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		201820192020
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2020	
2020	
2018	
2012	

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2020	
2019	
2015	

2013

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	10,000
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	300779
	0532-58657701
	0532-58657729
	www.hcpect.com
	stock@hcpect.com

PFCC

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RFCC

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2018	2019	2020			
6,374.64	4,285.93	2,701.52		4,454.03	
			32,000.00		3.00%
		960.00			
3					

6,374.64	4,285.93	2,701.52	13,362.09
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[2020] ZG11646

[2021] ZG10920

2020

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2016

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60.32% 53.43% 54.55%

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22,432.51	26,073.30	24,078.40
	66.14%	77.65% 75.55%

1 /

5

			12,802.52	9,477.80
	7,887.59			34,387.24
34,379.47		32,385.97		
37.23%	27.57%	24.35%		

3

40.14% 36.44% 28.82%

	2020	2019	2018
	28.71%	36.98%	40.24%
	52.43%	64.34%	66.94%
	24.36%	32.13%	36.99%
	46.53%	46.88%	31.44%
	35.51%	13.67%	33.18%
	28.82%	36.44%	40.14%

		2018			2019
	2018	3.7		2019	FCC
					2020
2019	7.62			1	
2					
			3	2020	
	998.66				
2020					

		2010	11	15						
2013	9	25		2016	12	2		2019	11	28

15%

2018-2020

2019-2021

13%

1

31,871.09	FCC	27,837.68	24,204.45
22,393.99			

22

FCC	2019	2020	FCC	2019
		FCC		

FCC

	2020	2019	2018
/	12,664.00	13,683.06	14,480.74
	17,683.20	17,689.35	19,223.94
	22,393.99	24,204.45	27,837.68

FCC

1

2019 FCC 2018 797.68 / 5.51%

2018 FCC 4,084.04

15,470.39 / 2018 FCC

14,213.77 / 1,256.62 / 2019 FCC

FCC

2018 2019 FCC

/

	2019			2018
	-			15,470.40
	13,683.06	-530.71	-3.73%	14,213.77
	13,683.06	-797.68	-5.51%	14,480.74

2019 FCC

FCC 2018

2019 FCC 14,213.77 / 13,683.06

/ 2019 2018 530.71 / 3.73%

FCC

FCC

2

FCC

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	2020	2019	2018
	28.71%	36.98%	40.24%
	52.43%	64.34%	66.94%
	24.36%	32.13%	36.99%
-FCC	26.35%	31.94%	37.78%
-	36.72%	28.19%	33.50%
-	53.89%	50.86%	16.86%
	28.82%	36.44%	40.14%
2019	2018	3.70	2020
7.62			FCC

1

2019 2020

	2020		2019
	22,657.34	19.33%	18,986.49
/	1,692.10	-17.30%	2,045.95
/	804.91	10.32%	729.59
	52.43%	-11.91%	64.34%
2020	1,692.10	/	2019
17.30%			

2020 804.91 / 2019
10.32%

	2020	2019	2018
/	1,951.42	2,053.31	2,029.81
/	673.63	692.47	671.07
/	1,277.79	1,360.84	1,358.74
	65.48%	66.28%	66.94%

2 FCC

FCC 37.78% 31.94% 26.35%

FCC

	2020	2019	2018
/	12,664.00	13,683.06	14,480.74
/	9,326.88	9,313.16	9,010.06
-	5,265.67	5,254.49	5,134.98
-	484.38	656.58	581.2
-	2,219.95	2,290.11	2,193.76
-	979.04	1,111.99	1,100.12
	377.84	31.94%	37.78%

2019 FCC 2018 5.84

2019 FCC

2020 FCC

2019 5.59

FCC 2020 2019 1,019.06 /

7.45%			
FCC			
FCC			
51			
2019FCC			
119.51 / 75.38 / 2.33% 12.97%			
FCC			
FCC			
20192020FCC			
119.51 / 11.18 / 2.33% 0.21% 2019			
132.55 / 2019			
3FCC			
700 / 20193			
2020			
FCC			
	2020	2019	2018
	856.55	1,161.44	1,117.30
FCC	17,683.20	17,689.35	19,223.94
/	484.38	656.58	581.20
2019FCC1,161.44			
20182019FCC2018			
1,534.597.98%75.38 /			
2020			
2019172.20 /			

