

2017

2017 1 1 2017 12 31

2018 3

23

Zffb://i i i .e[abWUla_ /{efUa/Ued/
]Uj X/Zj\Y.eZf_ ^

GRI

2018

3 23





02
04

10

16

24

36

48

54
55
58
62

2017
3,283
605
7,850

1.99

5,876

3

3,640

4

2017

HSSE

2


2017

1.28

+

2

13



2018 3 23





2,360.2	328.3	457.4
---------	-------	-------

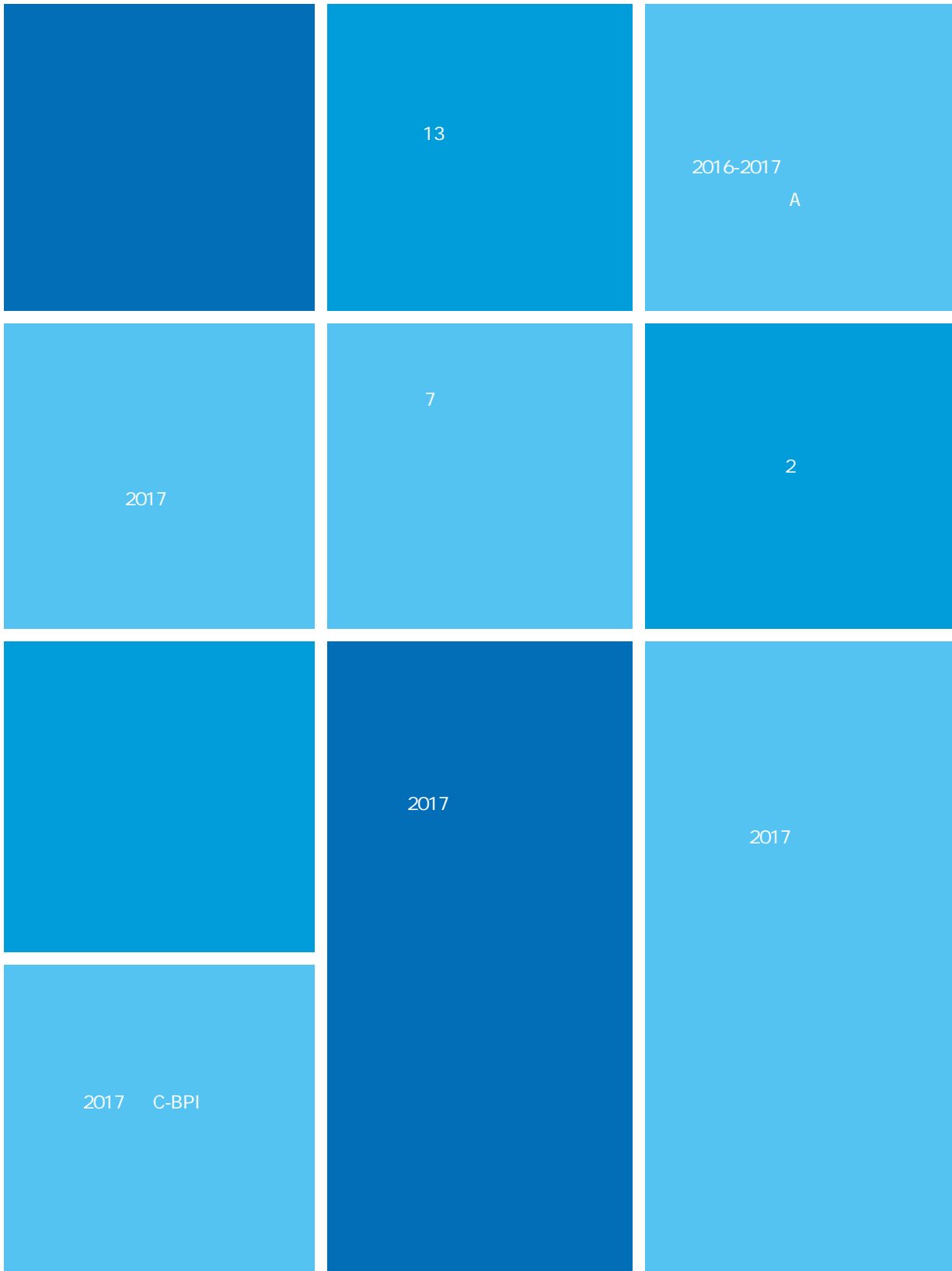
51.12	60.54	118.4 %
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446,225	100 %	100 %
---------	-------	-------

