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(TCFD)

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(GB/T2589-2020)

(GB/T 26719-2022) [2011]8 (2021)

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PDF PDF

(www.csec.com www.shenhuachina.com)

ir@csec.com 86-10-5813-3355/3399

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83,029

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3,445.33 2.6%

3.504 / **1,097.34**

39.0% 16.3%

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3.46 8% 95

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2.7 / 5,500

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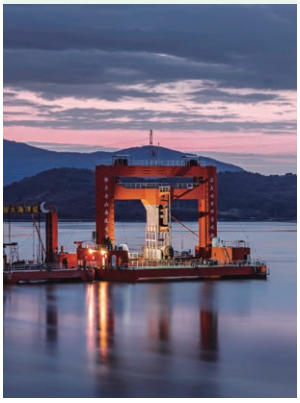

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中国神华2022年第一次临时股东

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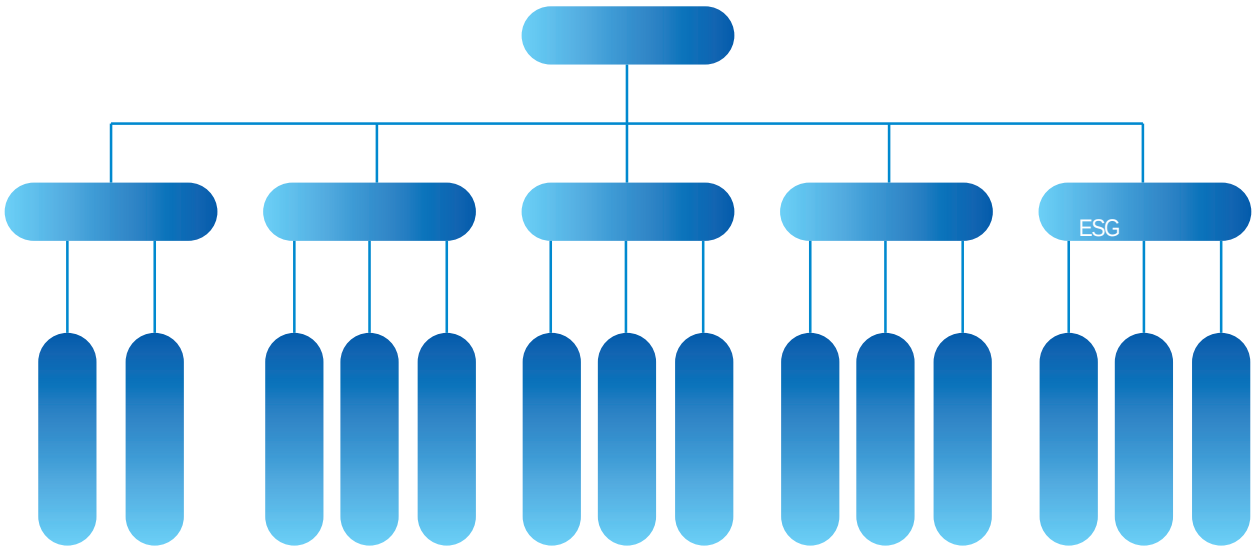

2022 8 5
78 56 2
96.6% 22
67 2
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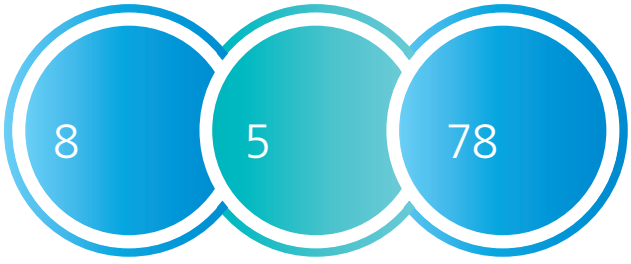

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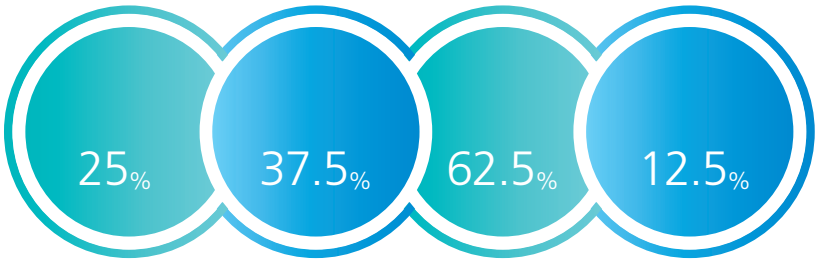

