



**2023**

	1
1.	2
1.1.	2
1.2.	2
1.3.	3
1.4.	3
2.	4
2.1.	4
2.2.	4
3.	6
3.1.	6
3.2.	6
4.	7
4.1. 2023	7
4.2.	7

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# 1.

## 1.1.

E5 ! 4<sup>-</sup>HĐ1•eÁ%áO ü6 eO k"÷ (GigaDevice)1 IÊ • 2005-so /:\_çZ½ • ,%ü" «o -u • 2016-s 8 6 &' <vZÁ!7 £5 1?1 !ž - o 5. ÿ\*µPó!š •-ÿ"Đ\*W §%g1•6. ;.-2!5%go MCUb #< 0 %gXâ ²4,7GEfg... G 4ß5u& "•!"û R k"÷ < k"÷1ä6 \,^Æ 1,700 # #W,äo -u&' ,%ü ;N•%ü ;fè%ü ;4ä6+ ;Qð%ü ;.¶%ü ;4<sup>-</sup>!ÿ&` JH( )%ü\*µ#< &/"9Z½6 ! 4.696f#<!• Š( < E5 ! 4<sup>-</sup>(ÊMÇ+ "i2 Mi"Đ+T [ 9 "Đ+TEf`ìX€&ùFò < k"÷\_ ^ÆQ•Oü Î2' ;"i ÆD Oü=•!(D' ;MpQq^İS\$JH2©4¼o !©!šeL MPé]ª"É š-"cyG²2'4=o 9-"\*ø; "x" ;\*•B<sup>-</sup> ""ËG²"Eí7 \ B-!š`Î <

## 1.2.

[ 9 ÿ\*µ`ìXÁ"i2 Mi"Đ+TEf o E5 ! 4<sup>-</sup><ðFä .R!L-"\*ø; "x" EfL&^ê/&#<`ìX€/&o -u+ u! 9 "i2 Mi"Đ+T 1 DdEf`ì , J`ì <\_ ^Æ!5\*™5 GmEf Fi6 ; ,6 ;d~6 ; Eí7 #<WK!§Z ! o E5 ! 4<sup>-</sup>Pó!š • + "i2 Mi"Đ+TEfC .òVœ d!/ Ef1 Dd"Đ+T ; !#À ! 4<sup>-</sup> ä"É 4ä-7^İS\$.R , o -u\_ ^Æ# Hì =2©o + ^İS\$ !D Ef=(\*£; R2'4= ä"É \*ø; Ef !(p#ìeLPò5ÿ M <

1.1

	2023			
	2023			
	2030	100%		
	2030		2021	50%
	2060			
	2060			
	2030		60%	
	ingPEaD-7Ö			



**GigaDevice**

**1.3.**

R %ó



**GigaDevice**

2.

2.1.



x \_74b2'4==• u X Pé6 Z½( <:!§ !D Ef2'4= <:Ó(•ly[ ; !5 ¶Z½( !D Ef\_74b HFCs;

PFCs <;&" G²?I?j%gEf\_74bCO₂JH <

R %ó <o!dó2¤=(\*£; R2'4=

dó2¤=(\*£; R2'4=Ef6d=• 9MÃMÆ ~D'1 \, oEfD0 u ÖMÃMÆ1? š-"EfD4!š ;?ìOüJHOü=•1? !D Ef=(\*£;

R2'4=o .R!L^İS\$^,DK „ :X€2'4==• 9%ü\*µD4NPD4!š <

R %ó o! u Ödó2¤=(\*£; R2'4=

u Ödó2¤=(\*£; R2'4=6d=• •ecR %ó < ä( ;D0MÃMÆ<:!§ !D ED0 u ÖMÃMÆ1?1ä6 1 2!İ5Ef=(\*£; R

=• <6+: Ex6ä1¤#l :X€X...EÖ2'4==• 9é6 "ÉHb\@C !^,DK „Ef#W,ä\$E! ,í4Ä ;4ä-7^İS\$D';3o ä"É E5 !