151.88	128.22	41,172
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162.66	5.42	
--------	------	--

2017



E

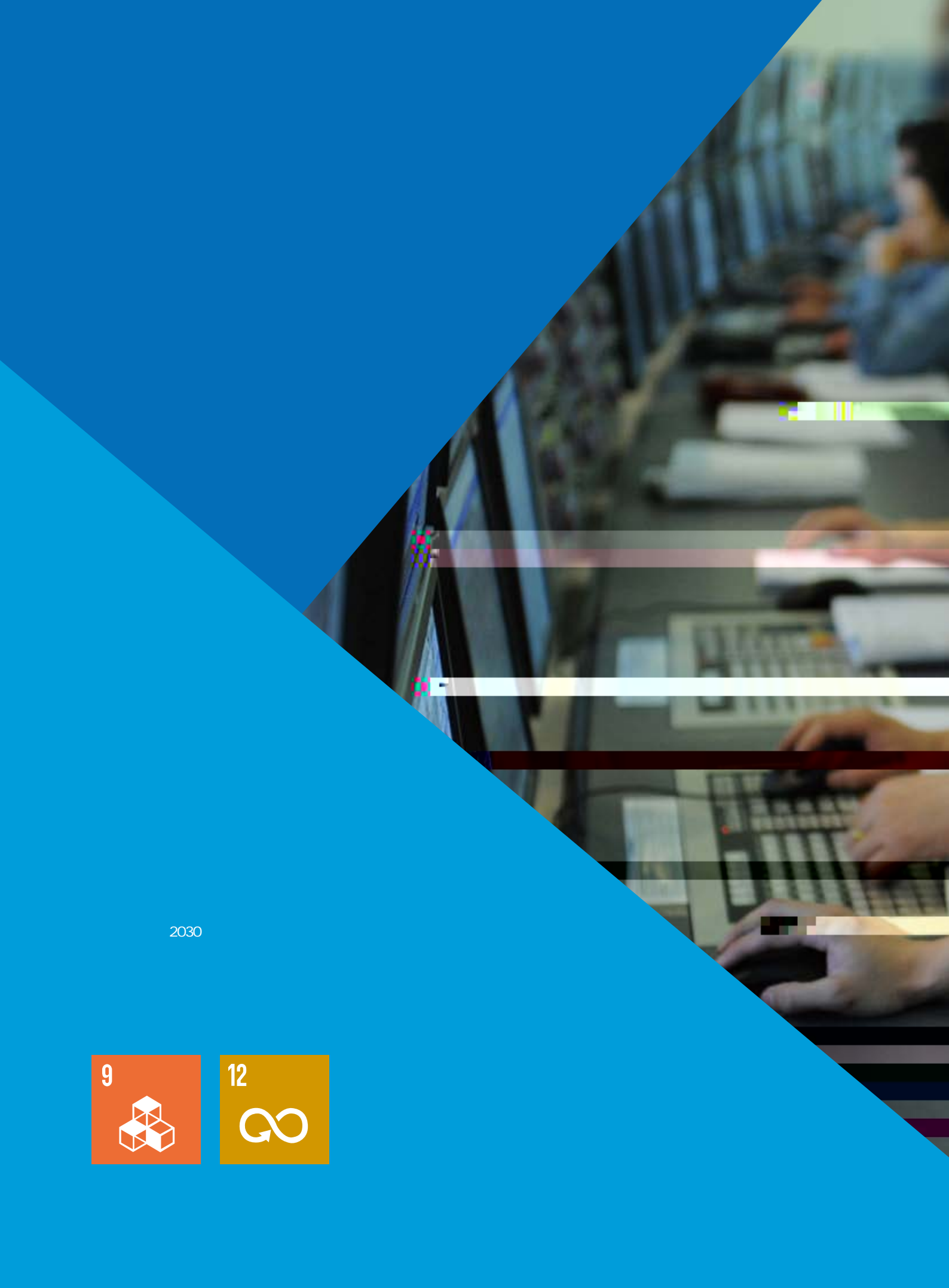
2030

17

TCFD

_____	P06
_____	P21
_____	P10-15
_____	P22-23
_____	P45-46
_____	P07
_____	P27-28

_____	P29-31
_____	P32-34
_____	P40-41
_____	P27
_____	P35
_____	P42-43



2030





[Redacted]

2017 5 4 2
2
2017
2
3 5,876
3,640
210292



2017

2017

2017

10

561

	2015	2016	2017
	2	4	2
	2	0	3
	5,246	5,612	5,876
	3,769	3,942	3,640
	18,349	22,291	25,931
	5.65	5.93	6.42



“ ”

2017

2025

+

+

11%22

3.4



4
2017

7

90.7%

99%



2017

2017

2017

2017

VOCe





2030
2017

6.9%





40% 2016
65% 2017
118.4%
2017 6

2016
99.96%

2017 ,

511 23,602 22%
10%

116%

2017

2017 1.32
1.99
2% 550 "
" 48%

SBS

" 2+26"



" 98"

