300779

123118

Qingdao Huicheng Environmental Technology Group Co., Ltd.

57

2022 A

2022

Zhong De Securities Co.

81 1 22

.....1

.....2

.....2

.....6

.....7

.....10

.....13

.....13

.....14

.....15

.....15

.....15

.....16

.....26

.....37

.....50

.....59

.....62

.....64

.....72

.....72

.....73

.....74

.....76

.....76

.....76

.....77

.....77

.....78

.....78

.....79

12 79

.....80

.....82

.....82

.....83

.....83

.....83

.....84

.....84

.....85

.....86

.....86

.....86

.....91

.....91

.....99

.....99

.....100

.....100

.....100

.....101

.....102

.....102

.....103

.....104
.....111
.....114
.....115
.....116
.....117
.....118
.....119
.....120
.....121
.....122

		2022 A
		2022 A
		FORLAND PETROCHEMICAL TECHNOLOGY LLC

2022

	Qingdao Huicheng Environmental Technology Group Co., Ltd.
	91370200783724899J
	2006 2 27
	10,000
	57
	57
	266520
	300779
	0532-58657701
	0532-58657729
	www.hcpect.com
	stock@hcpect.com

2022 6 30

100,004,149

1			17,060,250	17.06%
2			10,828,500	10.83%
3			10,465,450	10.47%
4			2,725,000	2.73%
5			1,851,600	1.85%
6			1,144,600	1.14%
7			1,131,950	1.13%
8			929,100	0.93%
9			902,900	0.90%
10			832,950	0.83%
			47,872,300	**47.87%**

