



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





2017

1,161

/

/

20

3.39

2.09

3.26

2017

13



---

2,360.2	328.3	457.4
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51.12	60.54	118.4 %
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446,225	100 %	100 %
---------	-------	-------

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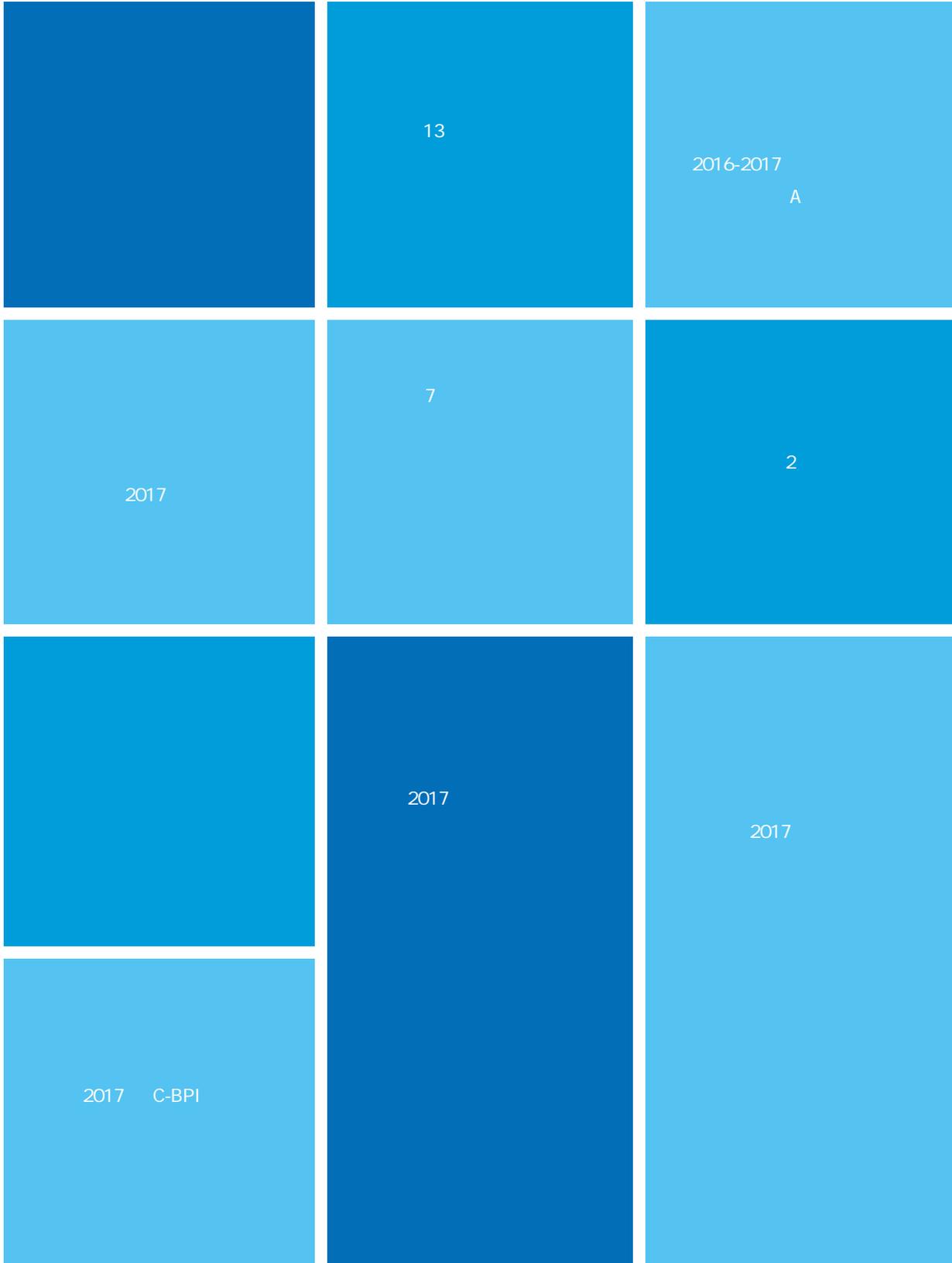
151.88	128.22	41,172
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162.66	5.42	
--------	------	--

