



Tsinghua University School of Economics and Management

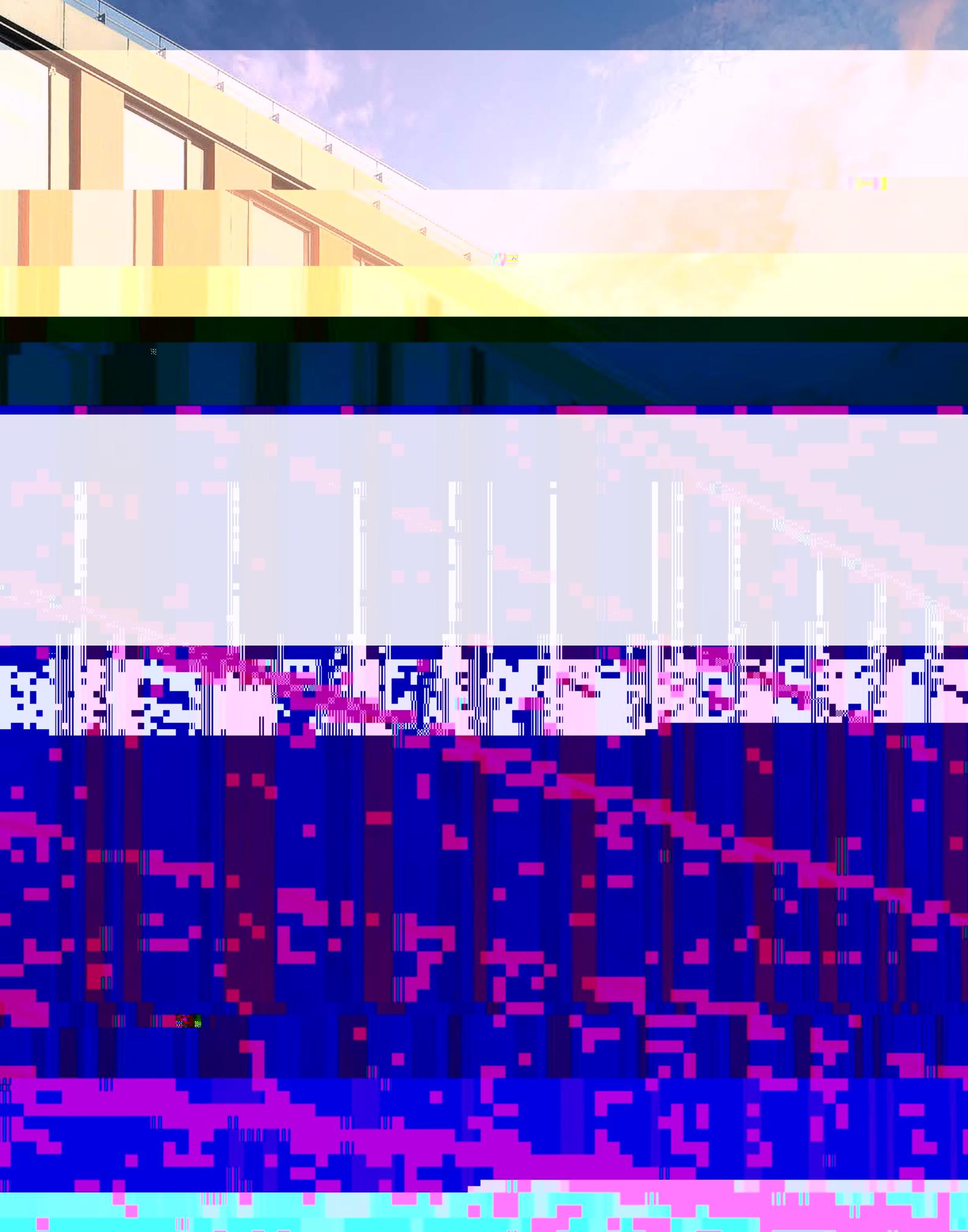
Carbon Footprint Accounting Report (2023)



SEM
TSINGHUA UNIVERSITY
清华大学经管学院

清华大学经济管理学院
School of Economics and Management, Tsinghua University

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"c " " " c c " c " " c "ec d " " " d "4252"c "
ce "ec d " c "d "4282"c "c " "e c " " " e "
c " " " e "c "ec d " ." " " " " c " "
" e ."c " " e ec "c " e e" c d ."V c"UGO" c " " "
c " c " ce " " / "ec d " "c "42570V " c " c ."