17.06%

10.83%

27.89%

1970 5

1992 7 1993 9

1993 7 2000 8

2000 9 2005 9

2011 2006 2015

2015 2022 4 2015

2020 4 2021 9 2022 4 2015

1

1

70%

14%

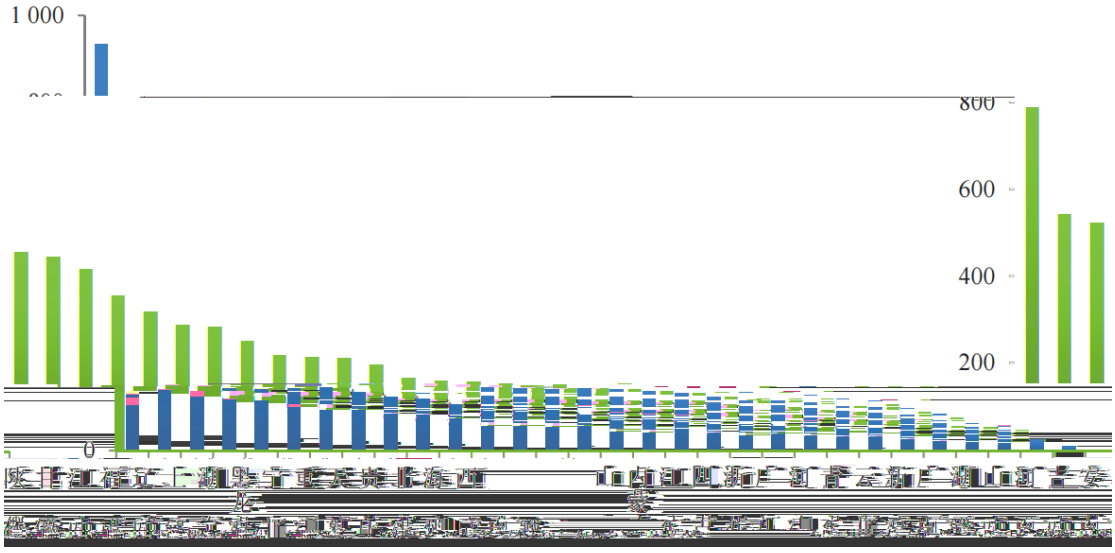
2020

2020 7,281.80

7,630.50

2020

12.80% 7.40% 7.20% 6.30% 6.10% 2020



2011

2020 31.31

1 0.354kg

21.52

10%

2

80%

20

2

10

2016

3

2020

1

1

2006

2006

14

2016

2

3

2

1

2

3

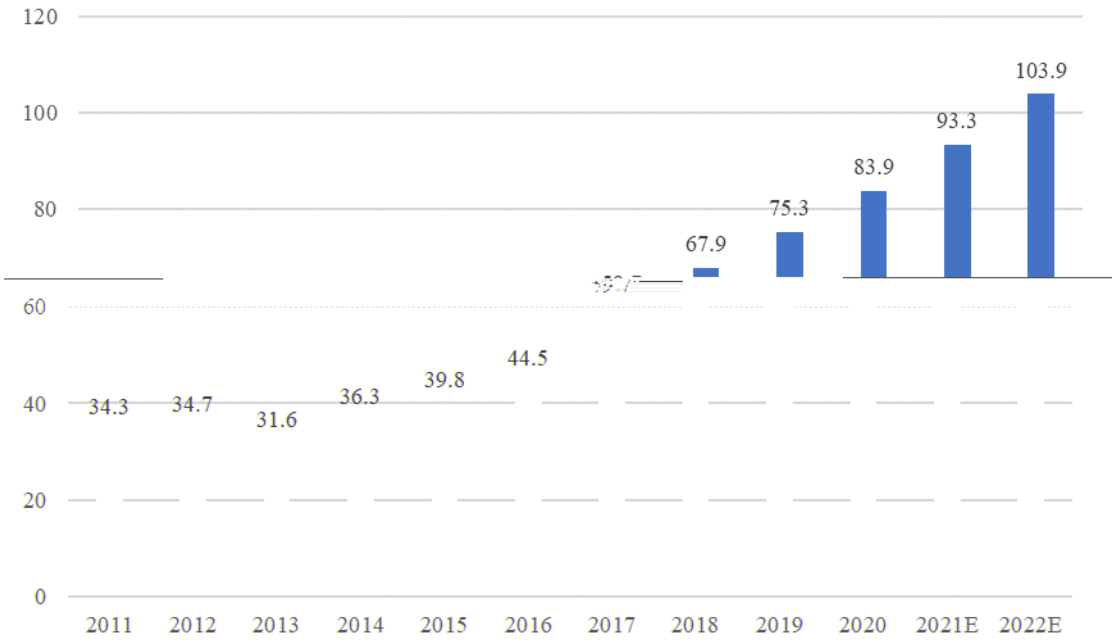
30%

1

2020

2013 31.6 2020 83.9

14.97%



50

2

2019

4,195

549

3

2012

4

2020 7.35
2013-2020 6.01% 2020 12
1,086 476.70
2025 10.2 /
5,000 /

1

[2011]19

2

70%

30%

1

2

+ +

FCC

FCC

1

1999

44 190

2003 1

H 2012 4

2021

230 /

2

2004

3 600

3

10 3 / 2 / /

1 / 1 / 2 /

1 /

4

6

FCC

5

1964

40

6

2001

836139

7

2010

MTO MTP

2021

4.40

1

FCC

FCC

2

3

4

+

FCC

5

6

10 70%

1

2013

2-3