15

50%



2016-2030

2021 2030

2017

2017

2017

W

47

19%

CRM

100

/

2017

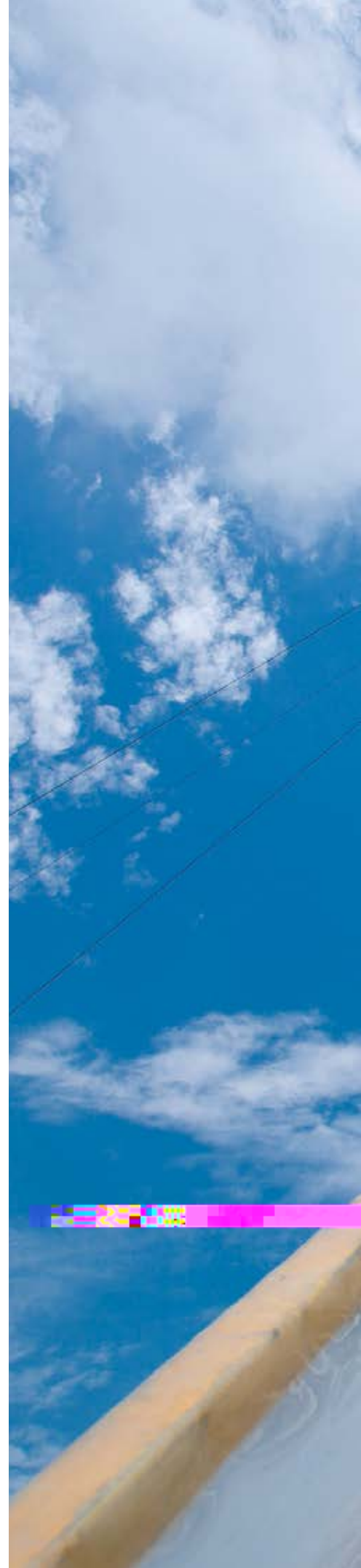
/

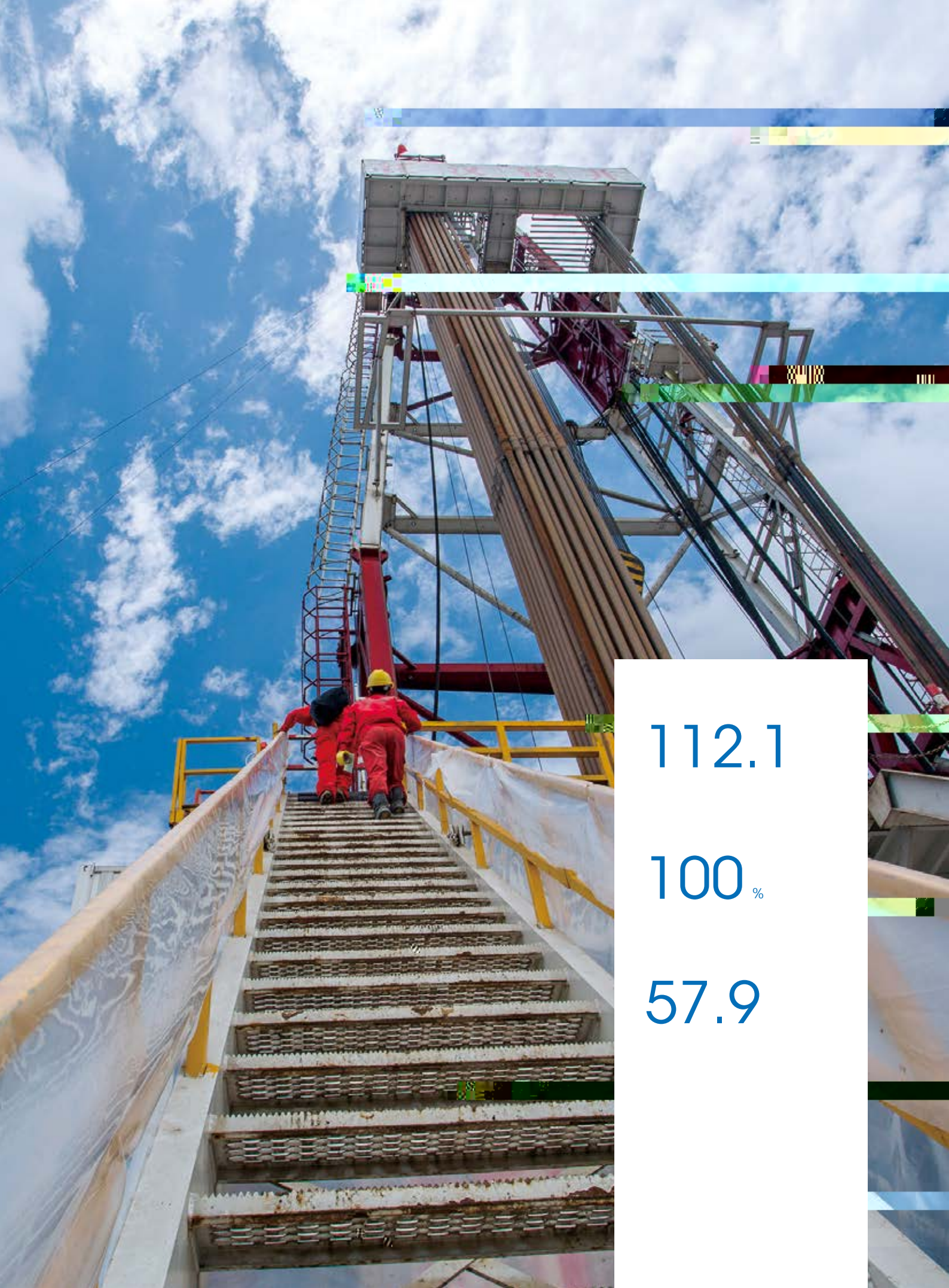
2017

1,105



			47
2017		ERP	
418.4	755.6	1.3	2017





112.1

100%

57.9