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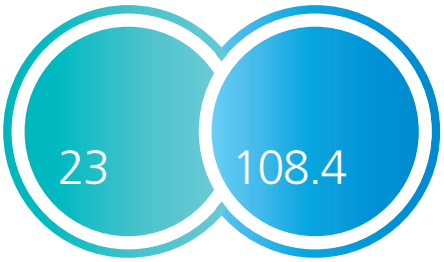
23 108.4



16

“ ”

2022 “ ”

A+H

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93

23 “ ” “ 3456 ”

15

2022

				(%)
	10	15	85	100
	5	15	32	100
	9	15	101	100
	2,730	241	25,755	79.9
	61,619	290	370,859	77.4
	1,805	28	2,599	–

2022

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16

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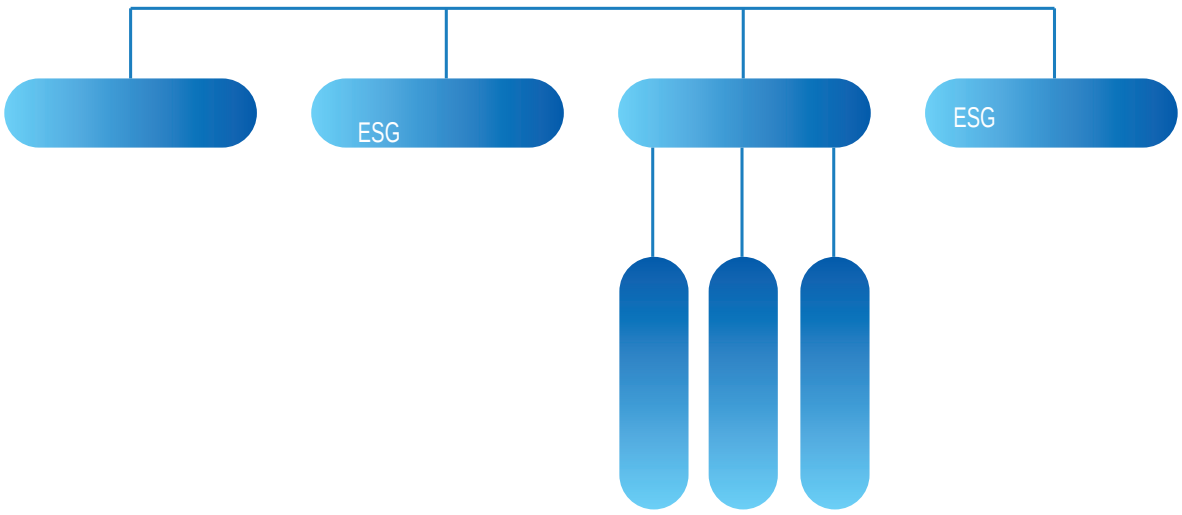
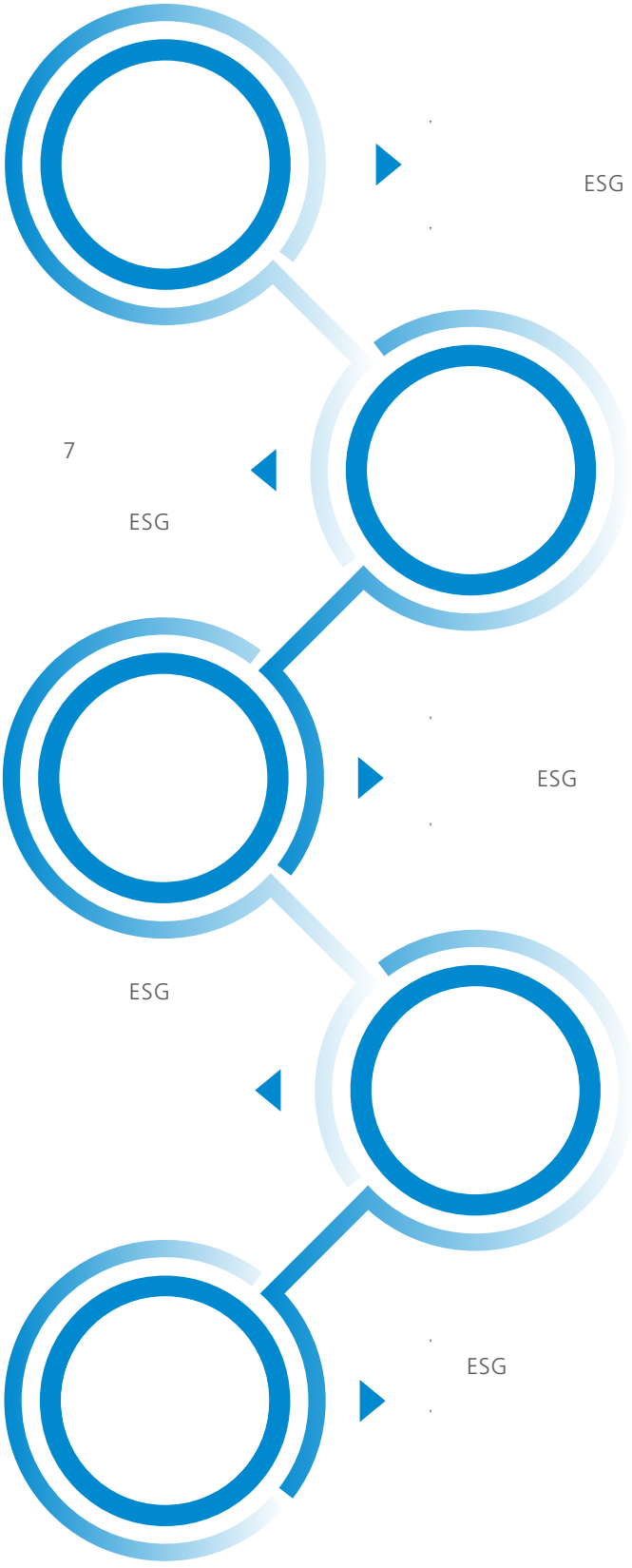