3-5 1

2016

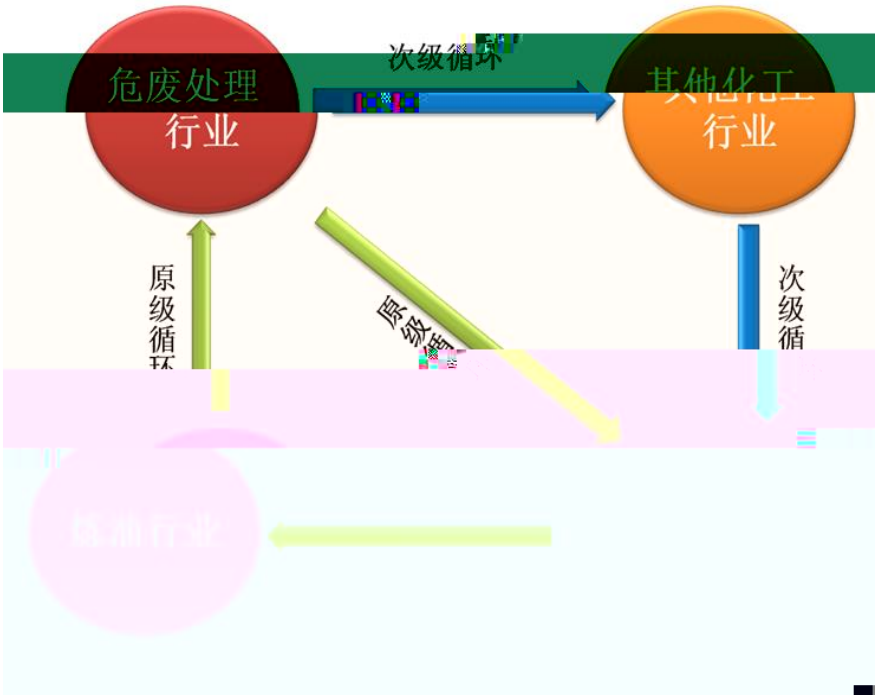
46 479

2

3

4

1



2

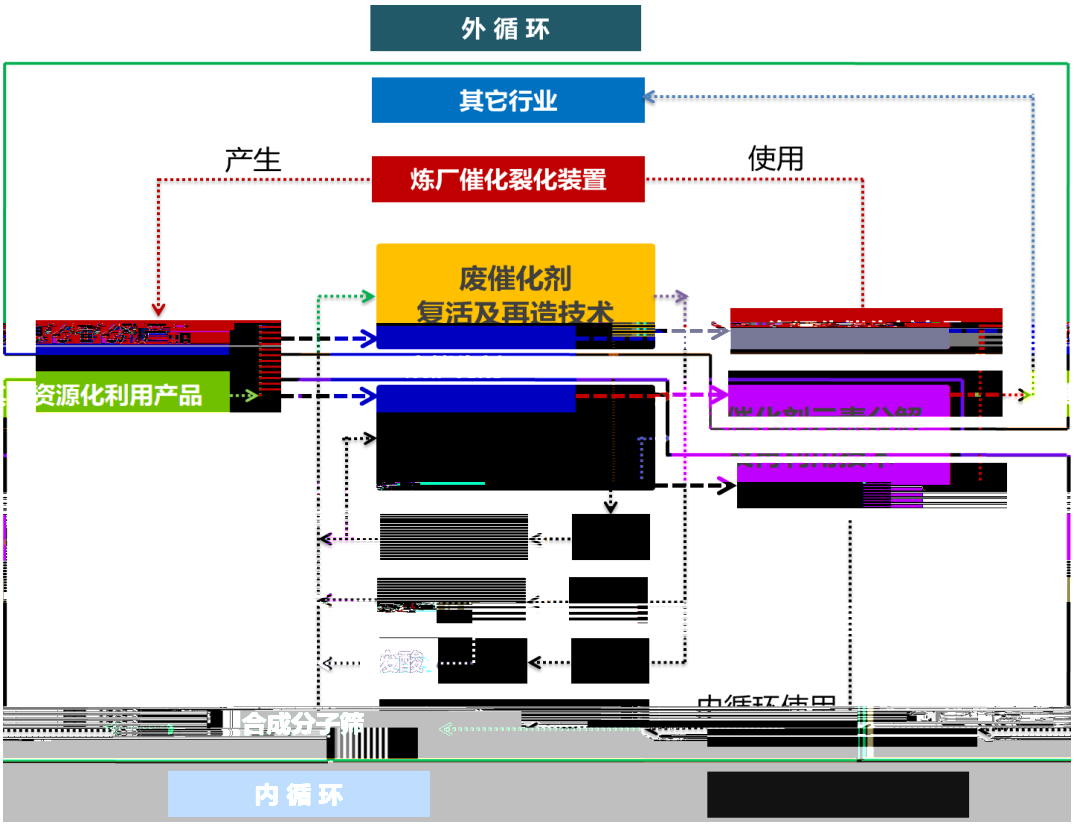
2020

2021

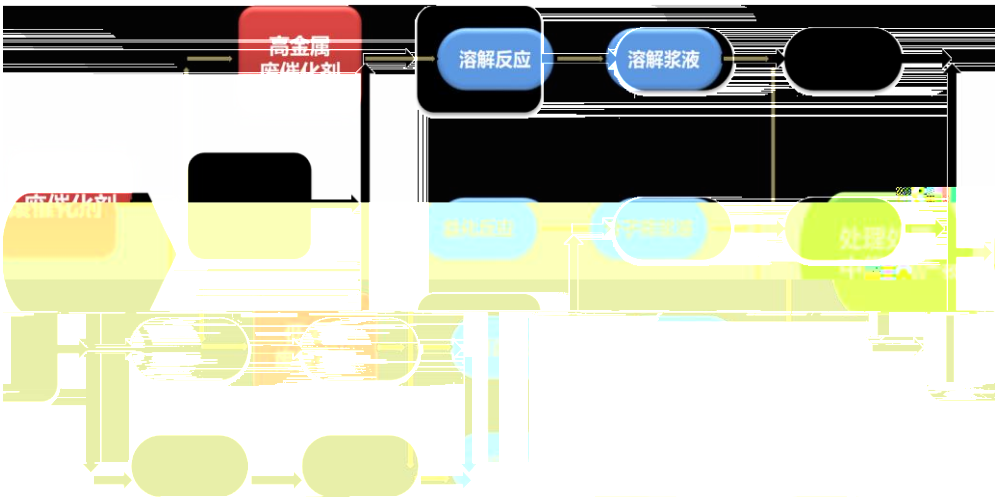
GDP

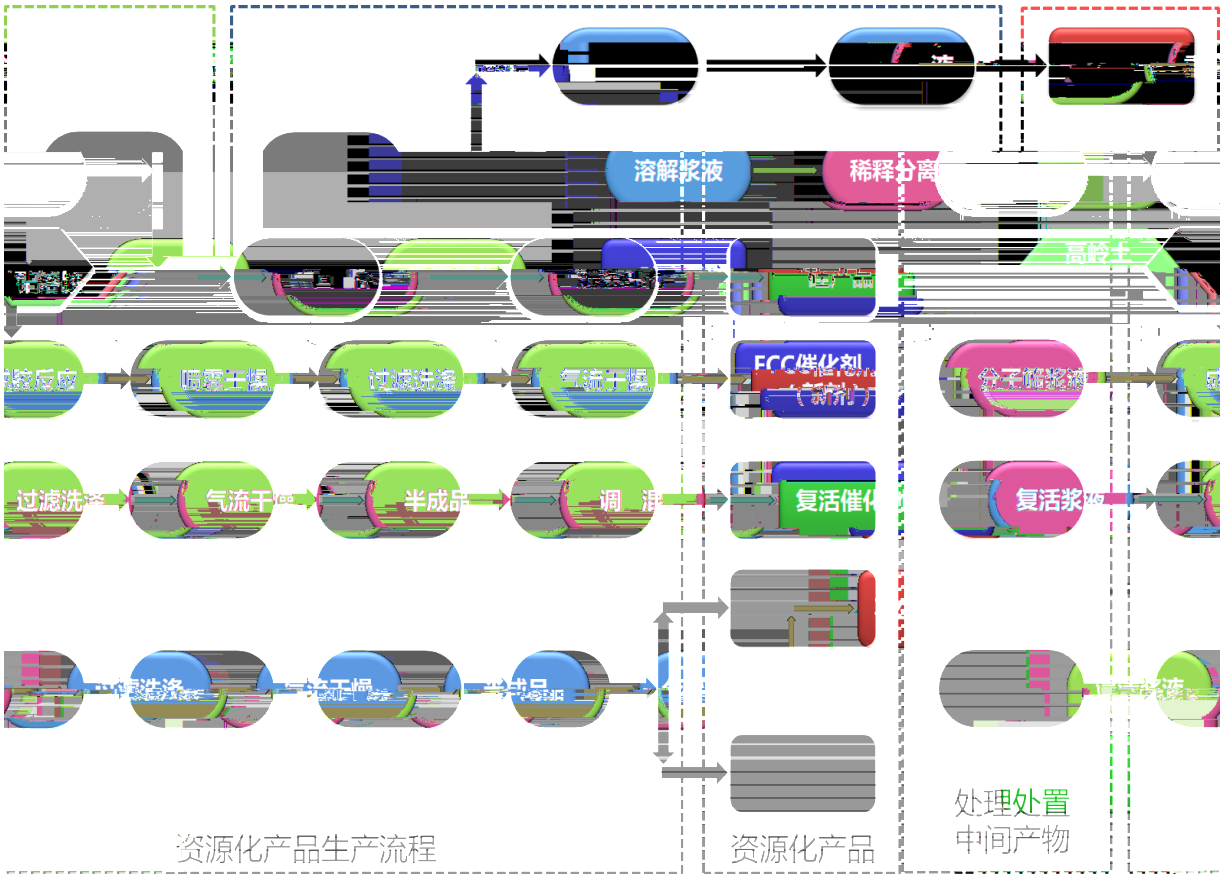
8.1%

FCC



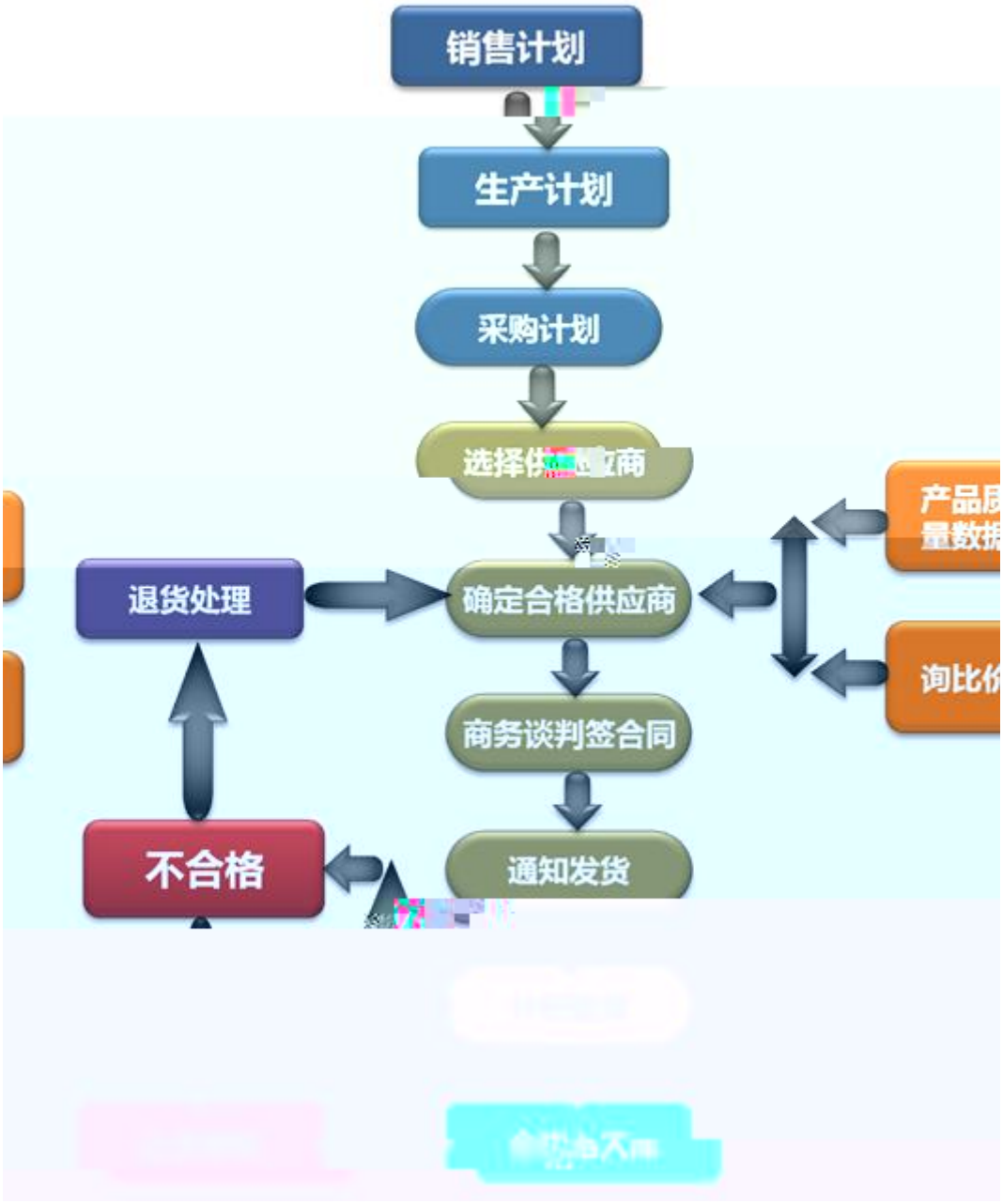
1


高金属
溶解反应
溶解浆液


溶解浆液
稀释分离
过滤洗涤
气流干燥
半成品
复活浆液
资源化产品生产流程
资源化产品
处理处置
中间产物

采集客户样品
催化剂配方
催化剂评价
催化剂优选
采集客户原料油进行理化指标分析
采集客户装置参数
根据催化剂配方，制备催化剂小样
分析小样的理化性质
重油微反实验评价
固定流化床实验评价
中型提升管实验评价
根据评价结果，选择最佳催化剂配方
一厂一剂
反馈《客户催化剂评价报告》

2



3

1

2

3

4

4

1

2

2 / 50

3

1

FCC

	2022 1-6		**2021**		**2020**		**2019**	
	1,154.86	8.02%	3,003.74	10.54%	3,833.86	11.84%	3,884.54	11.30%
	8,781.04	60.95%	23,008.15	80.77%	26,629.34	82.22%	27,136.20	78.93%
	4,284.81	29.74%	1,790.52	6.29%	1,407.89	4.35%	2,559.94	7.45%
	14,220.72	**98.71%**	**27,802.41**	**97.60%**	**31,871.09**	**98.41%**	**33,580.68**	**97.68%**