2030





2017

2+26

2+26

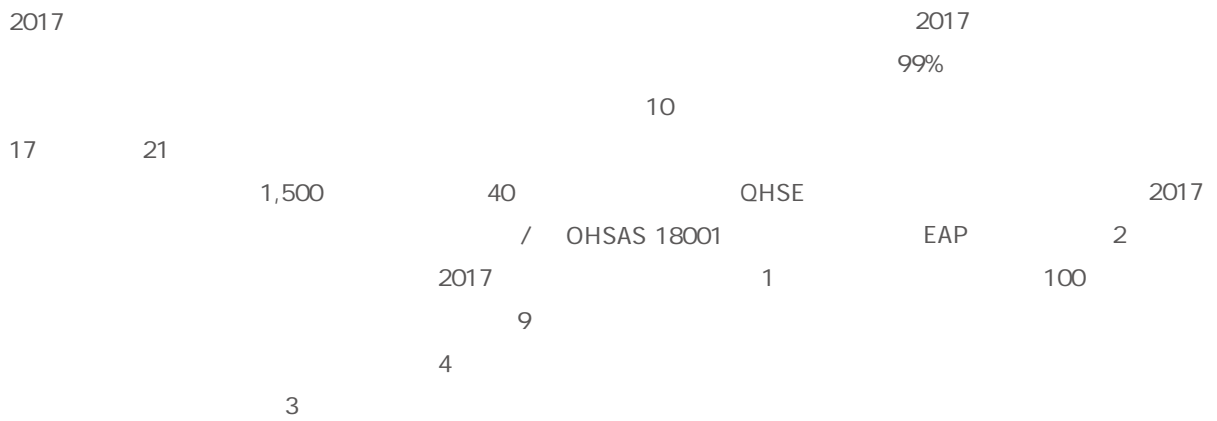
26 2

9

2+26



HSSE

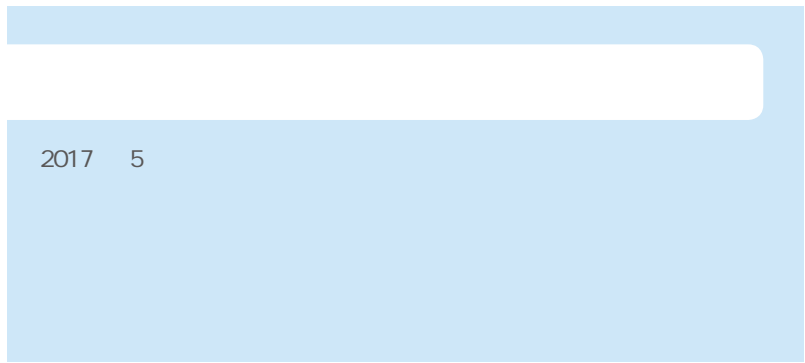


2017

25%

5 /

2017





	94.9	2017	452
/		17	
3		31.5	
		2017	0.496

5.42

		2017
27		19

270

	2017	426
2.2		330

