2022 9 25

636

189699387

email 13122392@qq.com

■ □

email

2761

/		A-2021-742906207-01/2022	5	25
/		A-2021-742906207-01/2022	9	25

5793 tCO_2e -

5793 tCO_2e -

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2021

2021 130 2022

! 2022 111 Є

2022 2022 6

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1.2 1
1.3 2
4
2.1 4
2.2 4
2.3 5
2.4 7
8
3.1 8
3.1.1 8
3.1.2 9
3.1.3 ..ŭ.. ǩ ĎŎ

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2 33
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- 2021

636

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2 CO_2

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4 CH_4

5 CO_2

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- 2021

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- 2022

2022 111

- 2022 m022 ß Ǝ

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	15858809268	1 2 3	
	13757171789		

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9 20		/	/ /0572-8351858-1856 / /0572-8351859 / /0572-8351858-831 / /0572-8351801	- - - -
9 20		/	/ /0572-8351858-1856 / /0572-8351859 / /0572-8351858-831 / /0572-8351801	- -
9 20		/	/ /0572-8351858-1856 / /0572-8351859 / /0572-8351858-831 / /0572-8351801	- - - -

2022

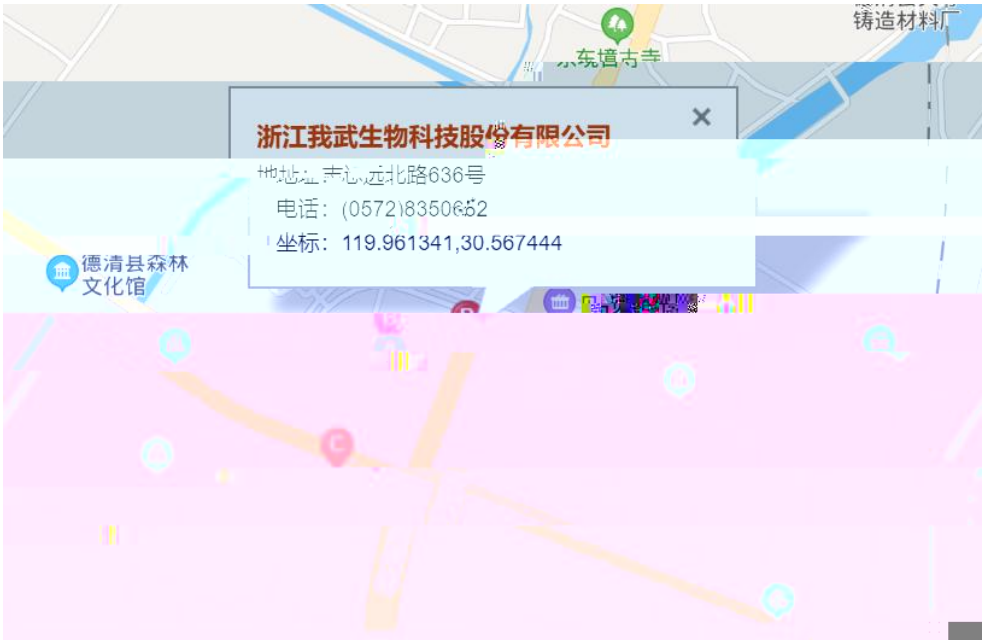
9 20

2022 9 25

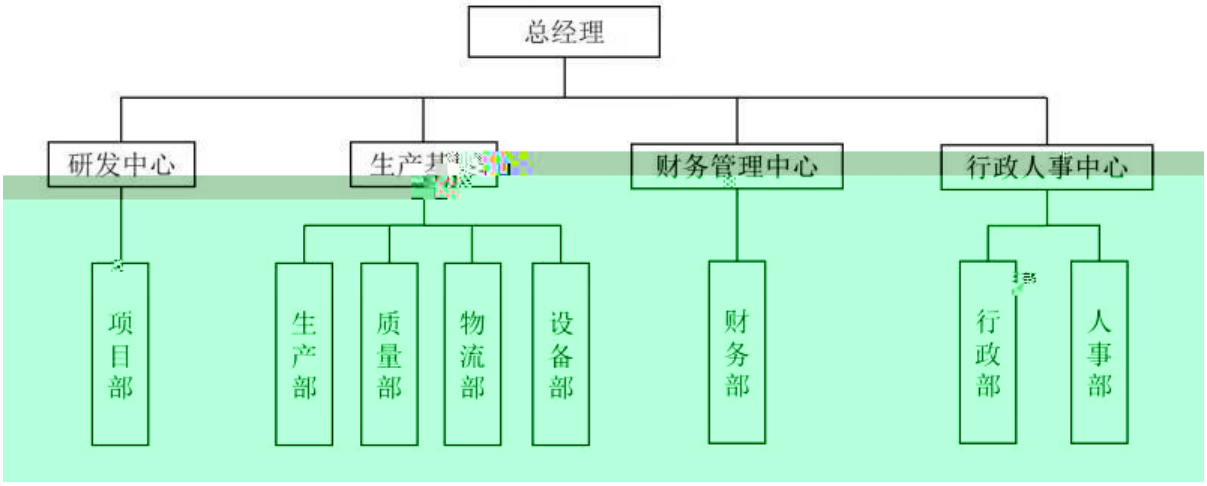
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3.1