3. Path and plan of implementation

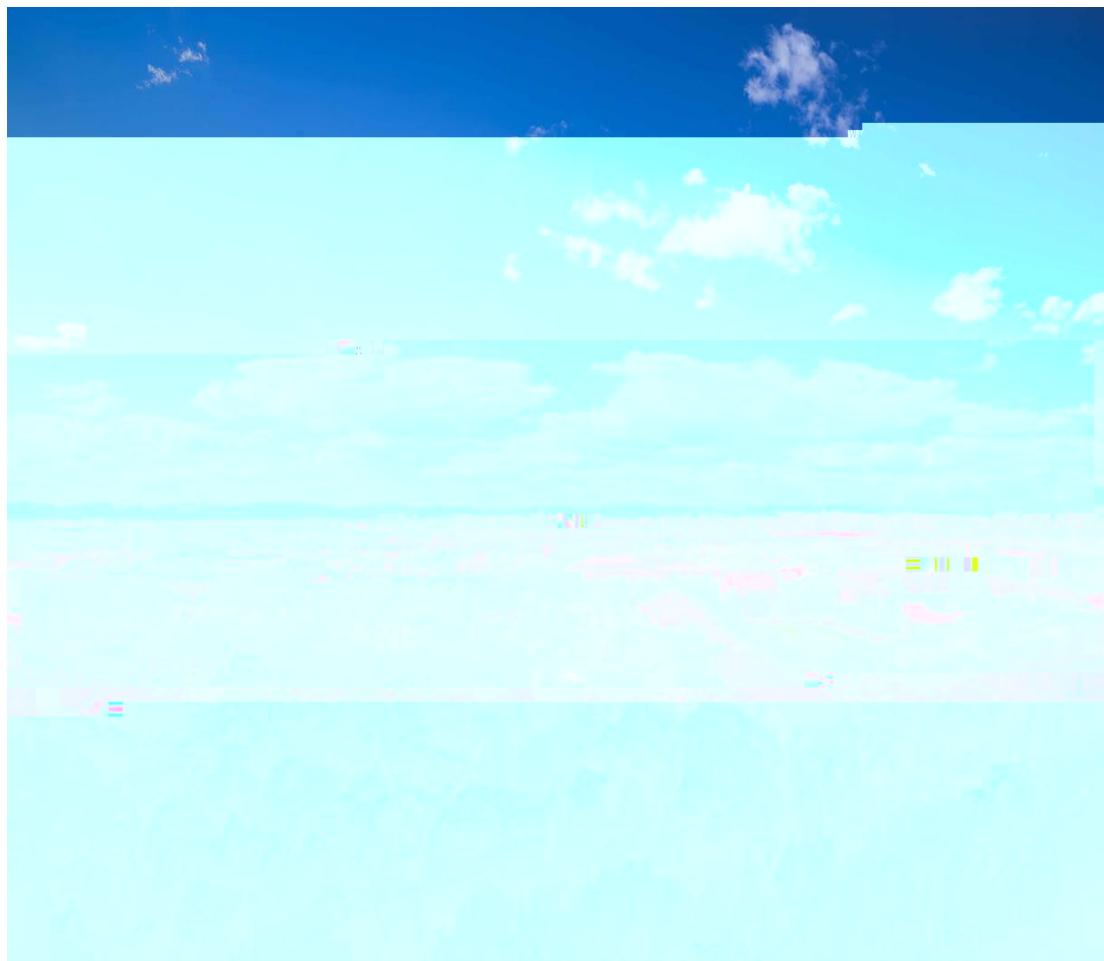
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e " c "ce " c " Ø " c " " " ."V c"UGO" "
ce " " "c " " "e c " " " c c " c " " c c "
" ØC c ." e " " c e " " c c ." " "
" " e e "c " " c " " " " c " " " " c " "
"c " " " c c " " 0

"c " "c " " " ."V c"UGO" " " " /ec d "
c " " e " c "c " c " ce e ØV "e " " " " e "c "
ce e ."c ec " " e e" e c "c " c " " " e "c "
c ØH ."V c"UGO" " e c " " c " ce " "c " " /
ec d "c " " ."e "c "e e ."c " " " " d e" c c ." "
e c " " " c " e ." d "e d " "c" e " "ec d "
0