ESG

2022 ESG



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2022 ESG 30%

ESG

2020-2025

					2022 2020
		2030			30.8%
	COD	2020	2025	4%	12.8%
	SO_2	2020	2025	2%	
	NO_X	2020	2025	2%	14.3%
		2020	2025	3%	23.1%
		2020	2025	5	22
		2020	2025	0.8%	13.4%
		2020	2025	1%	3.3%
		2020	2025	5	0.69

2022 68 1,600 e
122

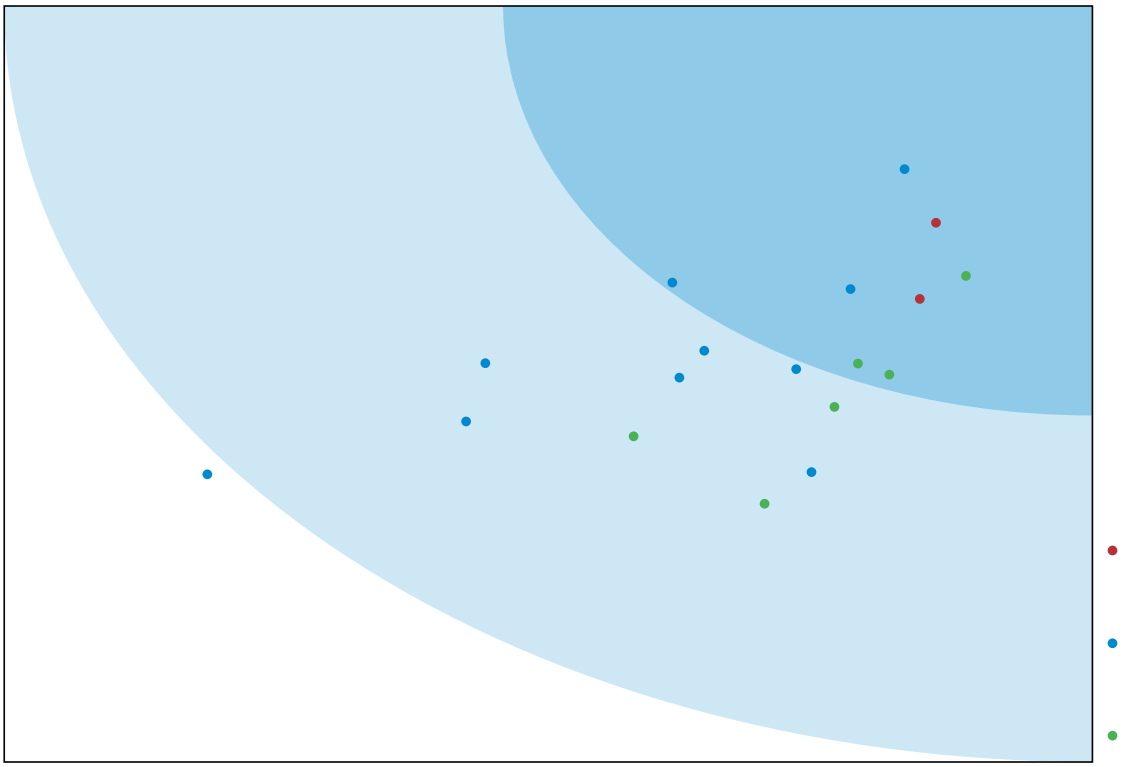
3 ESG

2022 ESG

ESG

2022 ESG

2022 ESG



喜迎二十大 奋进新征程

国家能源集团

国内首台大功率氢能源调车机车试验运行

RCP2.6 SSP1 2050

(IEA) SSP3

	2040	1.6	2040	1.6
	2 [1]		3.9 [2]	
	2030			
		25%		17.3%[4]
			[3]	
	2030		2030	
	2005	65%	[5]	
		2030	2030	
[6]				
		77-139		49