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# 2017



E

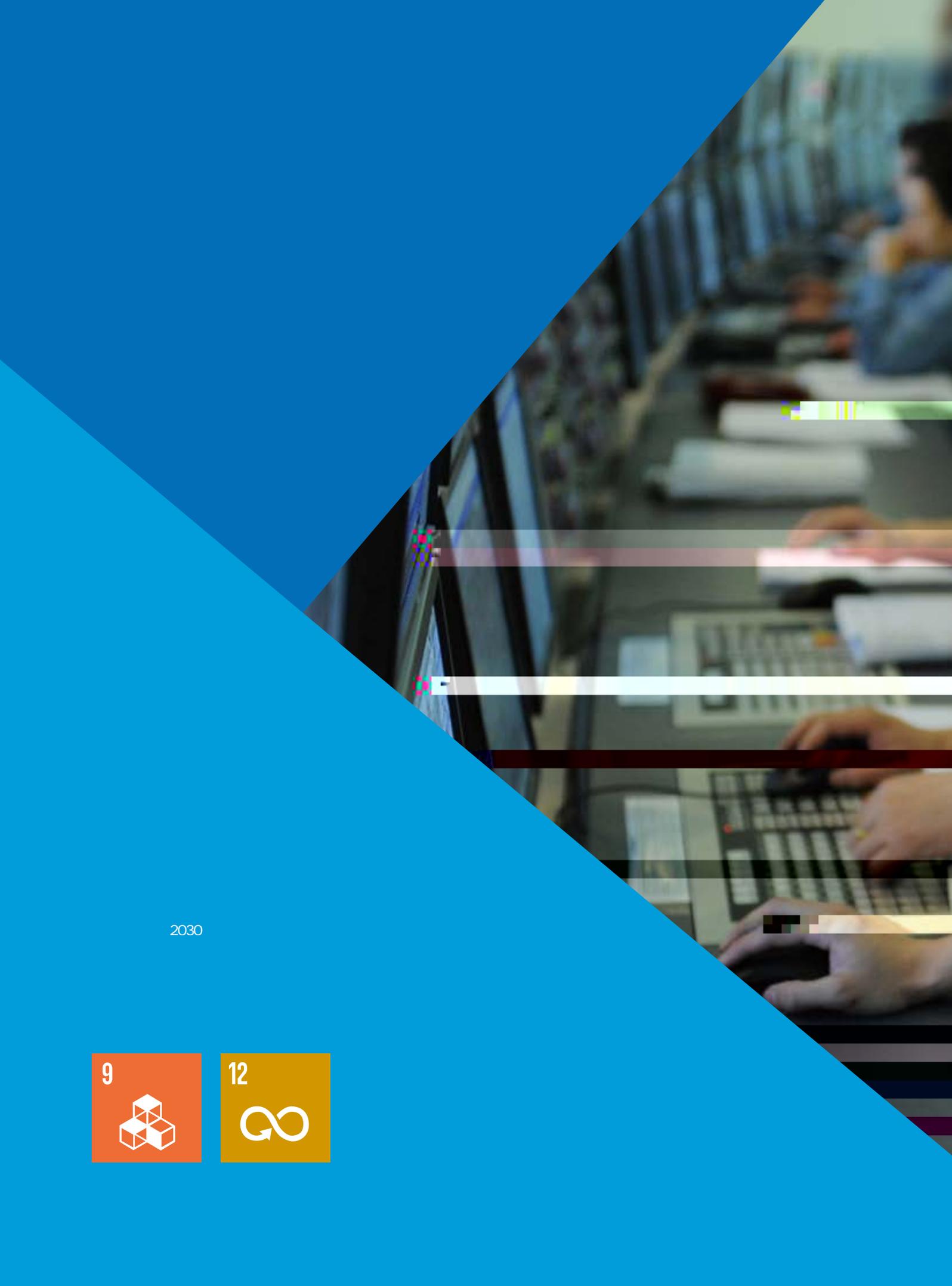
2030

17

TCFD

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