2

1 FCC

		2022 1-6	**2021**	**2020**	**2019**
FCC		10,000.00	20,000.00	20,000.00	20,000.00
		4,019.80	18,425.74	21,175.88	20,280.38
		40.20%	92.13%	105.88%	101.40%

2019-2021 FCC 2022 1-6

2

		2022 1-6	**2021**	**2020**	**2019**
		14,240.00	28,480.00	28,480.00	23,480.00
		11,546.60	21,149.24	22,657.34	18,986.49
		81.09%	74.26%	79.56%	80.86%

3 TJBT 1 326.78 623.86 Tm0 g8 14.22 reW* nBT/F

		2022 1-6	2021	2020	2019
FCC		4,019.80	18,425.74	21,175.88	20,280.38
		5,957.80	15,517.96	18,974.00	19,022.95
	%	148.21	84.22	89.60	93.80
		866.4	3,899.20	2,379.40	1,255.40
		1,057.86	3,707.86	1,988.40	1,279.20
	%	122.10	95.09	83.57	101.90
		649.35	5,899.85	8,207.91	7,496.38

			%
4		2,731.96	8.57
5		1,544.30	4.85
		17,386.97	**54.55**
2019			
1		5,591.29	16.65
2		4,965.37	14.79
3		2,738.00	8.15
4		2,362.35	7.03
5		2,285.31	6.81
		17,942.31	**53.43**

