{2}] \times 100\%$
			$/$		$\times 100\%$
			$/$		$\times 100\%$
			$/$		$\times 100\%$
	$/$		$\times 100\%$		
	$/$	$+$	$+$		$\times 100\%$
	$/$				

EBITDA

2-1

2020 10



1

1

			13			3		2
	7	1		1	4			
2					1			
		5				1		1
1		2	1					
	1							

2

1

2021 2023



2021 2023

2022

8

2023

35.74%

2021 2023

2022

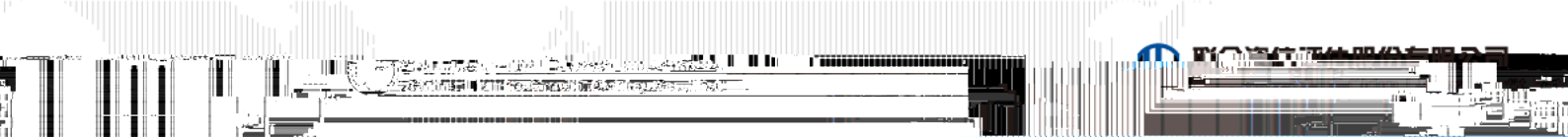
2023

2024 1 3

318.34

2.30

2 2023 2024 1 3



[Empty rectangular box]



	248.83	195.92	160.43
	485.98	807.86	716.36
	3325.59	2833.85	2950.13
	501.38	483.16	581.02
	5050.56	4752.66	4853.74

1.

2.2022

2021

2022 9

4

2023 1

70%

2023

20.97%

2

2021 2023

2022

70

2023

9

26

5

2023

3192.10

629.08

1752.14

810.88

2023

2.83%

2021 2023

2023

13.03% 9.13%

0.74%

5.25%

2023

2021

	2021	2022	2023
	1822.13	1668.26	1715.48
	1087.89	1146.87	1296.27
	1028.46	1156.00	1261.51
	2150.56	2509.00	2248.68
	1662.94	1977.21	1738.61
	487.62	531.79	510.07
	507.24	377.07	374.27
	431.67	291.00	306.29
	2235.37	2338.00	2082.51
	2320.78	2765.82	2471.16
	-85.41	-427.82	-388.65

2022

2023

3

2021 2023



		2022	2023		42.38%	35.74%		2022	
0.44								0.17	
							59.99	2021	2023
33.14		30.70	30.72						

3

	2021				2023				
		2021	2023		9.85	6.51	5.33		14.41
11.32	9.33			0.66	0.58	0.49		2021	
					2023				

	6.06		8.47		12.51	26.71
	9.10		6.33		11.73	9.50
	0.49		0.34		0.32	0.54

Wind Wind

4

	2023		179.86	135.48
--	------	--	--------	--------

2023 2.04 Tf1377.95 141.74 5.16 10.32 re7ETQ139 181.74 5.16

			2023	2024	2025	
400 /		83.06	19.42	23.38%	4.50	11.80
400 /		69.28	11.73	16.93%	5.65	12.10
150 /		27.52	9.42	34.23%	3.48	7.36
		179.86	40.57	--	13.63	31.26
			2024	2025		

" "

"

"

2021	2023				2021	2022			
	2023							2024	
	2022		8		2	2023			1
1		1	2024	1	3			2024	3
64									

1

2021	2023				2021				
1									
2021	2023		2023						
	36.91%		63.09%						
2021	2023			11.12%	2023			18.60%	
			105.09		33.14%				
2021	2023		2022						2023
			1		25.36				204.80
		66.32%			59.93%				
2021	2023		2022						2023
2021	2023		2022					2023	3
2021	2023			4.73%					3.67
2021	2023								
2									
2021	2023		2022						
	15.92		2023						
2021	2023				4.57%	2023			1043.60
	51.57%								
2021	2022		2022					2023	
									40
									60
2021	2023		2022						
	90.38					2023			
	2024	3							



	2021	2022	2023
	1321.89	1404.23	1291.85
	401.33	389.53	317.06
	237.73	283.10	281.17
	145.88	160.20	136.15
	95.08	143.49	131.75
	141.32	146.92	155.00
	214.50	207.90	211.50