[1] The shared socio-economic pathway (SSP) greenhouse gas concentrations and their extensions to 2500

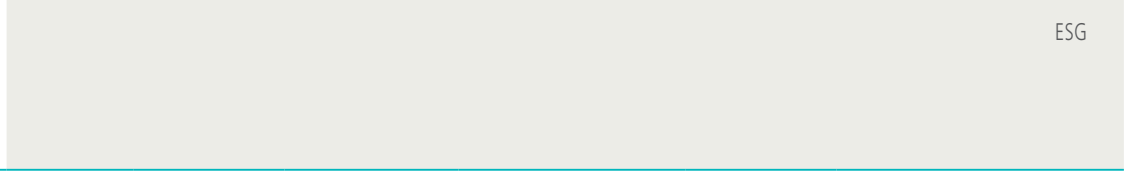
[2] SSP3: AIM implementation of Shared Socioeconomic Pathways

[3] 2021 2030

[4] 2022 2022

[5] 2021 2030

[6] 2021


ESG

2022

“ ”

2022

2030 2060

	2020	2022	2030
CO_2	13,490	17,640	70%
CO_2 /	5.78	5.10	6%

200 2021-2030

1%

ESG “

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2022

[1]	2020	2021	2022
CO_2	13,490	15,861	17,640
CO_2	12,668	15,333	17,239
CO_2	822	528	401
CO_2 /	5.78	4.73	5.10

1. 2021 2021

2021 2020 2021

2022

2022

“ ”

9.6%

23.3g/kWh 14

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1.9

37

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2022 153.2 0.82

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CCUS

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99.5% 4.3

5.5

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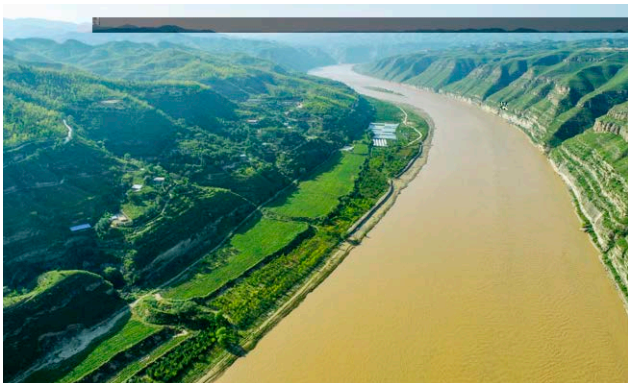
CCUS

2022 4,545 18.5



“ ”