C " "c " ."V c"UGO" " c "c "ce " " " c e ." "c "
" c c "c " " e"ec d " " e e ØD "e d "
E " " " " dc "e c " c e " ." "e " " " e e"
"c " e c " " " c " e / c " e ØV c"
UGO" "d "e cd c "c " e c " c " " e"c " c c "
. c e " ."c " " " " e e "c c e " "
"c "c " " " /ec d " e ØC c ." "e "
c " c e "e c "c "e ec " " " c " " e " " "
c ec " " " c " " c /ec d " e "ce " " e c " c 0

"e e ."V c"UGO." c " " " " c e " "e c "e c "c "
ce " c " " " c c "c " " e"ec d " " e ." "
ce " " " d e " "ec d " c ØV c"UGO" "e " "

" " . "cee c " e "c "c c e " " ce @V "e " "
c " " c " ec "e d " " "e e " " "c" c " " "
c "c " " c c " " ." c cd " 0





1. Measurement scope

C"ec d " " " " "e c " " " ec d " " EQ4 "c " " "
" c " I J I " e " " e " e "d " c ." c c ." "
" " e " "c" e e" c ." c " c " " " ec d " "
" c " EQ4 0 " "c "c"e ec " e" " c c " " ce " "
e c "e c ." ec " " e" " e" e " " c "ce " " " "
0

V "ec d " " "c " c c " e c " " c " " "
c " " c "d "c " " 0 0" e " "d " " " " c 0
V " " ec " " " " c c)" e " "e " " 0 0"
e e "c " c "c " "c " e "ce " ." e "c " "e " "
"e c " c c "c " 0

2. Measurement methodology

V " " " c " " ec d " " " " ce " c c" c " "
" ce 0 c ." c c c"ce " c c ." e "c " "e " "
e " c ."c " c c" c "c " c 0 V ." " ce " c c" c " "
"d " "e " " " ce " e " "I J I " " "
" ce " c c " " " c "I J I " 0



1. Organizational boundary

Vc " c c c c "d c " "ec d " "cee " " cd "dc " "

Q c c "E e V"V

Ue "3" e c " " "V c"UGO)" e " "e d 0 Ue "4"
e " " " e e "c " e c " c "e "d "V c"UGO 0
Ue "5" e " " " " / e " e " e "c "d " c ."
e c "c " c ."c " " e " " e 0

(1) Ue "3" e "

V c"UGO)" Ue "3" " e " "c" "ec 0 Dc " " " c " "
e " "4245."V c"UGO)" " "4245" "205" " EQ40

(2) Ue "4" e "

V c"UGO)" Ue "4" " c "e "ec d " " c "d "
e c " e e "c " e c " c 0 V "ec d " " " e c " "
e e "c "e "dc " " "e " "V c"UGO)"D " "
ce "c " c e " e "c " " e " "D " U " ec 0
R e c " c " " " " ce "c " c e " e " ce " "D " ".
e c " "d " " c " c

(3) Use "5" "e"

V c"UGO)"Ue "5" " " c "e " "ec d " " " c "d "
 d " c " c ." c "c "ec ." e c "c " c "c " " " c " c 0
 V "ec d " " "d " c "c "ec e c "dc " " " c " e " "
 V c"UGO" ce "c " c ."e " " " " c " c " c ".
 c ."c "ec 0C c ." "ec d " " " " e c "c " c "c "
 " c "c "e " "dc " " "e " " " " e "c "V " c"
 UGO)"D " ce "c " c e " e "c " " e " " "D " U " "
 ec 0V " c "ec e c " "V c"UGO "Ue "5" " " "4245" "
 363564" " "EQ40T " " "cd "d " " c "d c " " c c0
 Vcd "4"V c"UGO)"Ue "5"Ec d "H " "4245

Scope	Consumption category	Carbon emissions (tons)	Total carbon emissions (tons)
Scope 2	Municipal water	3.84	
	Car travel	206.24	
	Train travel	10.72	1413.32
	Air travel	1153.64	
	Paper	38.88	