2021		2023	
48.05%	51.95%	857.69	1784.92
77.37%	2023		4.40%
			927.23
			75.17%



2021 2023 4.94% 2023 4.97%

4.56% 43.16% 18.83% 33.45% 64.29

15.63% 2021 2023 9.63% 10.03% 11.24%

2021 2023

2022 17.73% 148.85%

2021 2023 2022 35.45%

2023 89.80 26.08% 2021 2023

54.24% 62.48% 34.15%

2021 2023

	2021	2022	2023
	2208.38	2017.22	1710.69
	212.69	202.25	192.20
	8.63	8.59	8.77
	100.22	82.25	82.95
	26.46	35.20	36.19
	77.38	76.20	64.29
	10.21	25.40	9.55
	9.41	11.08	9.87
	-33.18		

	2021	2022	2023
	2202.96	2204.22	1741.76
	2049.33	1844.97	1534.19
	153.63	359.26	207.57
	94.82	25.50	61.70
	168.70	152.72	248.45
	-73.88	-127.22	-186.74
	79.76	232.04	20.83
	1060.62	1011.36	1453.14
	1109.28	1223.09	1471.82
	-48.66	-211.73	-18.68
	98.46%	106.27%	99.46%

5

1

		2021	2022	2023
		72.92	70.57	79.75
		65.12	63.19	70.18
	/	8.47	18.05	12.81
	/	0.13	0.30	0.24
		0.39	0.37	0.41
	EBITDA	277.11	324.41	285.46
	/EBITDA	7.00	5.27	6.25
	/	0.08	0.21	0.12
	EBITDA	3.08	3.77	3.96
	/	1.71	4.18	2.88

2021	2023			
2024	3			
		2021	2023	
		EBITDA	EBITDA	/EBITDA
		2024	3	2796
				1160
		2024	3	52.85
				5.98%
				20.00
				17.08
				10.17
		2024	3	

6

2021 2023



	2021	2023			3.71%	2023	
1714.71			59.54%	40.46%			8.01%
	16.23%		41.03%	32.02%			
11.38%		59.72%		11.48%	13.24%	2023	
81.83							
2021	2023		2.15%	2023		1195.70	
2.89%	602.44	50.38%	593.25	49.62%			
32.31%	9.70%	7.46%		27.19%			18.27%
		76.13%	18.13%	2023		69.73%	2022
	2023	924.00		39.30%	60.70%		
64.03%	2021	2023		7.61%	2023		519.01
	2.78%						
2021	2023		44.84%	2023		2023	
360.52	37.44		29.24				
	2023		64.58		-61.21		-7.31