220

CNG LNG

2017

43

2017

3

/

2018

1
HU497

787

10



2017 12 19



CCER
2017

135
1,900

2017

VOCe

7851

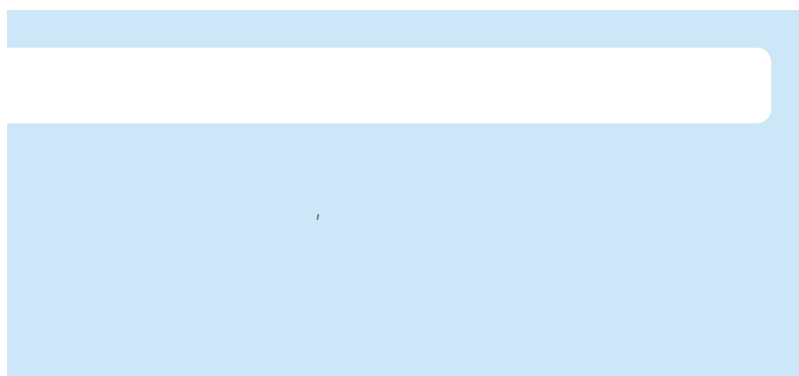
2017	4	5			
4	6				
			4	9	
	4	10	6		2+26
			8		
			VOCe		46
			VOCe		VOCe
2017	11			8	