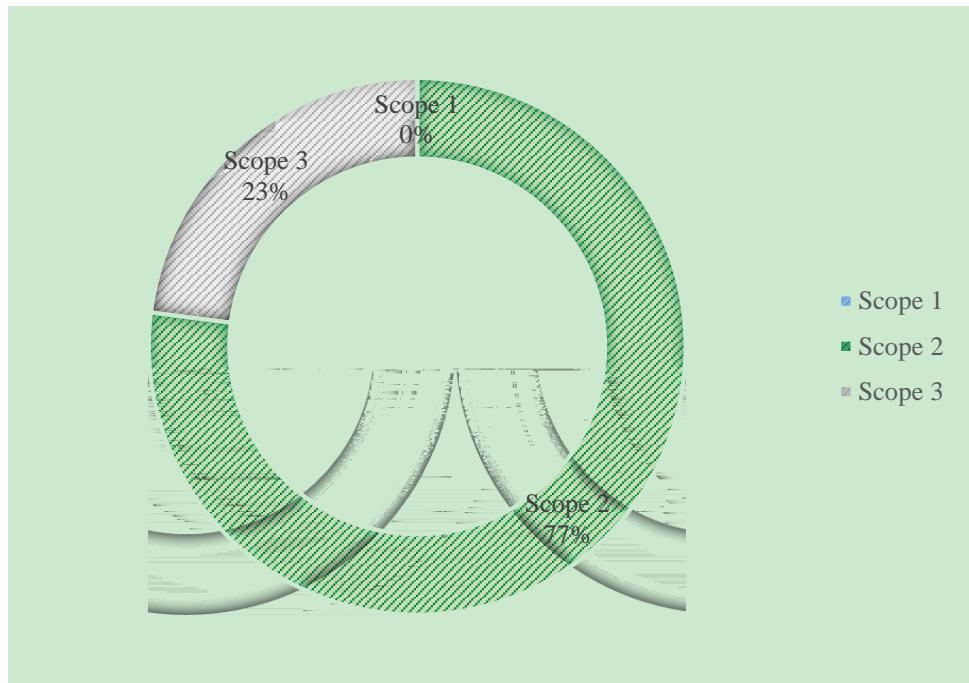
(4) Use c

Dc " " "c "ec e c ." " c "ec d " " "V c"UGO "
 "4245" c "837204" " "EQ4." " e " " " " "Ue "3" c "205" " "
 EQ4."Ue "4" "695868" " "EQ4."c "Ue "5" "363564" " "EQ40F c "
 d c " " c c" " "d 0