ESG

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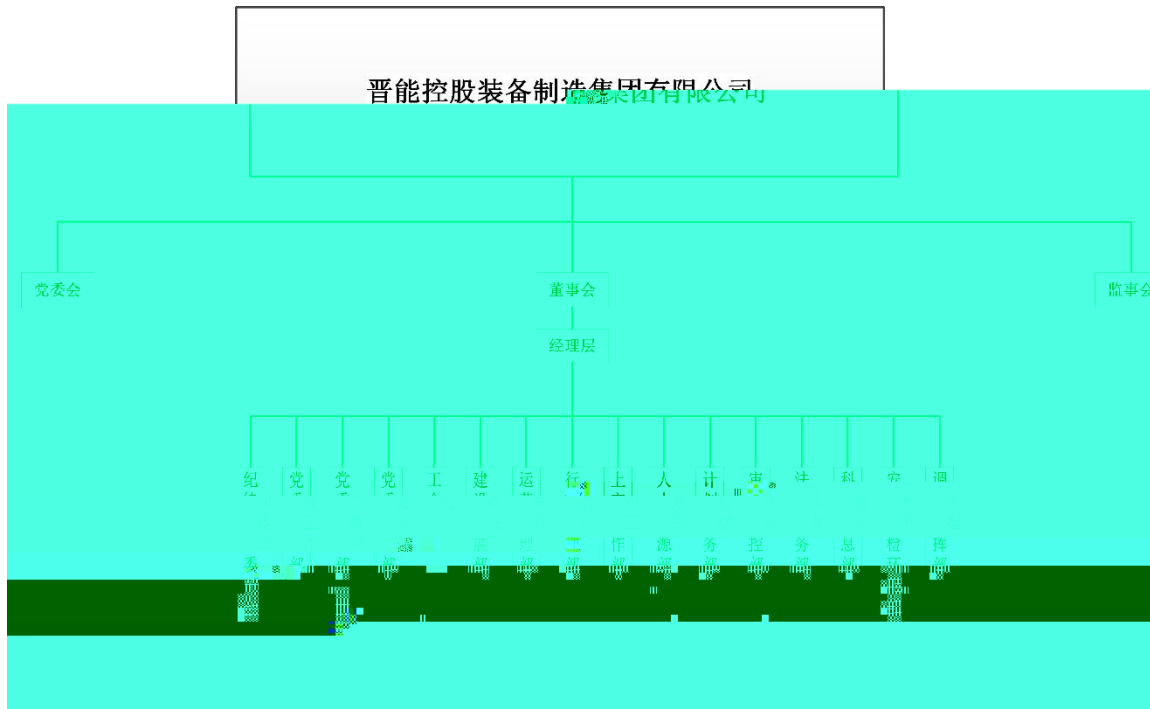
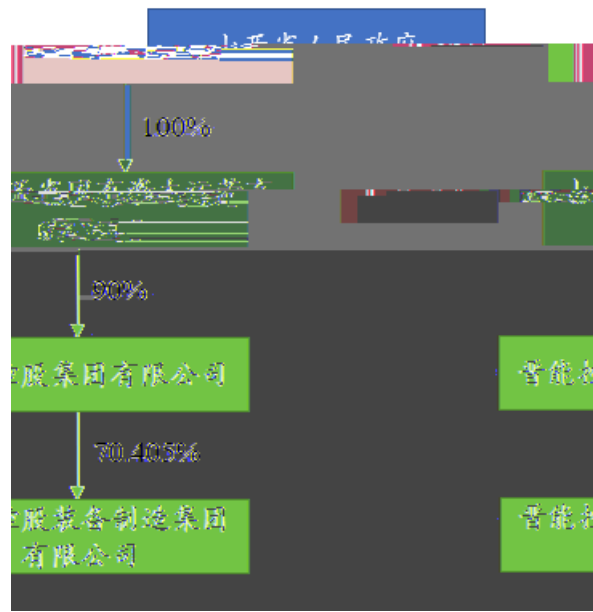
1

2020 10 2023 500 163 500 48

2

2022 5
6.25% 10.58%

AAA



			%	
1		57200.00	97.50	56493.00
2		72042.44	82.13	91994.11
3		121195.93	70.49	80430.68
4		260000.00	98.12	255100.00
5		157862.80	76.02	120000.00
6		270000.00	100.00	264327.21
7		60000.00	70.00	42000.00
8		21000.00	51.00	25955.00
9		2602.20	80.06	228989.17
10		135000.00	61.20	183846.46
11		77700.00	100.00	46620.00
12		36791.00	85.35	155610.00
13		38146.81	78.64	2896.41
14		95316.39	76.89	74000.00
15		40000.00	60.00	24000.00
16		26600.00	60.00	15960.00
17		440000.00	52.65	241650.00
18		166000.00	61.70	116000.00
19		42682.53	100.00	89414.48
20		30000.00	91.00	27300.00
21		144294.92	100.00	138094.92
22		65945.64	100.00	88173.41
23		54539.16	100.00	71891.12
24		5800.00	61.73	3580.00
25		73418.76	79.98	62742.27
26		80000.00	100.00	80000.00
27		7000.00	100.00	7000.00
28		100000.00	92.00	102771.05
29		15000.00	35.00	8120.50
30		66000.00	38.00	31154.85
31		24746.04	35.00	8047.88
32		10634.77	35.00	9360.00
33		7700.00	35.00	3894.65
34		26723.08	35.00	13974.99
35		9693.85	35.00	16050.00
36		15000.00	35.00	5855.00
37		10000.00	40.00	18196.00
38		20000.00	35.00	9409.00
39		30000.00	51.00	15300.00
40		40000.00	55.00	22000.00
41		20000.00	100.00	20000.00
42		62000.00	100.00	62000.00
43		20000.00	100.00	20000.00