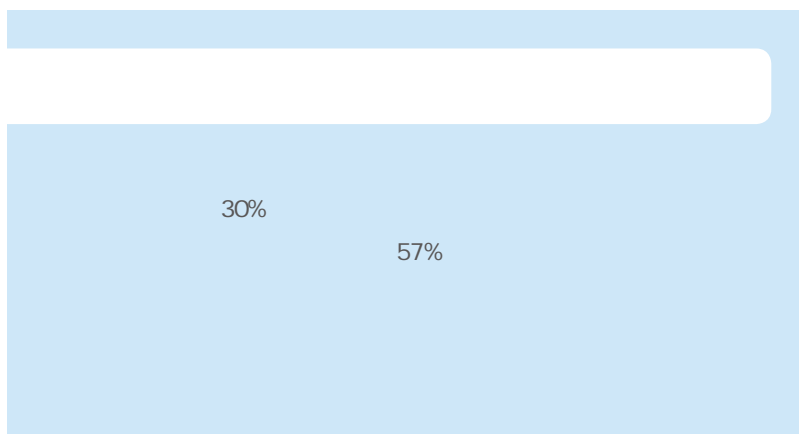
2017

7,796

2017



“



”

—



2030





2017



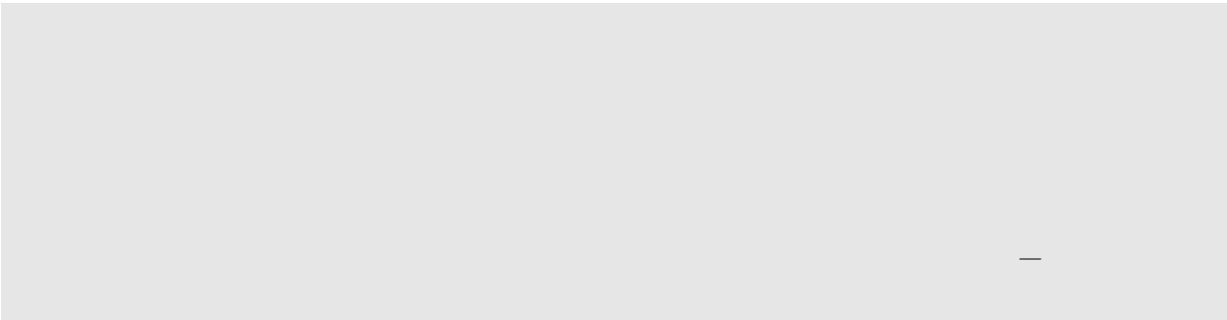
12,453 369

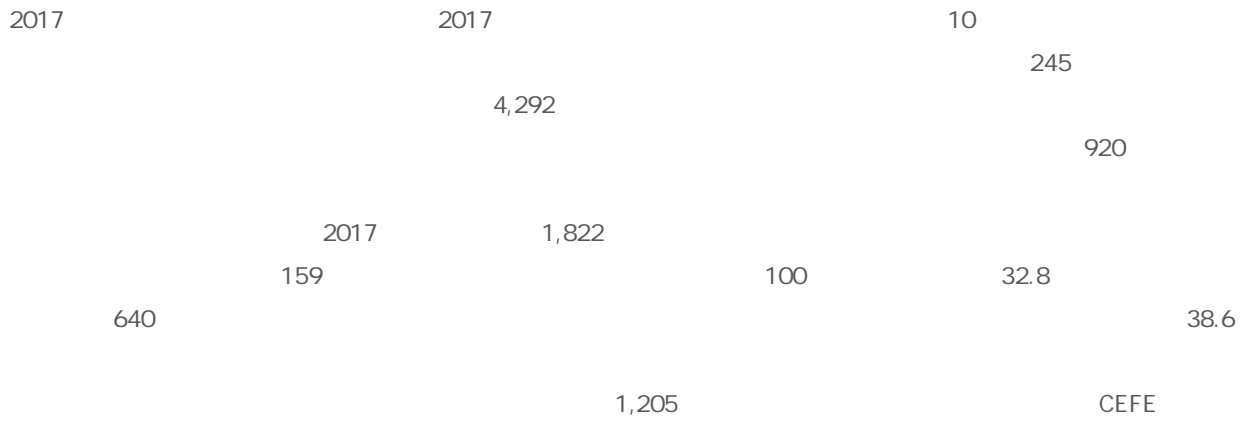


27,759

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 275	62 / 4,316 1,669	
3,202 13,907	 4,275	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
305 3,146 596	105	
4,926 1 158	" " 27	
865	" " 386	
261 2,157 13,852	48 513	

2017





2017 35.9% 12.76%



2017

66.52

2013

“ ”