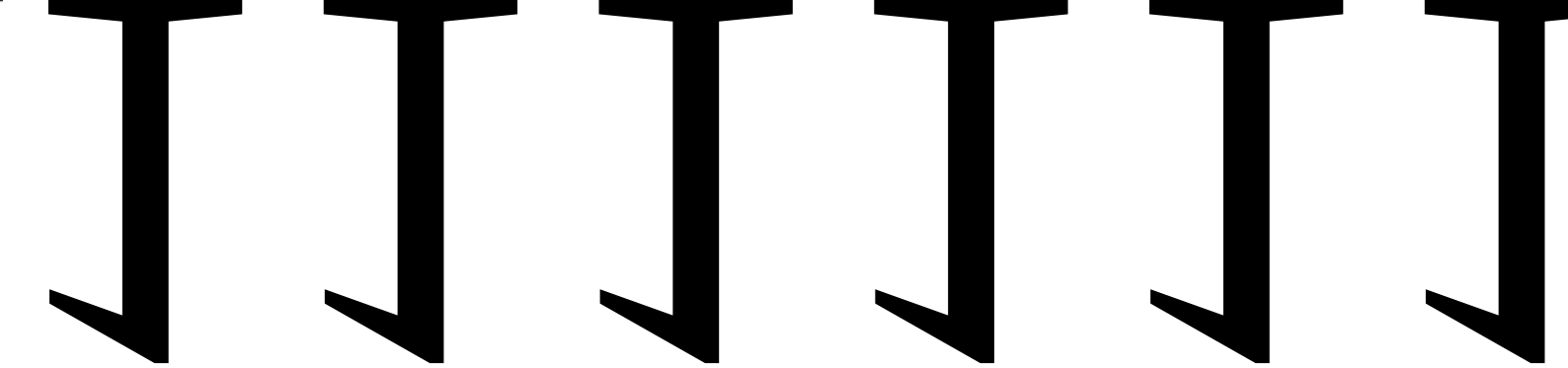
3.2

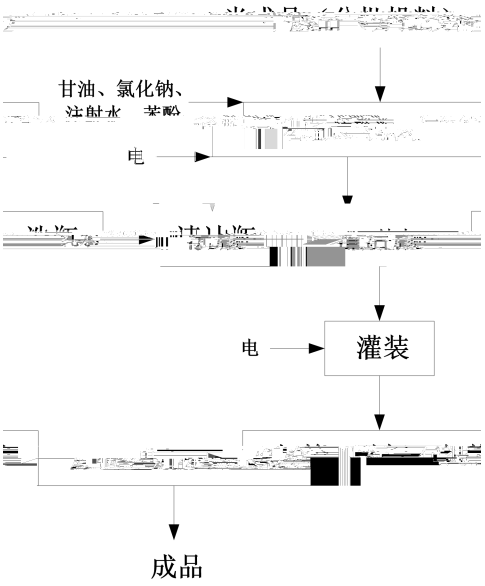
300

1000 6

150

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3.6



3.7

3-1

			kW	
	WCFX40TRC	3	163.9	/
	WCOX2010-DSE	1	160	HM2-315L1-2
	SLS150-315A	2	22	YE2-180L-4
	ZT22VSD	1	22	1LA7169-4AA91 ZT10
	PSX-330H	3	0.6	/
	DMH-C-2	1	10.5	/
	RXH-7C	1	10	/
	DMH-	1	8	/
	CT-FB	2	9.7	/
	SL480	1	99	/
	CF-FB	1	10	/
	TDL-40C	16	1.5	/
	TD5Z	5	1.5	/
	GA11CP-7.5	1	11	/
	AA6-15A-AM-0.8	1	15	1LA7169
	BLT-7A/7	1	5.5	1LA7169
	SLAD-1HTF	1	0.54	/