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FCC

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2020

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2020

FCC

	2020	2019	2018
	10,059.52	8,645.90	9,097.76

28,480 /

FCC

FCC

2021 3 31

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FCC

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FCC

FCC

FCC

2020

9.1 /

3.4

33

FCC

3% 4%

4.5

15 FCC

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5 FCC

2019 2020 FCC

119.51 / 11.18 /

2.33% 0.21% 2019

132.55 / 2020 FCC

6 2020

2020

2021

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2021

FCC

3,495.48

12,944.48 / 2020

12,446.24 / 498.24 /

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2018

2019

2020

	2020	2019	2018
	32,461.76	34,379.47	34,387.24
	22,390.89	21,852.51	20,583.80
	10,070.87	12,526.96	13,803.44
	31.02%	36.44%	40.14%
	7,161.92	8,385.73	6,307.57
	145.77	930.38	76.70
	392.69	32.86	3.75
	2,757.73	4,285.93	6,374.64
	2,757.73	4,285.93	6,374.64
	767.73	572.51	464.27
	1,990.00	3,713.42	5,910.37
	99,903.45	92,168.92	65,386.92
	33,240.85	27,274.92	32,599.38
	66,662.60		

4 / FCC

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1 2020 12 31

			2020.12.31	2019.12.31	2018.12.31
1			131.95	60.26	-
2			798.63	755.09	545.34
3			1,383.86	-	-
4	4 / FCC		5,321.68	-	-
5	3 / FCC		330.34	113.15	-
6			173.91	-	-
7	-		1,619.49	-	-
8			2,108.42	1,247.20	-
			11,868.28	2,175.70	545.34

2

							2020 12 31
1		180.00	131.95	73.31%	-	2021.05	
2		827.00	798.63	96.57%	-	2021.06	
3		1,546.00	1383.86	89.51%	-	2021.03	
4	4 / FCC	56,169.00	5321.68	9.47%	-	2021.09	
5	3 / FCC	17,956.00	330.34	1.84%	-	2021.12	
6		245.00	173.91	70.98%	-	2021.01	

							2020 12 31
8		2,400.00	2,108.42	87.85%	-	2021.06	
		81,183.00	11,868.28	-	-		

3 2020 12 31

		2021	2022	2023	2024	2025	2026
	2021.5	10.19	17.46	17.46	17.46	17.46	17.46
	2021.6	40.11	80.22	80.22	80.22	80.22	80.22
	2021.3	112.47	149.96	149.96	149.96	149.96	149.96
4 / FCC	2021.9	876.75	3,507.00	3,507.00	3,507.00	3,507.00	3,507.00
3 / FCC	2021.12	-	1,001.00	1,001.00	1,001.00	1,001.00	1,001.00
	2021.1	14.52	15.84	15.84	15.84	15.84	15.84
-	2021.6	90.21	180.42	180.42	180.42	180.42	180.42
	2021.6	58.20	116.40	116.40	116.40	116.40	116.40
		1,202.45	5,068.30	5,068.30	5,068.30	5,068.30	5,068.30

4 / FCC / FCC

		2020	2021	2022	2023	2024	2025	2026
4 / FCC	2021.9	-	828.00	3,313.00	5,370.00	7,285.00	7,466.00	7,643.00
3 / FCC	2021.12	-	-	1,119.00	1,727.00	2,334.00	2,334.00	2,334.00
		-	828.00	4,432.00	7,097.00	9,619.00	9,800.00	9,977.00

/ FCC

2021 9 / FCC

2021 12

2021 2023

828.00 4,432.00 7,097.00 2024

9,000

2020

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FCC	2018	/	FCC
			2020

2020

FCC

FCC		2020	2019	2018
		20,000.00	20,000.00	20,000.00
		21,175.88	20,280.38	20,035.36
		105.88%	101.40%	100.18%

$$\frac{1}{2} \left(\frac{1}{\text{FCC}} + \frac{1}{\text{FCC}} \right) = \frac{1}{\text{FCC}}$$

FCC 4×4

	FCC
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（本页无正文，为《中德证券有限责任公司关于青岛惠城环保科技股份有限公司向不特定对象发行可转换公司债券之发行保荐书》之签字盖章页）

项目协办人： 樊佳妮
樊佳妮

保荐代表人： 陈超 毛传武
陈超 毛传武

保荐业务部门负责人： 毛传武
毛传武

内核负责人： 何澎湃
何澎湃

保荐业务负责人： 段涛
段涛

保荐机构负责人： 何涛
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（本项无正文，为中德证券有限责任公司加盖公章并由法定代表人授权代表人姜斌投议并签署）

页

2014年11月

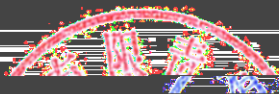
任 崔 天 斌

中德证券有限责任公司
姜斌

任姜斌代表人

12月12日

12月12日



中德证券有限责任公司