44		105000.00	35.00	36750.00
45		21000.00	100.00	21000.00
46		100000.00	100.00	100000.00
47		40798.65	76.75	31314.56
48		806043.06	64.23	352597.66
49		100000.00	50.00	50584.91
50		80000.00	51.00	40800.00
51		128869.46	51.00	73848.00
52		5000.00	100.00	5000.00
53		10000.00	51.00	5100.00
54		10000.00	51.00	5100.00
55		59000.00	68.00	23842.64
56		1850.00	51.00	1850.00
57		36939.79	100.00	38693.91
58		3900.00	87.18	2629.04
59		90138.73	100.00	

	2021	2022	2023	2024 3
	454.91	435.27	348.56	309.04
	237.73	283.10	281.17	295.19
	95.08	143.49	131.75	130.32
	141.32	146.92	155.00	161.29
	36.05	35.90	35.02	35.02
	1086.84	1113.24	1188.39	1168.81
	333.61	286.79	335.77	361.23
	3450.12	3478.05	3500.35	3566.60
	39.05	41.49	41.49	41.49
	344.44	361.80	347.38	354.28
	781.17	858.67	869.28	883.59
	1162.55	1186.97	857.69	809.47
	777.43	522.78	927.23	1077.64
	1939.97	1709.75	1784.92	1887.11
	2208.38	2017.22	1710.69	335.89
	1816.62	1631.93	1408.16	283.45
	10.21	25.40	9.55	1.23
	89.68	121.48	89.80	8.54
EBITDA	277.11	324.41	285.46	--
	2174.42	2143.80	1701.41	363.67
	2202.96	2204.22	1741.76	372.65
	153.63	359.26	207.57	-15.80
	-73.88	-127.22	-186.74	-107.48
	-48.66	-211.73	-18.68	89.66
	9.85	6.51	5.33	--
	14.41	11.32	9.33	--
	0.66	0.58	0.49	--
%	98.46	106.27	99.46	108.27
%	15.64	16.34	15.19	13.57
%	4.98	5.93	4.69	--
%	6.80	8.12	6.38	--
%	49.88	37.84	51.61	54.95
%	71.29	66.57	67.25	68.11
%	77.36	75.31	75.17	75.23
%	72.92	70.57	79.75	84.50
%	65.12	63.19	70.18	73.97
%	8.47	18.05	12.81	--
	0.39	0.37	0.41	0.38
EBITDA	3.08	3.77	3.96	--
/EBITDA	7.00	5.27	6.25	--

1.

2024

2.

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3.

	2021	2022	2023	2024 3
	108.45	86.49	81.83	59.16
	167.97	170.18	165.74	180.79
	252.70	334.97	418.93	435.15
	2.01	1.35	1.47	3.42
	448.37	438.86	414.30	414.30
	84.29	77.71	79.65	78.47
	10.00	11.73	12.23	12.17
	1594.16	1667.06	1714.71	1731.20
	39.05	41.49	41.49	41.49
	0.00	0.00	0.00	0.00
	448.23	504.99	519.01	524.22
	361.93	602.79	363.17	354.09
	442.29	278.17	560.84	659.51
	804.22	880.96	924.00	1013.60
	171.85	243.51	360.52	60.89
	102.02	157.48	301.59	54.54
	1.06	1.22	0.40	0.06
	20.49	44.18	37.44	0.44
EBITDA	63.65	91.63	/	--
	77.25	274.36	409.94	77.02
	80.54	277.62	413.34	80.41
	-82.13	100.60	64.58	-74.49
	18.15	-26.13	-61.21	-18.35
	38.91	-71.94	-7.31	86.66
	1.40	1.43	2.13	--
	52.86	93.77	213.81	--
	0.11	0.15	0.21	--

%nBT/F3 8.04 Tf1 0 0 1 385.1 0 0 1 91.944 316.0

3-1

AAA AA A BBB BB B CCC CC C AAA CCC

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3-2

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C_{sf} AAA_{sf} CCC_{sf}

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A _{sf}	
BBB _{sf}	
BB _{sf}	
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CCC _{sf}	
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