50%

1

	2022 1-6		**2021**		**2020**		**2019**	
	5,468.97	47.49%	10,029.02	49.98%	11,593.47	51.03%	10,677.53	50.45%
	2,357.48	20.47%	4,383.44	21.84%	4,973.43	21.89%	5,130.97	24.25%

2

8,978.62

8,518.45 7,992.41 3,497.59 50.33%

47.49% 50.61% 35.55%

			%
2022	**1-6**		
1		991.45	10.08
2		739.54	7.52
3		688.80	7.00
4		551.39	5.60
5		526.41	5.35
		3,497.59	**35.55**
2021			
1		2,654.72	16.81
2		1,813.06	11.48
3		1,389.97	8.80
4		1,257.52	7.96
5		877.15	5.55
		7,992.41	**50.61**
2020			
1		2,659.16	14.83
2		2,032.52	11.33
3		1,626.91	9.07
4		1,316.04	7.34
5		883.81	4.93
		8,518.45	**47.49**
2019			
1		2,738.06	15.35
2		2,502.03	14.03
3		1,554.89	8.72
4		1,300.52	7.29
5		883.12	4.95
		8,978.62	**50.33**

50%

1

2

1

2

1

	22,971.73	7,103.66	15,868.07	69.08%
	22,468.87	11,346.93	11,121.94	49.50%
	873.95	389.29	484.66	55.46%
	473.68	452.65	21.02	4.44%
	46,788.23	**19,292.54**	**27,495.69**	**58.77%**

2

1	2016 0046096		338 1811		28,552		2043.6.3		-
2	2016 0022174		57 4-7		32,705.25		2028.8.5		-
3	2016 0006122		57 1 2 3				2028.8.5		-
4	2020 0091455		57 8				2028.8.5		-
5	2016 0020136		398 1 2		29,033.34		2053.10.27		-
6	2017		9 A		8,558.00		2062.12.6		-

	0062207		1-12						
7	2017 0062208		7 B				2062.12.6		-
8	2017 0062209		5 C				2062.12.6		-
9	2020 0156001				102,577.00		2070.11.10		
10	2021 0295081		57 4#		29,033.00		2053.10.27		-
11	2017 0004395				20,521.35		2067.7.13		-
12	2018 0002994								

0156001 260,000,000.00

1	2016 0046096		338 1811		81.71		--
2	2016 0022174		57 4-7		16,619.87		--
3	2016 0006122		57 1 2 3		5,055.66		--
4	2020 0091455		57 8		1,425.20		--
5	2016 0020136		398 1 2		5,074.04		--
6	2017 0062207		9 A 1-12		13,058.14		--
7	2017 0062208		7 B		947.52		--
8	2017 0062209		5 C		2,984.52		--

3

		16 / 62.57 63.34	1300 / /	

		167 A 4 5	8 2,300 / / 6 2,000 / / 4 1,600 / /	2022.01.01-202 2.06.30
		10 / 312	750 / /	2022.02.01-202 2.07.31

		500.00	1.6 / ·	2021.6.1- 2024.5.31
		1,058.27	1.6 / ·	2018.10.1- 2023.9.30
		1,058.27	40 / ·	2018.4.1- 2028.3.31

4

1		2	618.44	51.71	10	8.36%
2	S809	1	444.85	308.49	10	69.35%
3		1	366.27	290.87	10	79.41%
4		1	303.34	22.96	10	7.57%
5	E-740	1	293.23	203.35	10	69.35%
6		1	290.6	207.77	10	71.50%
7	HVPF-55m2	2	237.61	169.88	10	71.50%
8		1	205.6	142.58	10	69.35%
9		2	231.99	23.29	10	10.04%
10	40T/H	1	116.77	8.59	10	7.36%
11	40T/H	1	110.42	8.07	10	7.31%
12	NaY	1	109.63	11.41	10	10.41%
13	HVPF-40m2	1	100	71.5	10	71.50%
14		1	95.97	7.01	10	7.30%
15		1	93.86	79.72	10	84.94%
16	D821	1	89.72	62.22	10	69.35%

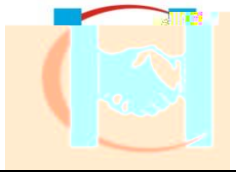
17		1	88.49	73.78	10	83.38%
18		1	73.5	52.55	10	71.50%
19		2	73.5	52.55	10	71.50%
20		1	70.8	50.61	10	71.48%

35kv 35kv

2021 7 30 2024 7 30 35kv

12 /

1

1			10253441	1	2023.3.6	
2			10253510	1	2023.2.6	

2

1	FCC			ZL200810014209.8	2008.1.28	2010.10.20	20		
2				ZL201110124965.8	2011.5.5	2013.5.1	20		
3				ZL201320139452.9	2013.3.17	2013.9.18	10		

4				ZL201110263254.9	2011.8.24	2014.12.17	20		
5	FCC NOX			ZL201420869225.6	2014.12.28	2015.8.26	10		
6				ZL201410085216.2	2014.3.6	2016.11.16	20		
7				ZL201510074806.X	2015.2.7	2017.3.22	20		
8				ZL 201720143994.1	2017.2.17	2017.9.29	10		
9	$SiCl_4$			ZL201510178636.X	2015.4.15	2017.3.15	20		
10				ZL201510468726.2	2015.8.3	2018.8.28	20		
11	ZSM-5/Y			ZL201610079650.9	2016.2.5	2019.1.1	20		
12				ZL201610506039.X	2016.6.30	2019.2.19	20		
13				ZL201610079649.6	2016.2.5	2019.11.15	20		