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



2030





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

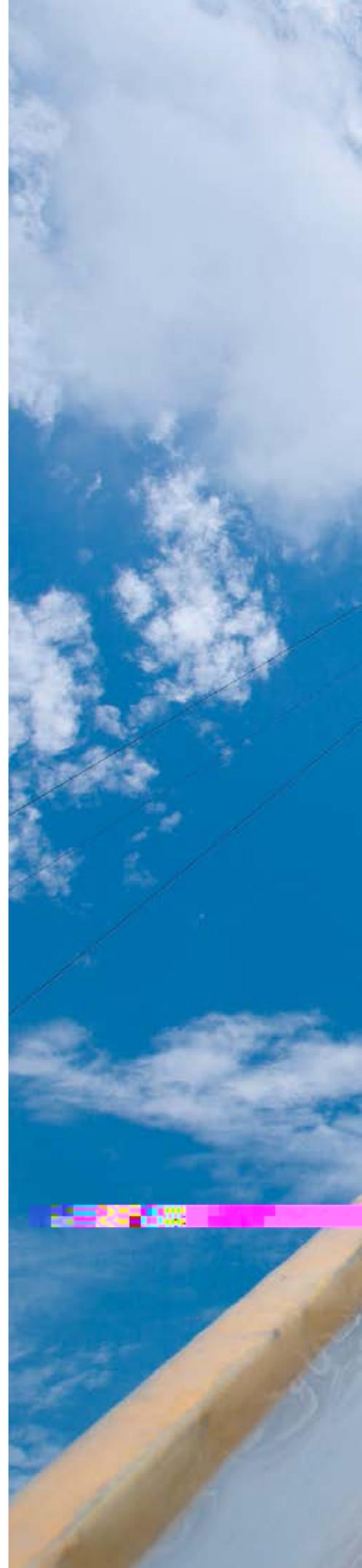
/

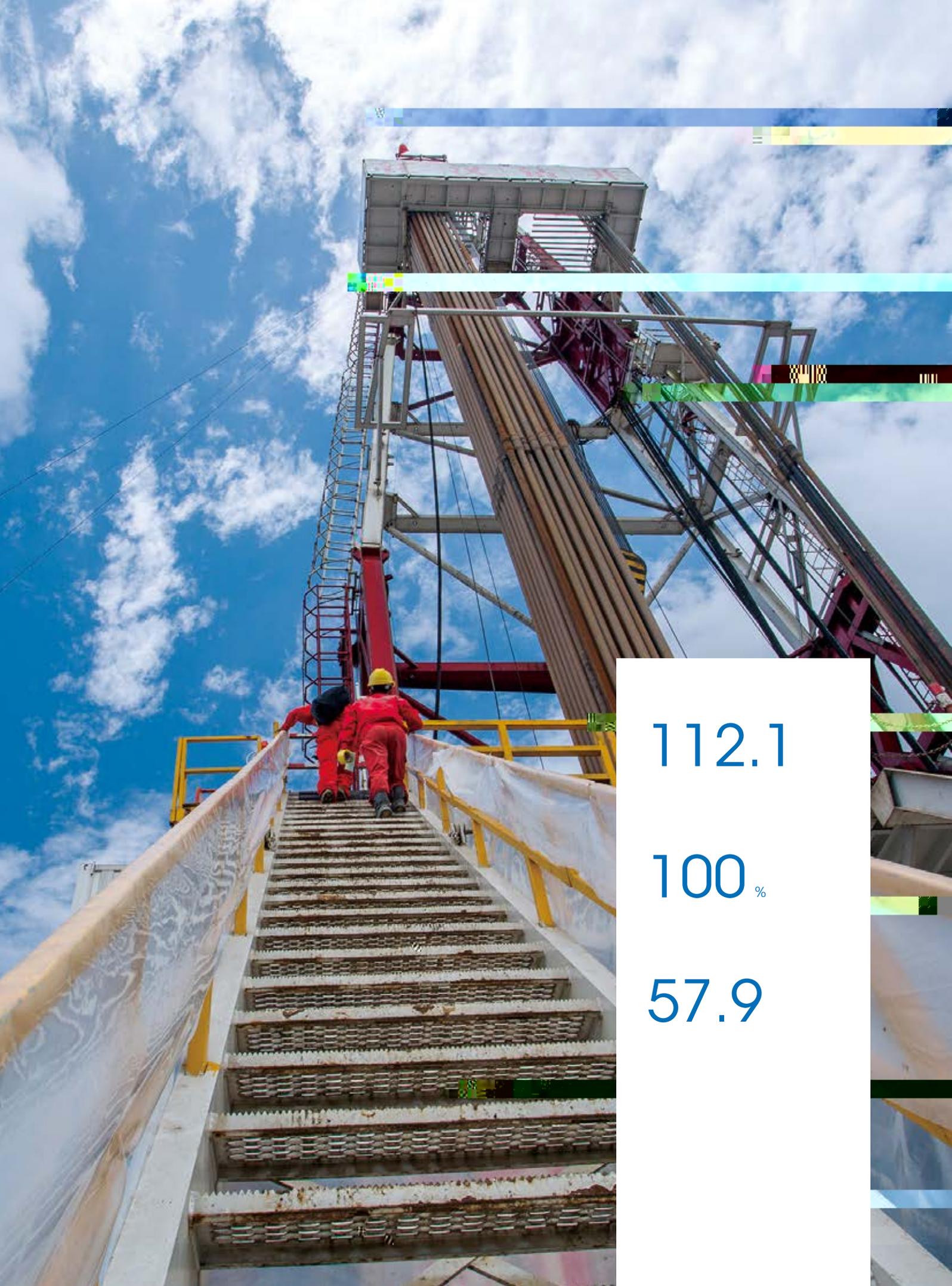