2017

512

900

40

812

2017



2

3,126

2017

13

2004

1.4

4

1

1

18

/

18

33





2017 1

5 45

289

23



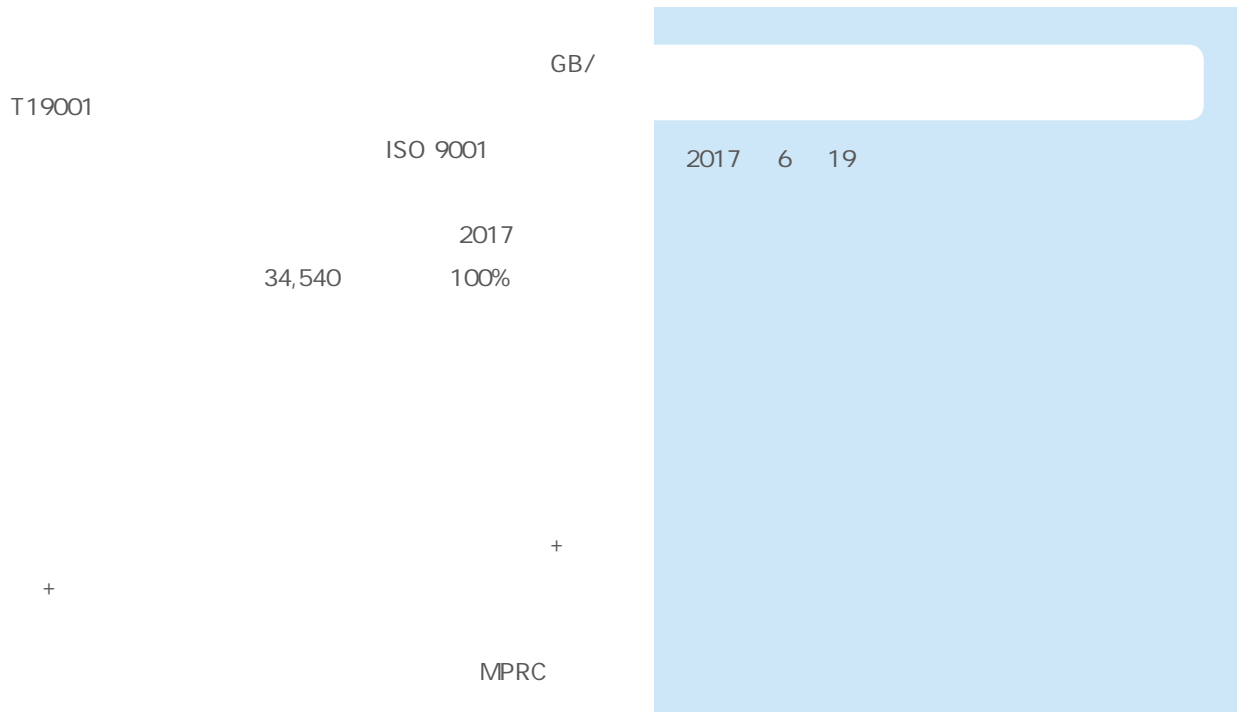
			6
3,193			62
	12.2		2017
24	30		491
	2.5		



			2017
	216		



2017			S[abWU
	2016	1	60
S[abWU	NW	e	2



2008			2017
		%	84
20		%	100
3,549	2017	%	92
	89%	%	100
		%	85
3		%	100

2017



HSE 100%
ISO14000 ISO18000

2017
26.7% 1.9

3

994 1,835 2017
580 52

3,000 HSE 2017

	2015	2016	2017
%	100	100	100
%	19.4	24.8	26.7





2030

17





66 96 + 2017 4
SC2B Sgbb'k CZS[
fa Bge[Vte

2017

2017

56

66

2017

246

4,282

4.55

12.8

1,817

37

43

38

20

260

					750	/
			116		8	/
5			4	1.05	/	
	6			2.09		3.39

				Ad_ S`	BOL	
				96%	89%	
						95% KOA
2017						82%
			UDM			
		99%	CIR			



CIR				
2017	KKM		471	359
Ad_ S`		64	UDM	-
-				



UDM

100%

100%

CIR

	2017	CIR		111.8
			Ad_ S`	KOA
		ISO 14001:2004	Ad_ S`	
BOL				1.5
KOA				5,400
2017	Ad_ S`		KKM	
2017				
UDM		ISO 14001		OHSAS 18001

CIR

KKM

KOA

UDM

2017 UDM

KOA

KOA

—

R.K.