4-4Ö !#ÀEf =7 Ò §"ÉAh<@^İ^ ^ÆI , Ef=(\*£; R2'4= <

782m\*øMÃMÆ^,DK „,C !Ef! 6•o 6+: ^İS\$<:!§R %ó „ZÄ!\* ùEf :X€=(\*£; R2'4==•(• Wg1?H9o!

2.2

		/

### 3.

#### 3.1.

%B E5 ! 4 :X€=( \*£; R2'4==• \*W&'Eó2pED<J ;`Í<JEf6` õo 6+: Ex6ä`Æ"Õ ä 4,;Ô\*ø=( \*£; R^Ú WK`Î" o!

2'4==•Ef=( \*£; R2'4=Î`ÆD' IPCC2006%p\*.-\*\*¥; T= "V2 "X ,2'4=Kú4o;Ôo "ro!

=(\*£; R2'4=Î = <:;!\$4o2mp2'4=%B\*ØdC "x5•>[!¾o oÔoxpdoØoÙpdoÚoêoã`ÆD':c4,;ÔZ J-Ef2'4==•6 o!D4NP\, o (D4!\$) ;(@5; ; <;&" G2?l?j%g\_74b CO<sub>2</sub>; ¶)'\_74b HFCs; PFCs; k^e (95#@Â;) <

%ù\*™@Â?æ#Hú!\$@Â?æEf=( \*£; R2'4=ÎZ J-o 1? ~D'Ef2'4=%B\*ØBCC2006%p\*.-\*\*¥; T= "V2 "X %p\*.Op='MàZø-uãù ;Ef WHî < GWP6dPé • IPCC2007J-%Ü:"ZÅ 11!#K<

6+: R %ó ÿ ;R %ó <(\*£; REx6äEf2'ecdç8ÚZ½\*™ 9"T ÿ2'4==• ix • 0.5% ( )2'4==•# Z ix • 3%<

#### 3.2.

6+: R %ó =( \*£; R2'4= ,o #W,ä,í4Ä ,EfQ)ly,í4Ä=( \*£; R2'4=ÆD' š-"\$E1af1Ef=( \*£; R2'4=Î ä"É# KzZ J-4,;ÔZ J-. ù < !#Ä =7^Í^<:;!\$Ef=( \*£; R2'4=ÆD'%üeD; Q)MÄMÆ ICAO \*—4,2Ï šEf Carbon Emissions Calculatoro ICEQ /J- <4ä-7^Í\$D';3 ;?j^eo ixcÄo ,í4Ä"É !#Ä =7 Ò §<:;!\$ Ef=( \*£; R2'4=Î 782m\*\*¥; T79J~ TKü o GHG Protocolo , \*ø • R %ó =( \*£; R2'4=Ef`Î" X€;A o "ro!

=(\*£; R2'4=Î = <:;!\$4o2mp2'4=%B\*Ø oÔoxpdoØoÙ

u ,o ?j^eo ixcÄ,í4Äo EfG2'4=%B\*O`ÆD'üeDcÄiOSBInternational Union of Railwaye , r • , %üixcÄ :X€M¾\iG2'4=%B\*O /J-ø

## 4.

### 4.1. 2023

E5 ! 4<sup>-</sup> • 2023-sR %óÿ #R %ó E f=( \*£; R2'4=Î p 9 6,321,376.01" B J ;&" G².R`Î (kg CO<sub>2</sub>e),  
 R %ó ^ÚWKEx6äE f=( \*£; R2'4==• ,o\$E! 4ÄWK=( \*£; R2'4=Î pZ 851,243.28 " B J ;&" G².R`Î o kg  
 CO<sub>2</sub>eo <

### 4.2.

E5 ! 4<sup>-</sup> • 2023-s R %ó ÿ#R %ó E f=( \*£; R2'4=Î p 9 6,321,376.01" B J ;&" G².R`Î (kg CO<sub>2</sub>e) <