2017

1,105



			47
2017		ERP	
418.4	755.6	1.3	2017





112.1

100%

57.9



2030





2017

2+26

2+26

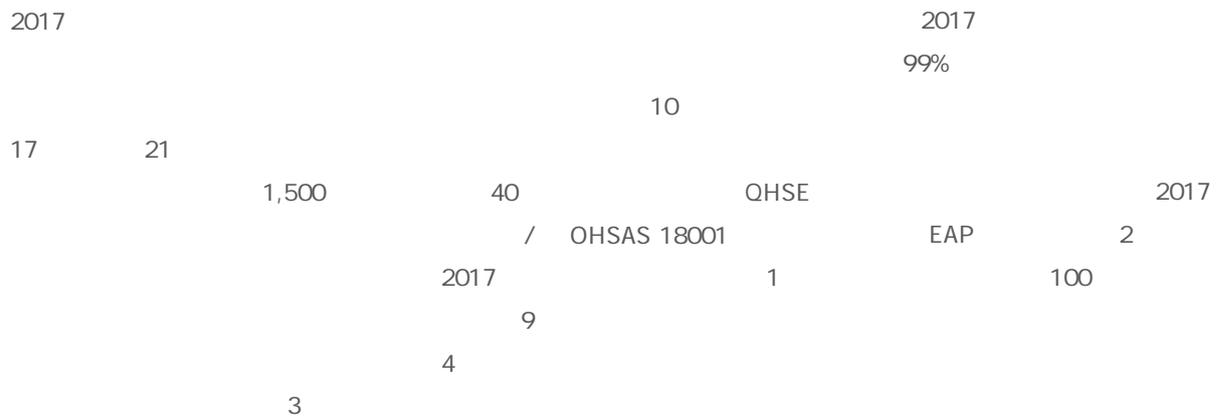
26 2

9

2+26



HSSE