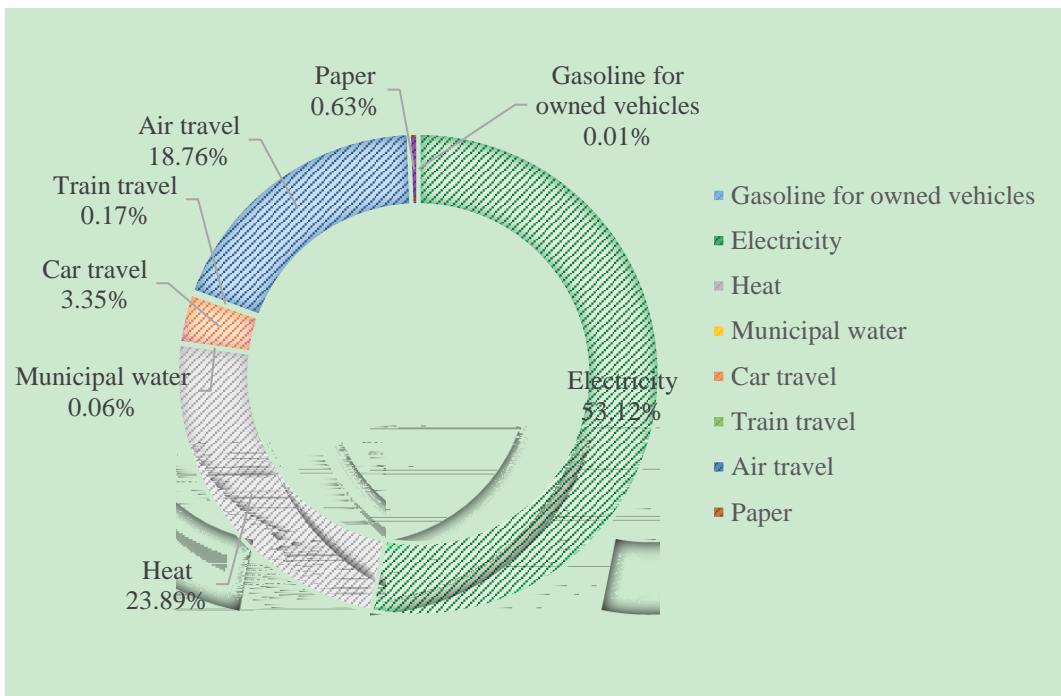
Ved "5"V c"UGO)"Ec d "H " 4245

Scope	Consumption category	Carbon emissions (tons)	Total carbon emissions (tons)
Scope 1	Gasoline for owned vehicles	0.73	0.73
Scope 2	Electricity	3267.20	4736.46
	Heat	1469.26	
	Municipal water	3.84	
	Car travel	206.24	
Scope 2	Train travel	10.72	1413.32
	Air travel	1153.64	
	Paper	38.88	
Total			6150.52

H " " e " I J I "cee " e ."V c"UGO)"ec d " " " 4245" " c "e " " "Ue "4" e " "c "Ue "5" " e " "ec d " "0U e ec ."Ue "4"ec d " "cee " " " " "c ." "9903' ." "d "Ue "5"ec d " " " "c" c " "440 : ' 0Ue "3"ec d " "e d " "c " " ."cee " " " "203' 0T " " " "e c "d " "c" c " "c " " " 0



H "3"V c"UGO)"Ec d "H "Uec "U e " "4245
 H " " e " "e "ec ."V c"UGO)"ec d " " "
 4245" c "e " " ec " e e ." ec " c" c "c " c 0
 R e c " e e " " " " c " "ec d " " "c"7504'."
 "d " e c " c "c "450; ".c "c "c "c "3: 08' 0V ." " "
 ec "cee " " ; 709" " V c" UGO)" e "ec d " " 0 V "
 c "e "ec "e d " " c "7" " " " c "ec d " " 0
 T " " " e c "d " " c " c " " " 0



H "4"Ec d "H "Uec "U e " "4245 E "Ec

5. Managing data quality

V "I J I " " " "c " " " " UQ36286" c c "c " " " e " "

e "c " c e ."e ."e e ." c c e ."c "cee ce @Q " c c"

c " c c "e " " "e

S c "e " c "V " " "e c "d " " c" c "c " "

c c " c " " " c ." e " " ec" c "c "d " "

e 0

S c " c c " "V " c " " d " " cd " " c e " c " "

e e " "e e " " ec " c c" c " "c" " " "cee ce @V " "