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2022 36

78

2022 19 ISO14001

13 ISO50001 1 ISO45001/

OSHAS18001

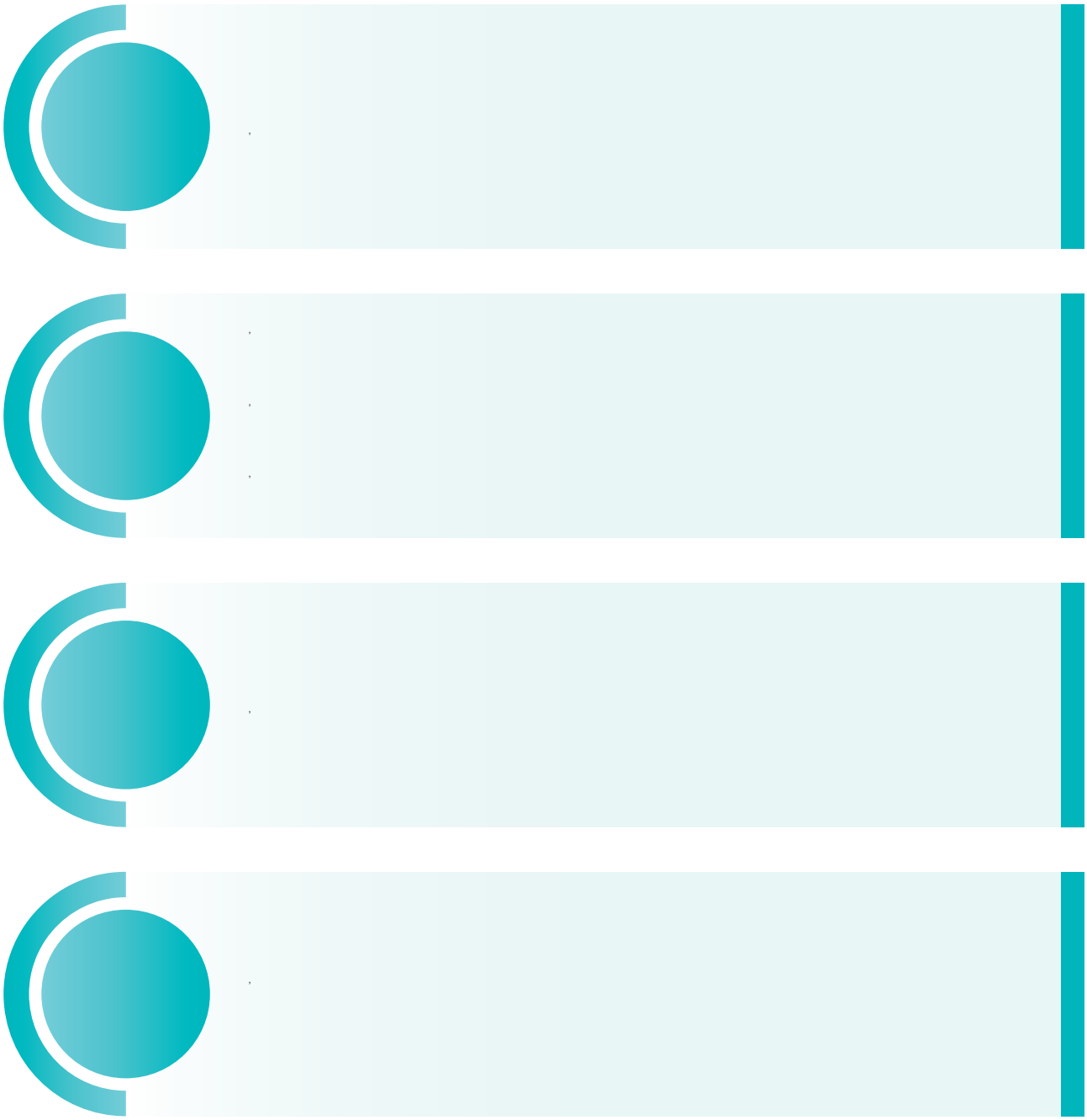
GB/T24001-2016 ISO 14001:2015

COD	1-4 1			
			HJ/T 84-2015	65
	1			
			HJ700-2014	

2022 62.76%

2022

“ ESG ”



2022

1,310

3,046 11.14

9.69 14.41

100%

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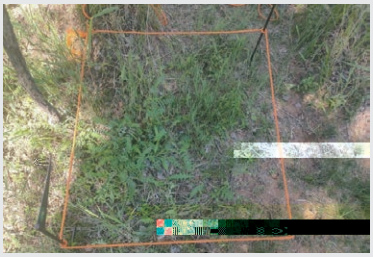

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2022 6
14 6 2022
50,292 100% 5,201
99% 14 6
80%