25				ZL201922464546.3	2019.12.31	2020.12.22	10		
26				ZL201922432375.6	2019.12.30	2020.11.13	10		
27				ZL201922434713.X	2019.12.30	2020.11.3	10		
28				ZL201922432356.3	2019.12.30	2020.10.20	10		
29				ZL201922464556.7	2019.12.31	2020.10.9	10		
30				ZL201922464550.X	2019.12.31	2020.9.22	10		
31				ZL201922434692.1	2019.12.30	2020.9.15	10		
32				ZL201310500360.3	2013.10.14	2015.4.29	20		

33				ZL 202122410634.2	2021.09.28	2022.4.19	10		
34				ZL 202121521425.9	2021.07.06	2022.4.19	10		
35				ZL202011469701.1	2020.12.15	2022.6.28	20		
36				ZL202220258519.X	2022.02.08	2022.6.7	10		
37				ZL202123381831.2	2021.12.29	2022.5.13	10		
38				ZL202123366628.8	2021.12.29	2022.5.13	10		

99			HW50,251-017-50 18,480 /	2019.1.25 2024.1.25
118			HW50 251-016-50 251-017-50 10,000 /	2019.11.19 2022.11.18

	2022 1-6		2021		2020		2019	
	453.94	56.32%	924.17	53.98%	741.34	49.55%	930.81	47.41%
	164.44	20.40%	214.90	12.55%	198.03	13.24%	449.97	22.92%
	79.07	9.81%	281.16	16.42%	231.36	15.46%	309.45	15.76%
	1.21	0.15%	135.96	7.94%	269.12	17.99%	269.88	13.75%
	97.00	12.03%	120.68	7.05%	11.37	0.76%	-	-
	10.33	1.28%	35.09	2.05%	44.91	3.00%	3.10	0.16%
	805.98	**100.00%**	**1,711.96**	**100.00%**	**1,496.13**	**100.00%**	**1,963.21**	**100.00%**

	2022 1-6	2021	2020	2019
	805.98	1,711.96	1,496.13	1,963.21
	14,406.30	28,486.22	32,385.97	34,379.47
	5.59%	6.01%	4.62%	5.71%

1

1978 4

2011 2015 2015

1983 8

2010 2015

2015 2016 2017

1986 1

2012 2015

2015 2018 2018 2019

2019 2020

2020

2

114 19.59%

2 7

20

3

FCC

1 FCC

FCC

2 FCC

3

4

5

2021

2022

2

2022

POX

3

4

	2022 1-6	2021		2020		2019
			%		%	

34,379.47 32,385.97 28,486.22

14,406.30 4,285.93 2,701.52 1,175.42

-472.40

2020 1,993.50 1,584.41

5.80% 36.97% 2021 3,899.75

1,526.10 12.04% 56.49% 2022 1-6

917.32 6.80%

1

		2021		2020		2019	
		-	-	566.28	200.73	2,362.35	820.96
		-	-	215.41	56.56	465.19	120.64
		-	-	409.36	134.03	723.97	219.33
		1,096.70	264.23	1,544.30	399.60	1,447.26	452.95

		2021		2020		2019	
		710.57	181.44	763.63	200.20	902.42	277.16
		1,807.27	**445.67**	**3,498.98**	**991.12**	**5,901.19**	**1,891.04**
		1,854.45	1,078.50	4,007.49	1,993.43	5,591.29	2,590.80
		3,661.72	**1,524.17**	**7,506.48**	**2,984.56**	**11,492.48**	**4,481.82**
		12.85%	**18.90%**	**23.18%**	**31.98%**	**33.43%**	**35.78%**

2020 1,993.50 1,584.41

3,986.00 1,497.27

2021 3,899.75 1,526.10

3,844.76 1,460.39

2022 1-6 14,406.30

2022

2022 1-6 1,131.32

2022 1-6

2019

	2022 1-6	2021	2020	2019
	19.03%	27.82%	28.71%	34.44%
	-25.19%	47.97%	35.51%	13.67%
	18.46%	**28.31%**	**28.82%**	**33.96%**

33.96% 28.82% 28.31% 18.46%

2

	2022 1-6	2021	2020	2019	2021 2020	2020 2019
	19.03%	**27.82%**	**28.71%**	**34.44%**	**-0.89%**	**-5.73%**
	0.87%	32.10%	52.43%	64.34%	-20.33%	-11.91%
	14.77%	25.75%	24.36%	29.13%	1.39%	-4.78%
FCC	14.88%	27.30%	26.35%	29.10%	0.95%	-2.75%
	18.46%	**28.31%**	**28.82%**	**33.96%**	**-0.51%**	**-5.14%**

2019 2021 64.34%

52.43% 32.10% 2020 11.91% 2021

2020 20.33% 2022 1-6

31.23%

3

29.13% 24.36% 25.75%

14.77% FCC

FCC

	2022 1-6	2021	2020	2019
	6,753.13	18,217.37	22,393.99	24,204.45
	5,748.27	13,244.26	16,492.90	17,160.23
	5,529.48	14,499.30	17,683.20	17,689.35
/	12,212.96	12,564.32	12,664.00	13,683.06
/	10,395.68	9,134.42	9,326.88	9,700.88

	2022 1-6	2021	2020	2019
/	1,817.28	3,429.90	3,337.12	3,982.18
	14.88%	27.30%	26.35%	29.10%

FCC 29.10% 26.35% 27.30%

14.88%

1 2020

2020 FCC

3 9 3 T J E T l T J T

/

	2022 1-6	2021	2020	2019
/	968.38	1,451.44	1,951.42	2,053.31
/	797.30	721.58	673.63	692.47
/	171.08	729.86	1,277.79	1,360.84
	17.67%	50.29%	65.48%	66.28%

2022 1-6

2022 1-6 2021 15.57%-51.13%

3

Wind 2021

	2022 1-6			2021		
	203,345.98	671.53	20.23%	401,523.04	15,584.19	27.48%
	17,326.39	1,139.21	21.76%	11,306.23	1,570.22	43.72%
	21,242.28	2,354.69	29.96%	48,206.00	2,356.99	34.51%
	80,638.22	**1,388.48**	**23.98%**	**153,678.42**	**6,503.80**	**35.24%**
	14,406.30	**-472.40**	**18.46%**	**28,486.22**	**1,175.42**	**28.31%**
	2020			**2019**		
	331,502.12	33,349.45	34.12%	345,859.11	46,671.79	36.08%
	8,505.45	-199.68	26.26%	12,871.57	134.85	25.23%