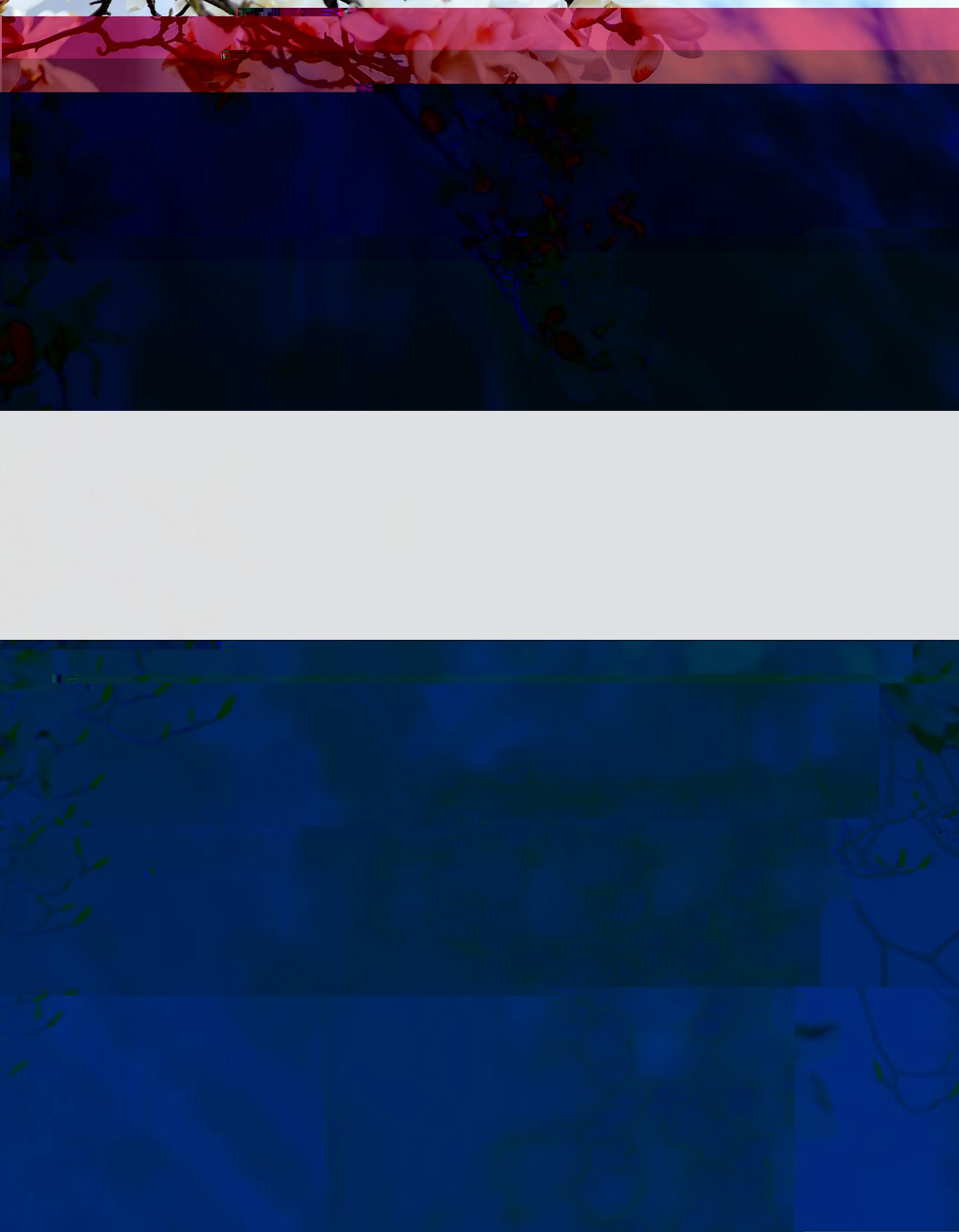
"e " " " " e " "cee c e " " c "e e 0

Q c " c "e e "V " c "e e "c " c c "c "c " " " c c."e c " "

c " " " c " "c "e e "c c "c " " " " " " " "

" "cee ce " " " c c0





1. Utilizing disciplinary strengths and exploring academic frontiers

V c"UGO" "E c)" e e" ." c e c " " "c"
c "c" " c cd " c 0Cec e" c e " " e" e "c" " "e ."
d " " e ."e c " ec" d "c" c cd " " c "
c "c" ec" " " ce 0D "4242" c "4243." ce " d "
d "c" c" "97" c ." c "c" ec" " c " " " c cd "
" c " UFI " "d" " e" c" " c c" c "c" cec e"
e e 0H ."V c"UGO" c" cd " " c e "e "e " "
c " " /ec d " c cd " 0V "T c e "E " "I " "
Ge "c" U c cd "F " "V c" W " c" " " "O c e "
42370V " " "I dc "F " "V c" W " c" " " "42380
V c"UGO" " ec " "e e "e / " c e "c" " "
d e" c " "ec d " c 0V "e " c " e " " c "
" e ." "c" e "c ec" " ec d " c " " " "
e e" c" c " " "E c)" c /ec d " c 0

2. Fulfilling the responsibilities of a think-tank and making public suggestions

V c"UGO" c "d" "ce " c "c" c "cec e" ce "e " "
" " c " " c /ec d ." e "c" " E c" Ec d "P c "72" H "c" " "
E c" Ec d "P c" Ge e" R e " c ."c" "c" " "d c " "
c "c" e " " " c " " c /ec d " c 0 "O c "4243."
V c"UGO." "e cd c " " " " "G c" R c " " "
O " " Ge "c" G " " " O GR." c " " cd " " " E c"
Ec d "P c" 72" R)" H " " " cec e" e "c" " e c"
" " " " e / c ."c" "c" " " " " "c" "
c c 0Q "L "46."4243." "V c" W " E c" Ec d "P c"
Ge e" R e " c ."e / "d "V c" UGO" c " " " " I dc "
F " " V c" W " " ce " D 0V " " " " "
" " " " ec d " c " c e ." " c " " / " e " "

cd "c" d " " " c " "E c "ec d " c" e e" e 0Q "
 F e d "44."4245." "4245"V c"W "H " "Ec d "P c "Ge "
 " ce 0I "d "V c"W "c "E c"R e ec"E c "
 UP QRGE ." " c"e / c "d "V c" UGO."V c"W "
 " "Ec d "P c " EQP."V c"W ."c "Ge e"R "
 E c0Rc e c " e " c " " / c " "c " "dce "
 " c /ec d ." e " " " " Ec d "P c " "J /S c "
 F 0