3-2

				/			
1		DSZ178	1	0.5 S	1		
2		DSZ178	1	0.5 S	2		
3		FCM	1	0.5 S			
4		HS96	1	/			

GB17167-2006

3-3 2021

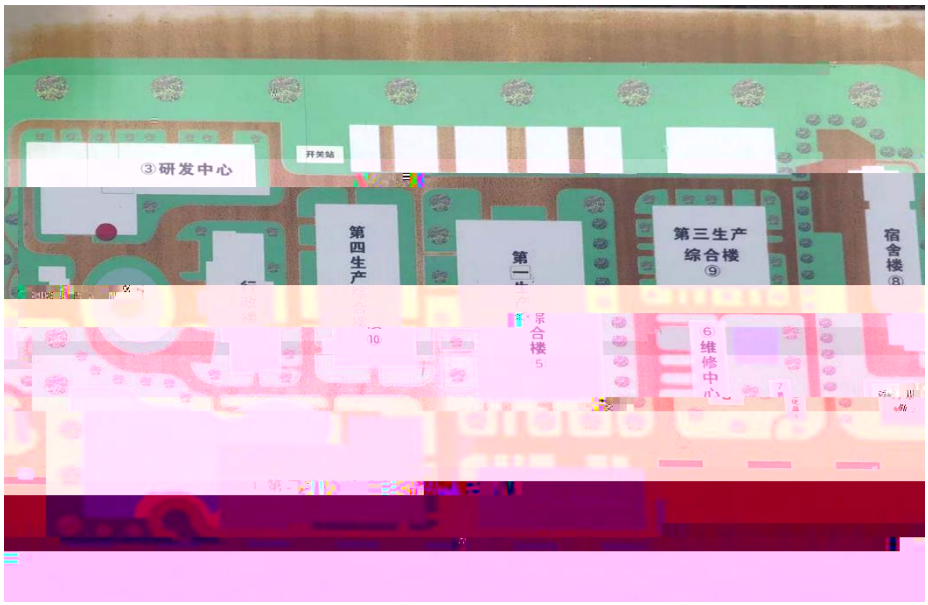
	947.11751
	3.4271
	50.9122

2021

		2020	2021	
		66891	97438	45.67%
		815	844	3.56%

		3167	4812	51.94%
		993.5	813.7	-18.10%

636 3.8



3.8

3-4

				1
	-	-	-	2
CH_4	-	-	-	3
CH_4	-	-	-	4
CO_2	-			
CO_2				

1

E_{CO2-} CO_2

E_{CO2-} CO_2

E_{CH4-} CH_4

R_{CH4-} CH_4

GWP_{CH4} CH_4 CO_2 (GWP 21

R_{CO2-} CO_2

E_{CO2-} CO_2

E_{CO2-} CO_2

$$E_{CO2-} = B_i (AD_i \times CC_i \times OF_i \times \frac{44}{12}) \quad 2$$

E_{CO2-} CO_2 tCO_2

i

AD_i i t Nm^3

CC_i i tC/t tC/ Nm^3

OF_i i %

$$E_{CO2-} = B_i (AD_i \times EF_i \times PUR_i) \quad 3$$

E_{CO2-} CO_2 CO_2

i

AD_i i

EF_i i CO_2 CO_2/ i;