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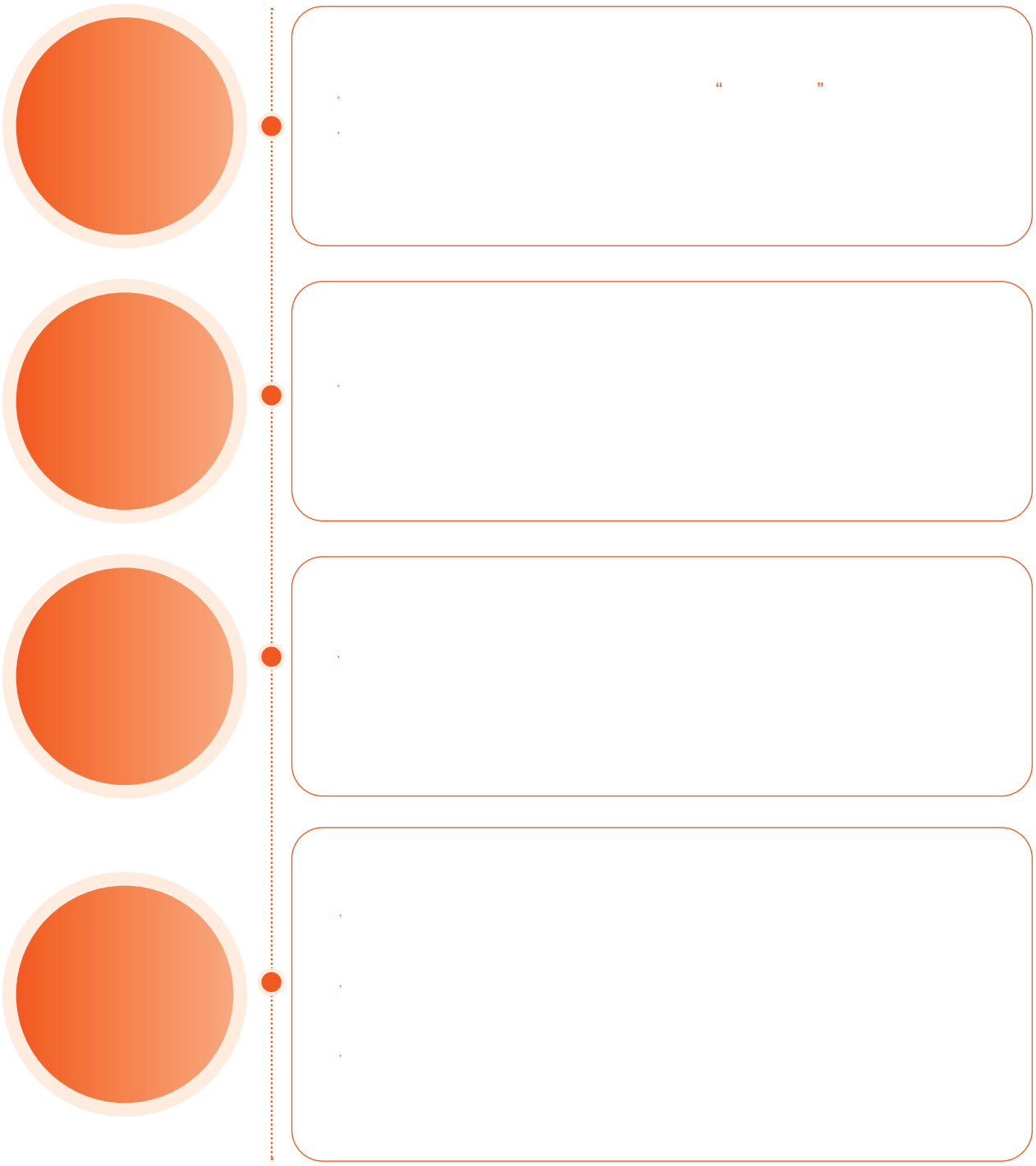

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100%

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96.6 99.7

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40%

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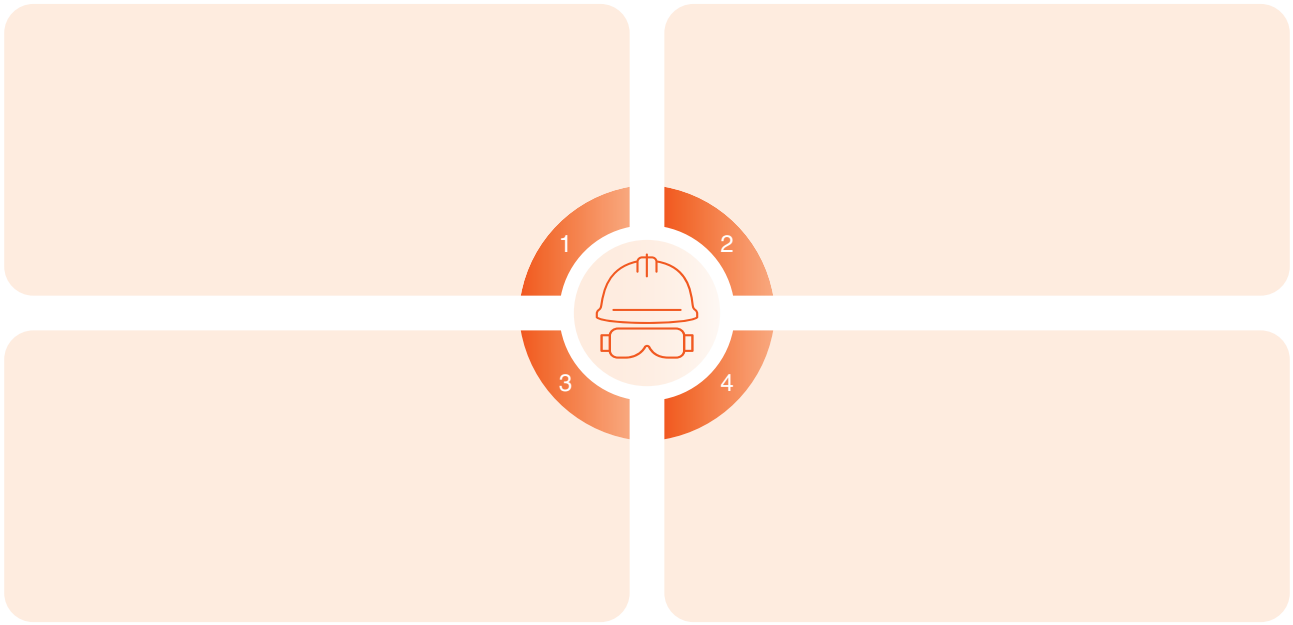
1
2
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4