	31,840.23	2,466.19	34.57%	26,644.90	343.2	24.99%
	123,949.27	**11,871.99**	**31.65%**	**128,458.53**	**15,716.61**	**28.77%**
	32,385.97	**2,701.52**	**28.82%**	**34,379.47**	**4,285.93**	**36.44%**

2019 2022 6

2022

2022 7-8

2020 101.6

100 17%

2006

+

+

3 / FCC 4

/ FCC

1

2022

P0 D N

P1

2022 5 2021

2022 6 20 0.05 /

11.72 / 11,720.00

35,160.00

1,000 3,000

30%

11,770.00

35,310.00

2022 5 2021

2022 6 20 0.05 /

11.72 / 11,720.00

35,160.00

36

12

11,720.00

35,160.00

17,060,250

17.06%

10,828,500 10.83%

27,888,750 27.89%

3,000

57,888,750 44.53%

2021

1970 5

370502197005******

1		2015 2020 4 2021 9 2022 4 2015 2022 4 2022 4
2		2011
3		2017
4		2020 12
5		2019 8

1		FCC RFCC PFCC		10,000	17.06%

2				1,700	96.03%
3		FCC		15,700	4.46%
4				1,000	22.50%

5

12

12

1

2022 4 18

2

35,160.00

2.20

3

2,788.88

3,000.00 5,788.88

450.00

450.00

35,160.00 30%

50%

= * 30%* 50%=

30%

170%	
150%	

= × × = × ×

170%	

150%	

= × × = × ×

2022 4

28 11.44 /

2022 6 27.89%

10.47% 5%

36 2021

/

/

2022 4 18

1

11.77 / 20

80% 20 =

20 / 20

P1=P0-D

P1=P0/(1+N)

P1=(P0-D)/(1+N)

P0 D N

P1

2022 5 2021

2022 6 20 0.05 /

11.72 / 11,720.00

35,160.00

2

1,000 3,000

30%

3

4

1

2

1

2

3

1%

4

2021 11.72 /

11,720.00

35,160.00

1

27.89%

3,000

57,888,750 44.53%

2

FCC

3 / FCC

4 / FCC

3

1

2

1

1

2022 6 13,126.08

3 / FCC

4 / FCC

2

29.59% 30.81% 54.86% 65.10%

3

5,740.83 3,911.39

-12,529.88 -7,486.09

2021 2022 1-6

4

1

2021 2022-2024

5% 29,910.53 31,406.06 32,976.36

2

3 / FCC

4 / FCC

1	3 / FCC	2022 9 30	10,073.00
2	4 / FCC	2022 8 31	45,587.00
3		2022 8 31	59,831.00

2022 8 9

2022 2023 2024

5% 40% 90%

3

3

	2022 E	**2023 E**	**2024 E**
	29,910.53	31,406.06	32,976.36
3 / FCC	503.65	4,029.20	9,065.70
4 / FCC	2,279.35	18,234.80	41,028.30
	2,991.55	23,932.40	53,847.90
	35,685.08	**77,602.46**	**136,918.26**

4

1

	2021	**2021**
	28,486.22	**100.00%**

	2021	**2021**
	20,961.40	**73.58%**
	-	-

11,967.54

3

2019 5

2021 7

1

2019 822

A 2,500

13.59 / 33,975.00

4,153.77 29,821.23

2019

5 17 2019 ZG11501

2 2021

2021 1178

32,000.00

778.42

31,221.58

2021 7 13 2021 ZG11716

2022 6

29,821.23		16,470.13	
	15,184.95	2019	12,788.42
	50.92%	2020	884.03
		2021	1,170.52
		2022 1-6	1,627.16

	3 / FCC	3 / FCC							
1			15,184.95	15,184.95	15,184.95				

				31,221.58			19,895.82			
						2021			16,743.96	
						2022 1-6			3,151.86	
1	4 / FCC	4 / FCC	31,221.58	31,221.58	31,221.58	31,221.58	31,221.58	19,895.82	11,325.76	2022 8 31