4.1 2023

	IC-Park	kg CO <sub>2</sub> e		kg CO <sub>2</sub> e		kg CO <sub>2</sub> e	kg CO <sub>2</sub> e
	5,788.80L	12,735.36	2,618.83 L	5,868.21	3,779.00 L	8,313.80	26,917.37
	/	/	14,079.00m <sup>3</sup>				



(1)

4.2

2

		kg CO <sub>2</sub> -e	kg CO <sub>2</sub> e	
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### 4.3

R %ó 2'4=5. E5 ! 4<sup>-</sup> -"\*ø; "x" Ef ÿ(&`ì?),g...&Po R %ó 2 ö ;cý =7#< =7<:!§ !D Ef u  
Õdó2²2'4=" 1ë`ÆE,\"ž6O4`Ef^Ĭ^' ;#W,ä\_ !ă ; !#À ~D'#<5ÿMÇ( NmJHB®Q• <

2023

851,243.28"B J <;&" G<sup>2</sup> 4

¥ • 2023 -sc†\*øPé6 "ÉHB\@C !^,DK „Ef4ä-7^ĬS\$ø ä"É E5 ! 4<sup>-</sup>4Ö !#ÀEf =7  
Ò §"ÉAh<@Ĭ^1? !D Ef=(\*£; R2'4= -ÿ+T ..2 Mi/&Ef4o2m45eÅ&ù• .R!L4o2m\*4s/&eO!5o 6+: 1²#I5•  
^ÚWKE÷ rEx6äMÒèf1 <

## 5.

[ 9 gC g... GEf"l\*û RZ½Z o E5 ! 4<öFä ÎN ; "x" EfL&^ê/& o -u+ 2!5=(\*£; R2'4=XÅ 9 "î2 Mi"Đ+T1 DdEf`ì , J`ì <

2023 -s-¥ o E5 ! 4 4Ö \C ! EfG²2'4=J C ,ä ["Ö.- ...Hî6€^Ú+T <&'2'4=77J-4,fa o 782rĚ ÷ r =\*\*¥; T79J~ TKü X€;Aö ZÄ!\*#<^î" ... k"÷R %ó ÿ ;R %ó <#<\_ç! R %ó :X€2'4==• Ef=(\*£; R2'4=o 1ª f1 ...2023 -s-¥Ef=(\*£; R2'4=Î4o2m <

:c( o E5 ! 4 ¥&' „\_çHî6€2§^Ú Q•Oü Î2' E ÷ r2©4¼oS<\* \C !D'OüD4; " o 2§~ "î CED Oü =• ~D' < # Oα7;5 eÅ1 D4î6 eO k"÷ ,ñ • 2023-s 106 \*< g^½1 100%D4; " 48\_ < •:c# 4õo # Oα&ù&B~ 6 +Jgu H KúMϑ,ñ\* < g1" d^ÏWKo 2023-s g-s "î CED Oü=•ĐD4'Î^½27.75 MWh <

:c# 4õo &' 2023 -so E5 ! 4 ^ \*øPé]ª š-"cýB®Q•EfG²J C "É à/n;ž\_ ,ä [^ÚWK ... gfaEf<đ" 7² C < &' 2023 -s =7 š-"\$E+0Q•Oü Î2"ÉMpQqOü=• ~D' +T-ÿ;ž\_ # [ o \*ø š-"cýD'Oü"É ÎG²Ei7 Z½Nm/Ä ^ÚWK à/n45eÅo -u E ÷ r š-"\$E^½1 "î2 Mi"Đ+T"NZ-o !ÿ\_ 2§!§4s ) š-"cý Ef MG²^k&Š <

; "x" 5. g 'Kzfa 3Ef p# 2 1 < E5 ! 4+ HÈ1~ "HĐ1•! 4o \JOüN•(|D <: "Ef~#|o äMpQqHĐ1• !"šN•(|D <: o 4>-> ;WK #<H= # DK391J-u^Ú o 9\*•B~G² ,#\ B- MpQq ö ; <