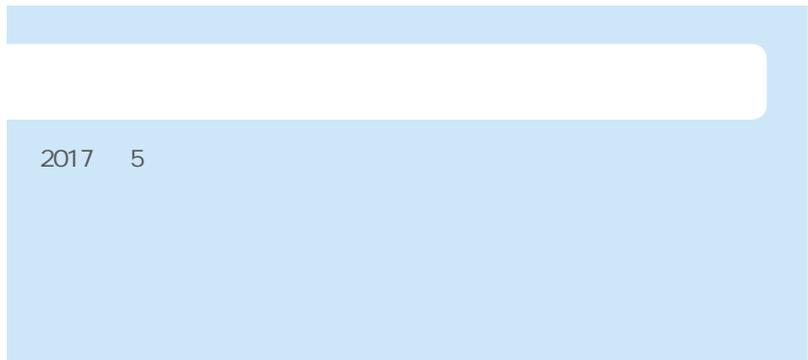


2017

25%

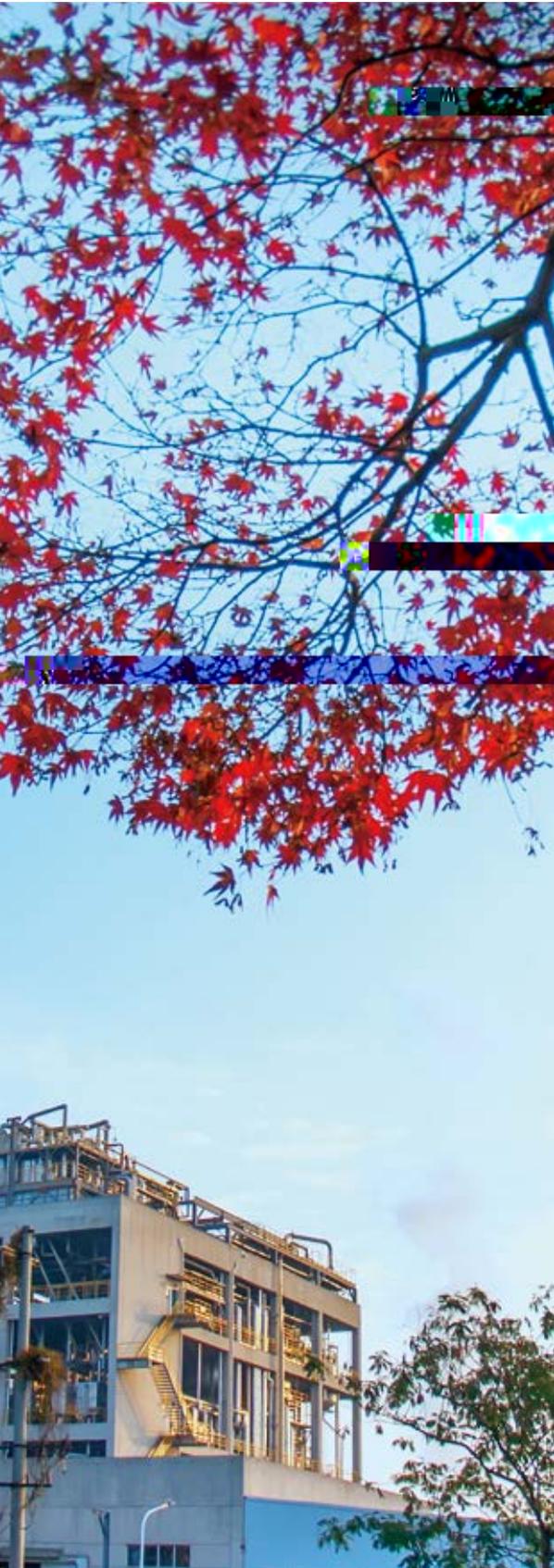
5 /

2017



2017 5





	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

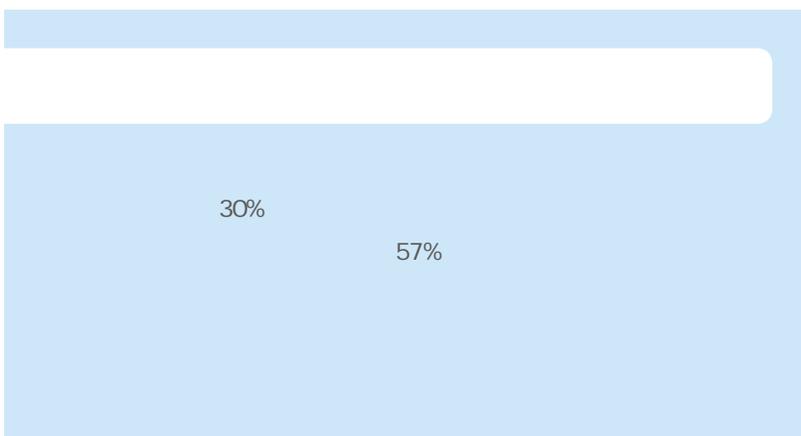