4 / FCC 2021 9 30

4 / FCC

2020 10 28

2020 11 13 2020

3 / FCC

102,577

3 / FCC

3 / FCC 1.5 /

2021 12 01

17,956 15,184.95

2020-092

3 / FCC 2021

12 1

1 3 / FCC

2021 3 / FCC

486.42 15,184.95 14,698.53

3 / FCC

102,577

2020 10 28

2020 11 13 2020

2022 4 27

2021 12

1 2022 9 30

2 1 /

2021 1 /

9,856.55 10,136.28 279.73

3

4,500

4 4 / FCC

2021 4 / FCC

16,743.96 31,221.58 14,477.62

2021 9 30

2022 4 27

4 / FCC

2021 9 30 2022 8

31

4 / FCC

1

2019 5 31

6,184.07

6,184.07

[2019] ZG11567 2019 7

24

2

2021 7 19

16,673.65

16,673.65

[2021] ZG11736 2021 7 20

3 1 / 2,980.98

1,577.00 /

2020

[2022] ZG11433 2021 12 31

[2007]500

2021 12 31

2019 2020 2021 2022 1-6

53.43%

54.55% 57.10% 52.40%

2019 2020 2021 2022 1-6

26,073.30 24,078.40 21,440.36

7,294.44 77.65% 75.55%

77.12% 51.29%

5,740.83 3,911.39

-12,529.88 -7,486.09 2021 2022 1-6

3 / FCC

4 / FCC

IPO

9,477.80 7,887.59

10,058.63 14,643.29

2010 11 15 2019 11 28

GR201937100531

15%

2020 12 02

GR202036001757

15%

[2016]41 6,000 / FCC

2015-2017

2018-2020

[2017]34 20,000 / FCC

2016-2018

2019-2021

FCC

13%

一、发行人控股股东、实际控制人声明

本人承诺本募集说明书内容真实、准确、完整，不存在虚假记载、误导性陈述或重大遗漏，按照诚信原则履行承诺，并承担相应的法律责任。

张新功

青岛惠城环保科技集团股份有限公司

2022年10月12日

二、保荐机构（主承销商）声明

本公司已对募集说明书进行了核查，确认本募集说明书内容真实、准确、完整，不存在虚假记载、误导性陈述或重大遗漏，并承担相应的法律责任。

法定代表人：

侯 巍

保荐代表人：

陈 超　　毛传武

项目协办人：

樊佳妮

2022 年 10 月 24 日

二、保荐机构（主承销商）声明

保荐机构董事长声明：本人已认真阅读募集说明书的全部内容，确认本募集说明书不存在虚假记载、误导性陈述或重大遗漏，并对本募集说明书真实性、准确性、完整性、及时性承担相应法律责任。

保荐机构董事长（签名）：

侯　巍

中德证券有限责任公司

2022 年 10 月 12 日

二、保荐机构（主承销商）声明

保荐机构总经理声明：本人已认真阅读募集说明书的全部内容，确认本募集说明书不存在虚假记载、误导性陈述或重大遗漏，并对本募集说明书真实性、准确性、完整性、及时性承担相应法律责任。

保荐机构总经理（签名）：

段 涛

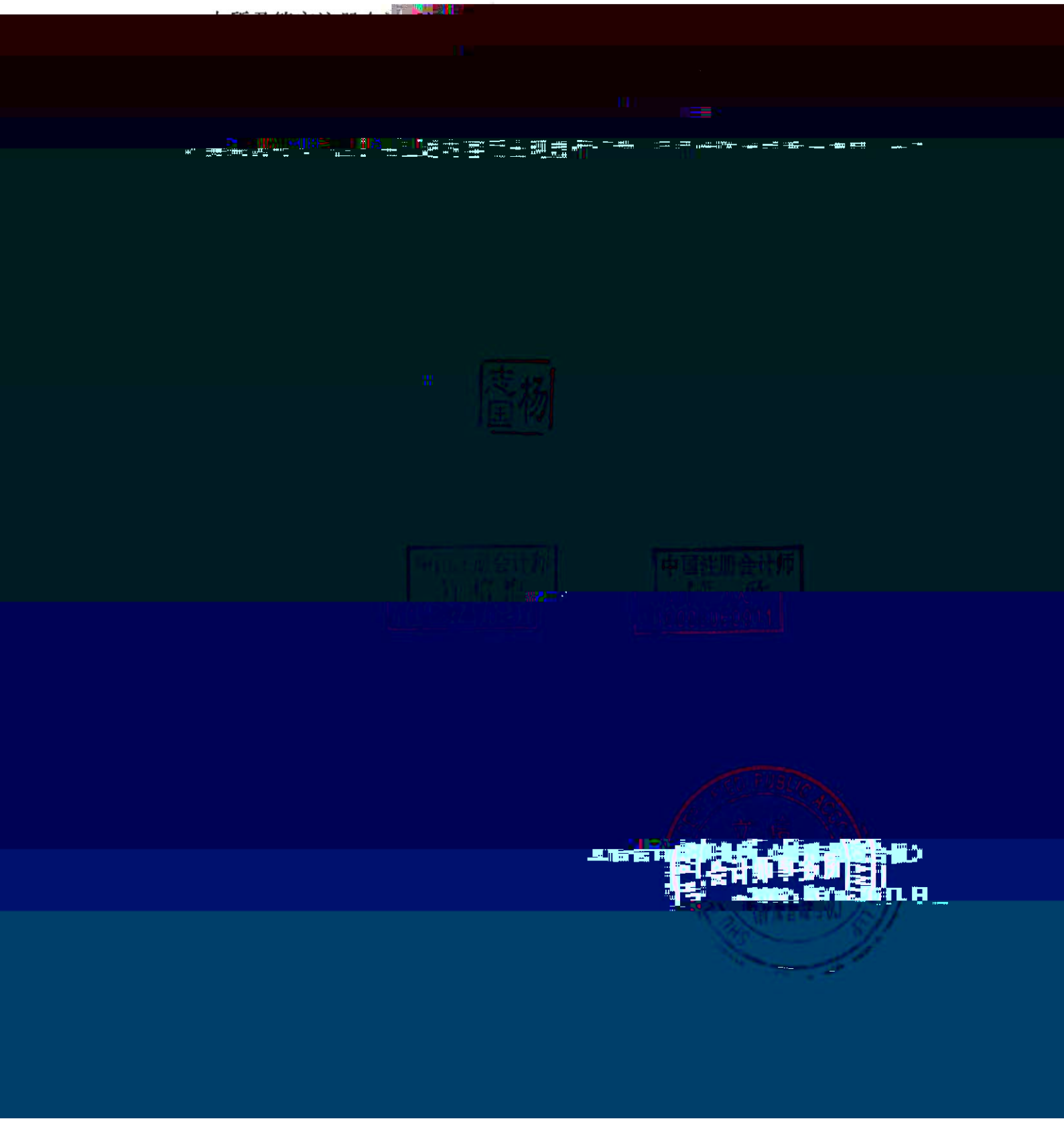
中德证券有限责任公司

2022 年 10 月 12 日

三、发行人律师声明

本所及经办律师已阅读募集说明书，确认募集说明书内容与本所出具的法律意见书和律师工作报告不存在矛盾。本所及经办律师对发行人在募集说明书中引用的法律意见书和律师工作报告的内容无异议，确认募集说明书不因引用上述内容而出现虚假记载、误导性陈述或重大遗漏，并对其真实性、准确性和完整性承担相应的法律责任。

四、会计师事务所声明



A