2022

“ ”					
		25			2020~2021
100%	100%	100%	42		

	2016	2017	2018	2019	2020	2021	2022
	0.156	0.106	0.093	0.083	0.058	0.044	0.05236
	0	0.003	0.0126	0	0.0034	0.00597	0.00588

2022

2022

80.8%

2022

18.79

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2022 46

2022 624

1,368 2,074

2022 6 10

360 “ ”

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2022

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2022	228
34,996	47.42

2022

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(20%)

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2022

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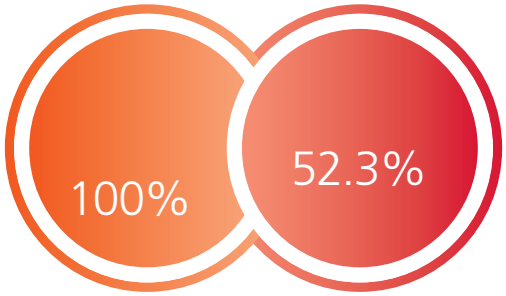
2022



2022 11 8

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(T/CERDS 4-2022) 2023 1 1 ESG
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(ICMM) 2022

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2022 EMM

2,000

82%

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EMM

EMM

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TECHNIQUE

I ESG

	2020	2021	2022
	13,490	15,861	17,640
	12,668	15,333	17,239
	822	528	401
/	5.78	4.73	5.10
	3,523.00	2,343.78	3,886.96
	2,911.00	1,571.46	3,286.04
	1.16	1.18	1.73
	0.89	0.92	1.25
/	0.065	0.055	0.065
	3.26	3.42	4.52
	1.87	1.94	2.31
/	0.14	0.12	0.12
	0.222	0.19	0.30
	0.147	0.126	0.158
/	0.0108	0.0076	0.0083
	0.086	0.046	0.075
	168.74	159.99	141.37
	25.17	26.65	27.94
	132.82	125.24	105.11
	10.75	8.10	8.31
	126.27	121.65	104.83
	20.23	23.15	25.87
	99.29	92.34	73.91
	6.75	5.51	5.05
(%)	74.84	76.03	74.15
(%)	80.38	86.85	92.59
(%)	74.76	73.73	70.32
(%)	62.79	68.02	60.77

	2020	2021	2022
	4,773.23	5,132.74	5,395.23
/	3.4	3.0	2.38
	3,683.49	3,891.87	3,777.99
	703.93	780.63	1,063.03
	/	/	282.34
	/	/	190.28
/	2.0	0.9	0.89
(%)	41.20	70.04	62.76
(%)	34.10	68.10	58.99
(%)	71.20	85.20	77.08
(%)	/	/	64.38
(%)	/	/	80.77
	1,966.57	3,594.97	3,386.21
	1,254.05	2,650.63	2,228.75
	500.95	664.97	819.43
	/	/	181.77
	/	/	153.68
	2,806.66	1,537.77	2,009.02
	4,608.93	6,202.56	53,193.24
/	0.3196	0.3510	2.34
(%)	96.88	96.92	97.04

	2020	2021	2022
	39.88	40.33	40.37
	8.41	8.05	8.31
	169.06	158.30	170.68
	4,324.04	5,155.47	6,041.39
/	3.05	2.92	2.64
/	307	301	297
	157.24	155.11	179.92
	130.89	118.67	129.18
	92.93	96.18	105.05
	2.65	11.48	12.41
	35.31	11.01	11.72
	11.22	28.22	26.13
	15.13	8.22	24.61
/	10.68	8.51	7.53
(%)	16.76	23.49	28.20
	/	/	546
	20.99	23.45	38.43
	7.54	7.61	12.35
	1,083	9,256	4,545
	4.4	37.7	18.5
ä Ğ			