7,796



2017



“



”

—

2030







2017



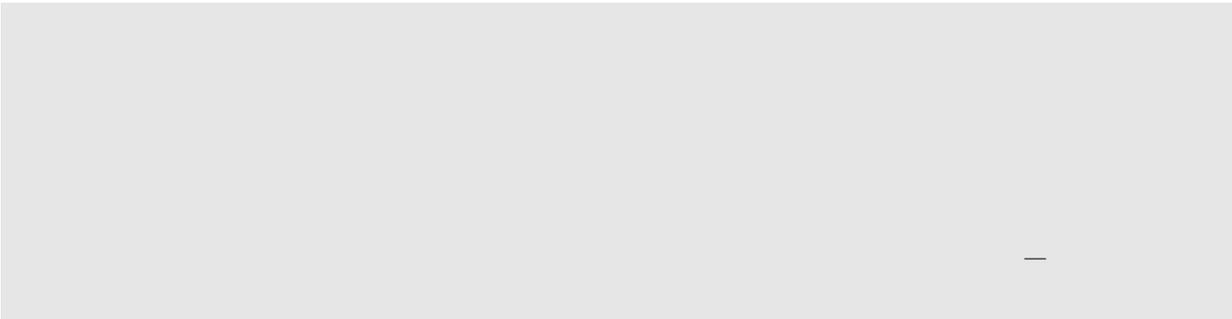
12,453 369



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 " " 48
261	2,157	13,852 513