2030



	2015	2016	2017
	1,447.3	1,498.6	1,595.5
	657.7	666.1	741.4
	2,020.4	1,930.9	2,360.2
	32.28	46.42	51.12
	18.16	30.15	60.54
%	56.4	64.9	118.4
	327.4	316.1	328.3
	471.91	431.29	448.79
	349.47	303.51	293.66
	734.79	766.12	912.50
	236.49	235.53	238.50
	11,118	11,059	11,610
	189.33	194.84	198.75
	62.87	69.96	78.50

	2015	2016	2017
%	98.9	98.9	99
%	98.9	98.9	99
	6	19	21
%	100	100	100
	7	2	3

	2015	2016	2017
/	3,542	3,606	3,778
	428.8	436.6	457.4
	351,019	451,611*	446,225*
()	2,633	17,897*	21,887*
	18,361	19,144	26,128
%	29.46	35.95*	35.9*
%	26.74	12.88*	12.76*
%	100	100	100
%	100	100	100
%	100	76.89*	73.90*
%	100	100	100
	111.85	132.88	151.88
" "	3,286	3,248	3,126
	6,754	6,584	6,652

*

2016

2017

19,048

		2017
		882
		0.496
		1.41
		3.35
		28.86
		15.08
		936
		162.66
		123.05
		39.61
		-
		30.55
		129.49
		2.62
		5.42
		270
		220

* ISO14064-1:2006
2017

CO₂ CH₄ N₂O HFCs PFCs SF₆

1 COD 4 2017 11
" " <" " >
2017

2

3

4

2017

A1		P29 P32
	A1.1	P57
	A1.2	P57
	A1.3	P57
	A1.4	P57
	A1.5	P29-34
	A1.6	P33
A2		P29 P30 P34
	A2.1	P56
	A2.2	P57
	A2.3	P29 P30
	A2.4	P34
	A2.5	P57
A3		P29 P32 P34 P35
	A3.1	P29-35
B1		P40 P41
	B1.1	2017
	B1.2	-
B2		P27
	B2.1	P55
	B2.2	-
	B2.3	P27 P28
B3		P40 P41
	B3.1	P41
	B3.2	P41
B4		P40
	B4.1	-
	B4.2	-

2017

		P03,P09,P40-41 P40-41
		P40 P40 P40 P40-41,P51
		P29-31 P32-35,P52 P31
		P22-23

2017

	1	P02-03,P06
	2	P09,P13,P19,P27-28,p40-41,P51
	3	P09,P22,P32-35,p39-47,P51-53
	4	P09,P10,P16,P24,P36,P48
	5	P02-03,P40-41,P51
	6	P02-03,P40-41,P51
	7	P40-41
	8	P40-41,P51-52,P56
	9	P06,P40-P41
	10	P40-41
	11	P40-41,P51
	12	P40-41,P51-52,P56
	13	P06,P29-35
	14	P29-32
	15	P29-32
	16	P39-35,P52,P57
	17	P06,P22
	18	P22
	19	P22
	20	P22-23,P56
	21	P46-47
	22	
	23	P59
	24	-

GRI

GRI

	G4-18 G4-23 G4-28 G4-29 G4-30 G4-31
	G4-1 G4-2

2017

- G4-8
- G4-1 G4-43 G4-56
- G4-9 G4-10 G4-EC1
- G4-19 G4-24 G4-25 G4-26 G4-27 G4-37
- G4-49 G4-50

" "	G4-EC8
	G4-EC8

- G4-EC8
- G4-EC8
- G4-2
- G4-2
- G4-57 G4-58 G4-SO4

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!

22

100728

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1.

2.

3.