	2020	2021	2022
(%)	100	100	100
	22	22	21
	21.49	33.47	54.04
	915	754	900
	198	199	208
	38.15	25.62	18.79
/	0.0034	0.00597	0.00588
	0	0	0
	1	5	4
	1	2	2
	0	3	2
2			

	2020	2021	2022
	76,182	77,872	83,029
	61,966	64,306	70,029
	14,216	13,566	13,000
	76,182	77,872	83,029
	228	256	234
	3,398	3,025	3,229
	72,556	74,591	79,566
29	8,976	9,041	10,187
30-39	35,000	35,262	35,580
40-49	19,167	18,903	21,007
50	13,039	14,666	16,255
	75,867	77,456	82,585
	4	3	2
	311	413	442
(%)	/	5.30	5.31
	/	3,696	2,963
(%)	/	77.4	89.1
	0	0	0
	/	18,866	13,189
(%)	100	100	100
(%)	100	100	100
	/	17	10
(%)	/	100	100
	949	999	1,173
(%)	1.25	1.28	1.41

			2020	2021	2022
		(%)	1.03	0.99	1.17
		(%)	2.09	2.67	2.56
	29	(%)	1.27	2.07	1.54
	30-39	(%)	1.00	1.00	0.73
	40-49	(%)	0.60	0.87	0.66
	50	(%)	3.85	2.96	3.63
		(%)	1.25	1.27	1.40
		(%)	0	33.33	33.33
		(%)	0	2.91	0.90
			/	26,439	26,207
			74,784	76,239	81,125
			61,089	63,103	68,232
			13,695	13,136	12,893
			220	253	233
			3,303	3,013	3,175
			71,274	72,973	77,717
			670.21	805.28	932.45
			556.56	657.22	776.79
			113.65	148.05	155.66
			3.28	4.02	3.65
			34.11	44.26	44.17
			632.81	756.99	884.64
	(%)		98.16	97.90	97.71

	2020	2021	2022
(%)	98.58	98.13	97.43
(%)	96.34	96.83	99.18
(%)	96.49	98.83	99.57
(%)	97.20	99.60	98.33
(%)	98.23	97.83	97.68
	89.60	103.41	114.94
	91.11	102.20	113.85
	82.97	109.13	120.73
	149.29	157.03	156.65
	103.28	146.31	139.12
	88.79	101.49	113.83
	10,927	10,304	11,980
(%)	14.34	13.23	14.43
	/	43,324	50,107
(%)	/	55.63	60.35
/	82.25	99.36	115.92
/	5.69	6.99	9.39
/	5.52	7.06	9.55
	178	389	531
	41,996	51,305	71,825
	300,998	351,464	402,129
	9,668	10,137	9,870
	48,413	154,658	117,544

		2020	2021	2022
		115,371	127,440	118,611
		115,223	127,039	117,896
		68	172	314
		37	104	172
		29	63	132
		11	49	83
		0	1	2
		3	12	12
	CEO	0	0	0
		1	1	1
		0	0	0
		8.55	8.55	8.55
		382	237	236
	(%)	69.45	69.52	69.52
		0	0	0

1. BOT

2.

3. 2022 2021

4. = + +

5. http://www.tanjiaoyi.com/article-4820-1.html 667 60 110 24.455 90 = ×24.455 10

6. = *1,000,000 / OHSAS 18001

7. = /

II ESG

	ESG	[1]
	A1.6 A3.1 B2.3 B8.1	1.1 1.3
	B8.2	3.5.14 5.2 6.5.4 6.5.7 8.3 8.4 8.8
		2.1.1 2.1.2 2.1.3 2.1.15 2.3.5 3.1.1 3.5.12 6.5.4 6.5.5
	B4.1 B6.3 B7 B7.1 B7.2 B7.3	4.1.1 8.1 8.2
		6.3.3 6.3.13
ESG	A1.5 A1.6 A2.3 A2.4	7.1.3 8.6 8.14
	A1 A1.1 A1.2 A1.5 A4 A4.1	
	A1 A1.1 A1.3 A1.4 A1.5 A1.6 A2 A2.1 A2.3 A3 A3.1	8.1 8.6 8.8 8.9 8.13
	A1 A1.1 A1.2 A1.3 A1.4 A1.5 A1.6 A2 A2.1 A2.3 A3 A3.1	8.1 8.3 8.6 8.8 8.9 8.10 8.12 8.13 8.15
	A2 A2.3 A3 A3.1	8.1 8.3 8.6 8.8 8.9 8.10 8.12 8.15
	B6.1 B6.2 B6.4	8.9 8.13
	B2 B2.1 B2.2 B2.3	8.13 8.14
	B8 B8.1 B8.2	8.1 8.7 8.14 8.15
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