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



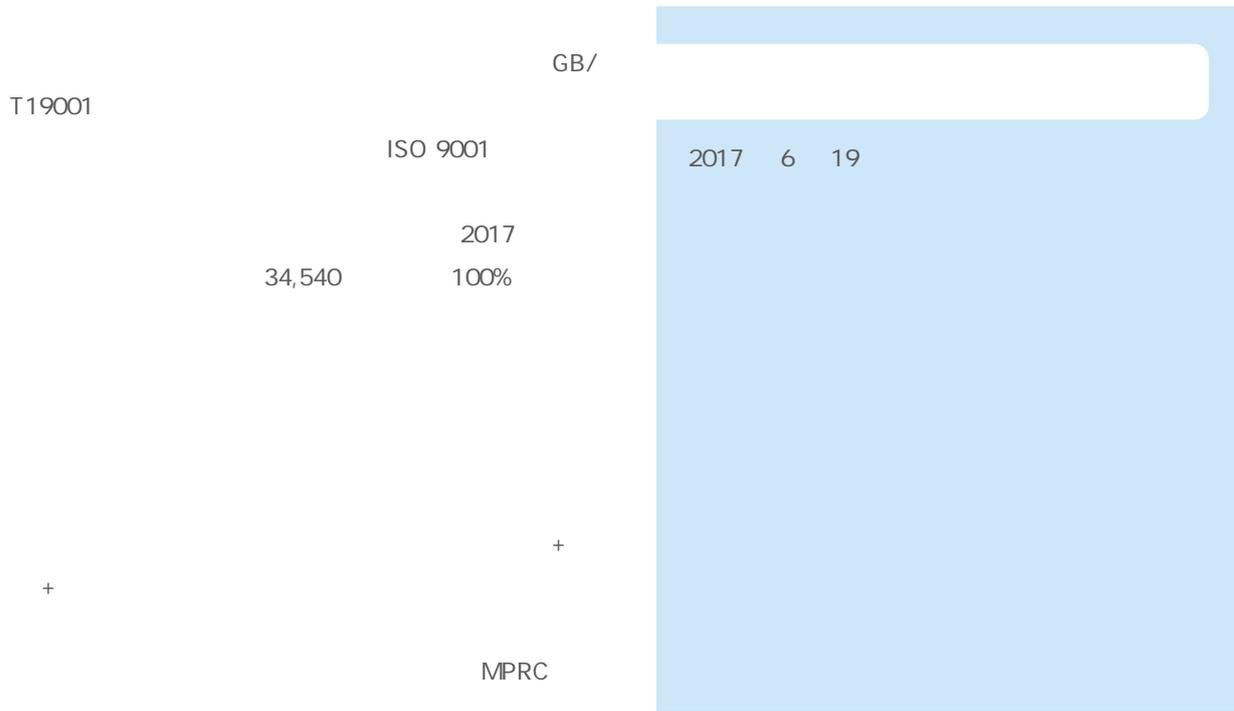
			6
3,193			62
	12.2		2017
24	30		491
	2.5		