3. Optimizing talent training and helping to improve industry

Q "L "7."4245." "E " "V c"W " c" cd 0V c"
 UGO."c " " " " c " " c ."ce " c e c " " "
 c c ."e e "c "c "e c " " " " "E 0V "
 e " "c " " e " " c c " " ec " " " " "
 c " "c "e c " " " c0V " " " " "E " " "
 " "c " "e " " c "c "c ."e c "c " " dc "
 " ."e d "V c)" " "d "c"e " " "
 c "c "c " " " ."c "c " " c cd " " " c "
 e 0

'C "4243."V c"UGO "d c " " E c"GEQ"G " c " "cee c "
 " c " "c"e "c " "ce "c " " "c " "0
 V " "c " e " c " " " E c"GEQ"G " c " " ce "
 F e d "4243"c "O c "4245" e ." ";8" " c " " c /
 ec d "c " c " " c e c "c "c "0J c " " " c "
 E c)V "722" c " " "V "722" c ce "e c 0V " c "
 c " " cd "c" / "c " " " /cec c/ c e " c .
 c c e " c e "c " c "c ec " "e " e " " " " "ec d "
 c ."c "e d " " " c c " "E c)" c /ec d " c 0

O . "V c"UGO" " " "c" c " " c c "c " e "e " "
 c " " c cd " 0V "e "e " " "c c" e "c" " "
 ." e ." e ." c ."e ec" ." c " e ." "
 " c c ." c ."e c " d ." c " e /e c "
 c c 0V "e "c " c "e " " "V c"UGO)c " c " "
 c 0

4. Creating low-carbon campus and renovating existing buildings

V c" UGO" c " c " c" c " e " " " c cd " "
 "c " c " e " " "ec "e e " " c 0V " "
 "d "c " " "c"e "e " " /ec d ." c "c " c " "
 e 0H " c e ." V c" UGO" "d " N c" D " e "
 " "e 0H " " " c ." " e " " /ec d ." "
 ." c "c " c "e e 0 "e " " c " /ec d " "
 / c " e "c " c ." e " " e " c cd " e "
 e ." c cd " e "c " c " ." c " e " " /e "c " ". "
 "c " c " " c " c ."3 /Ec " c / c "c c "c c e 0F " "
 " " e "c " c e " " c cd " ." e e " " ". "
 e e "c " " c ."N c" D " c "c c " " / c "e ec " "
 "d " " "42430H ." " e "NGGF" I "e ec " "
 "WU I "D "E e " "4244."c" e " " "c e " " "
 c c" c c 0

V c"UGO" "ce " c " " /ec d " c "c " c " " "
 "d ." c " "e " " " c cd 0V " c " "
 e " "V c"UGO)"Y "D " " " "c" / c " "d " "
 e ec 0V " " e ." " " "e e ." c ."c " "
 c c e ." /ec d " " " "d " e " " 0
 N "c c ." "e "c " " " " " c " " cd " " e "c "

c" "0" "c" " " "c e" "c "

- [1] J c "[0Ec d " c ."ec d " c "c " "c " " e e"c "
- e c " c e"e c "]LØ c c "Vc "G e c ."4243." 2: "3: /3;
- [2] V " e " Y "I c e " "Ec d "F "R c "c "Ec d "P c "
- "H "c "He " c " "P "F "R " c " c "]LØ
- T e "c "J c "U ."4243" 33 "8
- [3] U c cd "c " c " " " "e e " " " "ce " " c " "
- c "ec d "]LØG "E e "Uc c c ."4244" 24 "49
- [4] I DIV"73588/423; ."Uc c " "d "ec d " "ec e c "]U
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- [6] FD33IV" 39: 7/4242."T " "ec d " " " "cee "c " " "
- U e " "]U
- [7] D "O e c "Ge "c "G "D c ØD "Ec d "G "T e "
- O " "N "Ec d "Vc "V c "X ."42420
- [8] VIEGETRC"223/4244."E " " ce e " "c / ec "e e "c " d " /ec d "
- c "]U