PUR_i i

CH_4

$$E_{CH4-} = TOW - S \times EF_{CH4-} \times 10^{-3} \quad 4$$

E_{CH4-} CH_4

TOW COD

, COD

S COD

, – ᵒD b COD ǧ ʀ d : d+∩

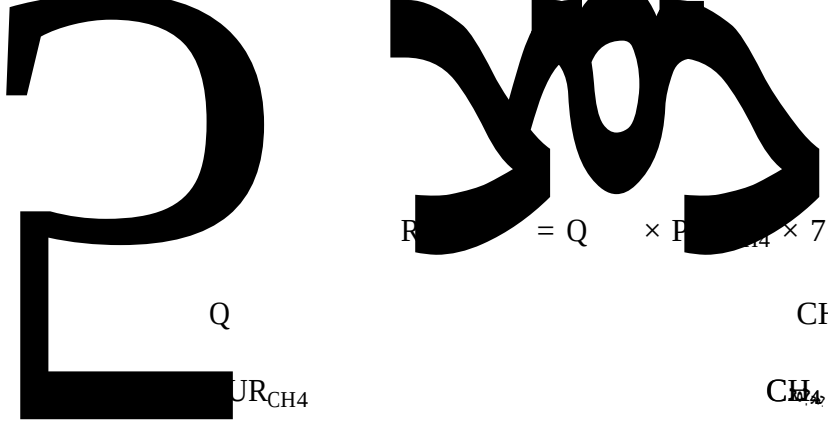
EF_{CH4-} CH_4 CH_4/ COD

– E `

$$R_{CH4-} = R_{CH4-} + R_{CH4-} + R_{CH4-} \quad 5$$

R_{CH4-} ḓ ʁ

ᵻ



$R_{CH_4} = Q \times P_{CH_4} \times 7.17$ 7 µ } }

Q CH_4 Nm^3

UR_{CH4} CH_4

PUR_{CO2-} CO_2 CO_2

0~1

19.77 CO_2 CO_2/ Nm^3

$$E_{CO2-} = AD \times EF \quad (10)$$

$$E_{CO2-} = AD \times EF \quad (11)$$

E_{CO2-} CO_2 tCO_2

E_{CO2-} CO_2 tCO_2

AD MWh

AD GJ

EF CO_2 tCO_2/ MWh

EF CO_2 tCO_2/ GJ

/

3-5 /

	1.186 Nm³	389.31GJ/ Nm3 0.0153tC/GJ 99%
	-	-
CH_4	-	-
CH_4	-	-
CO_2	-	-
CO_2	5557.6MWh	0.7035tCO_2/MWh
	: 16938.7035 GJ	:0.11tCO2/GJ

1

6.65

TBQM-G250-DN100 1.0

100%

CH_4

CO_2

1315003187

	5657.160	5657.160
	MWh	
	FKGA23-NRZS3212 6400imp/kWh	
	100%	

	1 5557.6MWh 2 1 2 5 7 10 12 5557.6MWh

3-7 MWh

1	406.350
2	289.770
3	399.120
4	399.390
5	495.570
6	

2.69 GJ/t



15173.413 15173.413

GJ

3-9

	t	t	t
1	601.00	601.00	601.00
2	435.00	435.00	435.00
3	433.00	433.00	433.00
4	458.00	458.00	458.00
5	441.00	441.00	441.00
6	445.00	445.00	445.00
7	451.00	451.00	451.00
8	468.00	468.00	468.00
9	482.00	482.00	482.00
10	464.00	464.00	464.00
11	475.00	475.00	475.00
12	477.00	477.00	477.00
t	5630.00	5630.00	5630.00

1

		tC/GJ	(%)
		0.0153	99
		tC/GJ	(%)
		0.0153	99

	tCO_2/MWh	tCO_2/MWh
	0.7035	0.7035
	2012	
	2012	

	tCO_2/GJ	tCO_2/GJ
	0.11	0.11

3-10

	t	GJ/t	tC/GJ	%		tCO_2	tCO_2
	A	B	C	D	E	F=A*B*C*D*E	
	6.65	389.31	0.0153	99	44/12	143.79	143.79

CH4

CH_4

2021

2021 130 2022

2022 111

2022

2022 6

2021

143.79

tCO_2e $0tCO_2e$ CH_4 $0tCH_4$

$0tCO_2e$ CH_4 $0tCO_2e$ CO_2

$0tCO_2e$ 3979.81 tCO_2e

1669.08 tCO_2e 5793 tCO_2e

2021

		t	tCO_2e	tCO_2e	
		143.79	143.79	143.79	0%
		-	-	-	-
CH_4		-	-	-	-
CH_4	CH_4	-	-	-	-

	CH_4	-	-	-	-
	CH_4	-	-	-	-
CO_2		-	-	-	-
		3979.81	3979.81	3979.81	0%
		1669.08	1669.08	1669.08	0%
tCO_2e			5793	5793	0%

1			

1	
2	

1	
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