			2017
	216		

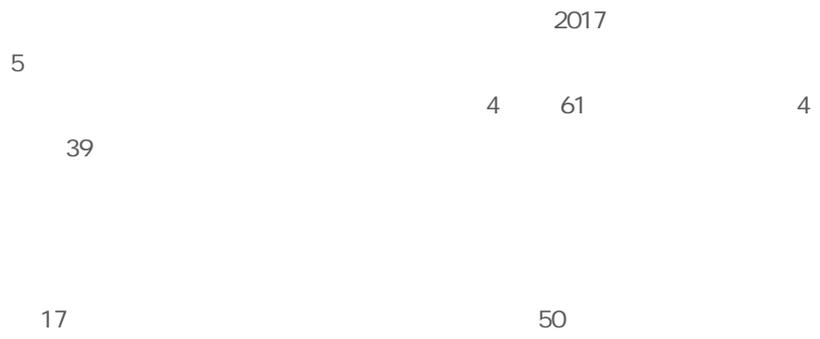


2017			S[ abWU
	2016	1	60
S[ abWU	NW	e	2



2008			<b>2017</b>
		%	84
20		%	100
3,549	2017	%	92
	89%	%	100
		%	85
3		%	100

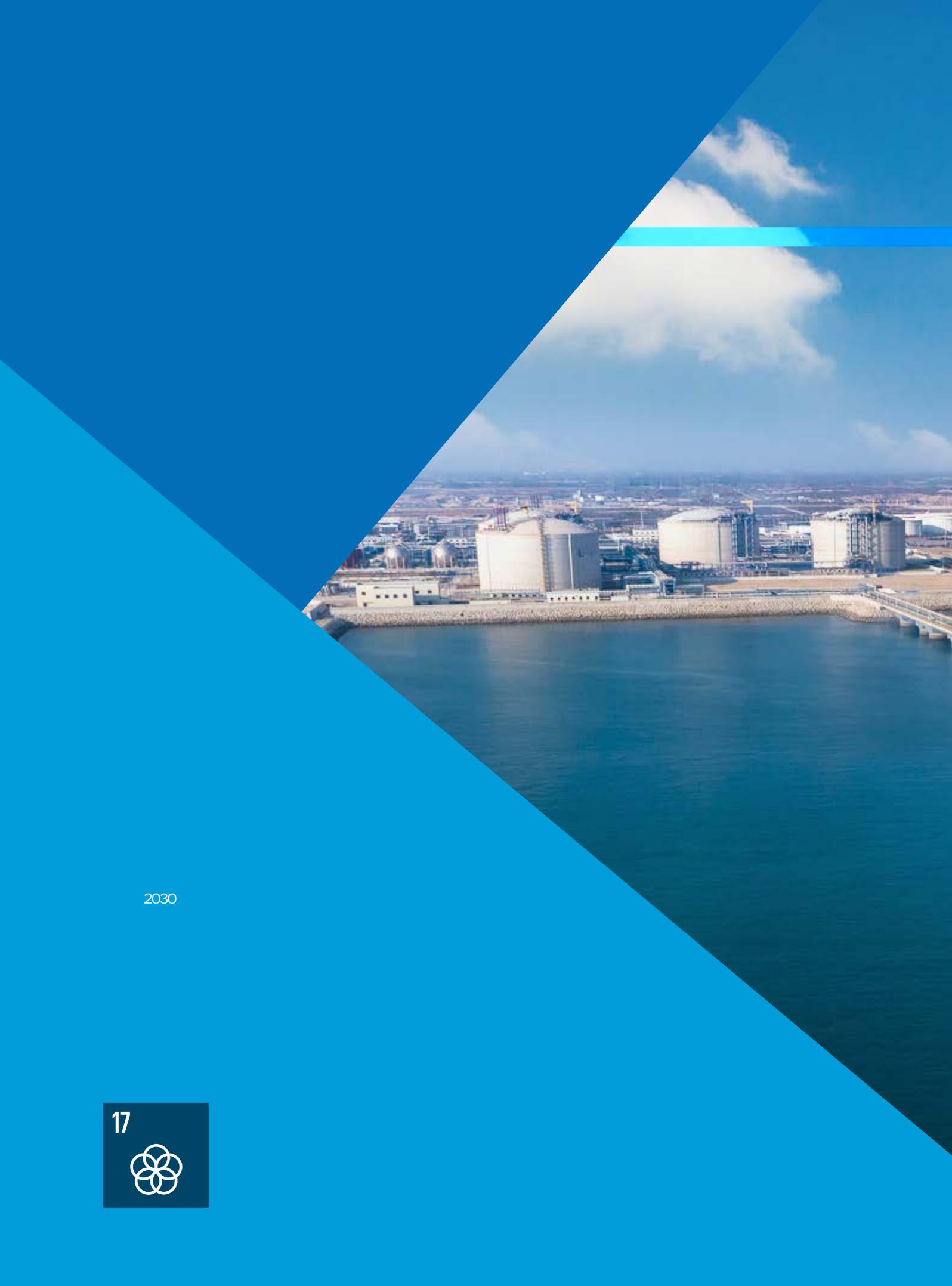
2017



HSE 100%  
ISO14000 ISO18000

2017  
26.7% 1.9





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 /
4		1.05 /			
		2.09			3.39
5	6				

		Ad_ S`	BOL	
		96%	89%	
				95% KOA
				82%
2017		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

CO<sub>2</sub> CH<sub>4</sub> N<sub>2</sub>O HFCs PFCs SF<sub>6</sub>

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

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

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1.

2.

3.



