Carbon Beta and Firm Characteristics

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November 2022

We have now added a title, author and date to our first \LaTeX document!

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Table 1: Carbon Beta and Firm Characteristics: log_scope1 emissions

	1able 1: Carbon Beta and Firm Characteristics: log_scope1 emissions						
	(1)	(2)	(3)	(4)			
	$carbon_beta$	$carbon_beta$	$carbon_beta$	$carbon_beta$			
logsize	-0.405*	-0.352*	0.107	0.0785			
	(0.225)	(0.203)	(0.300)	(0.309)			
bm	-0.142	-0.123	-0.387	-0.428			
	(0.271)	(0.254)	(0.318)	(0.332)			
1	0.000	0.775	0.000	0.010			
leverage	-0.902	-0.775	-0.296	-0.212			
	(1.507)	(1.394)	(1.113)	(1.068)			
mom	4.200	4.126	-0.634	-1.063			
1110111	(2.614)	(2.594)	(1.750)	(1.762)			
	(2.011)	(2.551)	(1.100)	(1.102)			
investa	2.384	2.163	2.921	3.640			
	(4.498)	(4.678)	(2.401)	(2.638)			
	, ,	,	,	,			
roe	0.0117	0.00970	0.000827	0.00943			
	(0.0255)	(0.0242)	(0.0245)	(0.0240)			
1	0.720***	0.697***	0.106	0.200			
logppe	0.739***	0.637***	0.196	0.398			
	(0.198)	(0.237)	(0.263)	(0.296)			
beta	0.507**	0.512**	0.145	0.193			
Secul	(0.213)	(0.217)	(0.161)	(0.167)			
	(0.210)	(0.211)	(0.101)	(0.101)			
volat	0.448	0.432	-0.00258	0.0395			
	(0.321)	(0.332)	(0.148)	(0.170)			
	,	,	, ,	,			
salesgr	-0.0935	-0.0913	-0.0655	-0.0932			
	(0.0799)	(0.0783)	(0.0832)	(0.0926)			
	0.00110	0.00110	0.000017	0.000246			
epsgr	0.00110	0.00112	0.000217	0.000246			
	(0.00257)	(0.00254)	(0.00220)	(0.00222)			
log_scope1		0.0598		-0.268			
108-200be1		(0.127)		(0.313)			
		(0.121)		(0.010)			
Constant	-6.996	-6.795	-6.125	-6.549*			
	(4.494)	(4.568)	(3.771)	(3.604)			
Year/Month FE	yes	$2_{ m yes}$	yes	yes			
Industry FE	no	no	yes	yes			
Observations	3039	3039	3039	3039			
R2-Adj	0.0553	0.0560	0.456	0.461			
	. 1						

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 2: Carbon Beta and Firm Characteristics: log_scope2 emissions

1401C 2: Ca100	n beta and rh			
	(1)	(2)	(3)	(4)
	carbon_beta	carbon_beta	carbon_beta	carbon_beta
logsize	-0.185	-0.154	0.297	0.317
	(0.178)	(0.182)	(0.210)	(0.215)
bm	0.591	0.604	0.353	0.354
	(0.387)	(0.400)	(0.230)	(0.230)
_				
leverage	0.507	0.371	2.269**	2.408**
	(1.206)	(1.224)	(0.934)	(1.090)
	2.00=	2.200	1 505	1.010
mom	3.867	3.200	-1.765	-1.916
	(2.703)	(2.632)	(1.951)	(1.915)
investa	-1.532	-1.663	1.409	1.362
mvesta				
	(2.842)	(3.072)	(1.685)	(1.801)
roe	0.0294*	0.0273	0.00585	0.00706
100	(0.0157)	(0.0183)	(0.0158)	(0.0168)
	(0.0137)	(0.0103)	(0.0100)	(0.0100)
logppe	0.322^{*}	0.328^{*}	0.114	0.0412
108PPC	(0.181)	(0.186)	(0.211)	(0.284)
	(0.101)	(0.100)	(0.211)	(0.201)
beta	0.0221	0.0292	0.0167	0.0295
	(0.278)	(0.283)	(0.202)	(0.208)
	(31213)	(31233)	(**=*=)	(3.233)
volat	-0.103	-0.0928	-0.492**	-0.533*
	(0.483)	(0.495)	(0.235)	(0.282)
	,	,	,	,
salesgr	-0.268**	-0.280**	-0.242***	-0.234***
	(0.133)	(0.129)	(0.0824)	(0.0771)
	,	,	,	,
epsgr	-0.00494**	-0.00491*	-0.00169*	-0.00164*
	(0.00245)	(0.00252)	(0.000945)	(0.000915)
\log_scope2		-0.0103		0.0985
		(0.129)		(0.268)
	0.440	0.000	0.450	Q = 1=···
Constant	-2.418	-3.093	-8.450***	-8.545***
	(3.388)	(3.326)	(3.029)	(2.980)
Year/Month FE	yes	3_{yes}	yes	yes
Industry FE	no	no	yes	yes
Observations	2967	2945	2967	2945
R2-Adj	0.0975	0.101	0.476	0.472

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 3: Carbon Beta and Firm Characteristics: $\log_{-}total_{-}emissions$ emissions

 $\underline{\text{sions}}$

sions	(1)	(2)	(9)	(1)
	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.349	-0.256	0.161	0.161
10g512C	(0.250)	(0.197)	(0.299)	(0.292)
	(0.290)	(0.131)	(0.233)	(0.232)
bm	-0.304	-0.276	-0.370	-0.371
	(0.258)	(0.255)	(0.318)	(0.317)
1	1 505	1.055	0.700	0.777
leverage	-1.737	-1.055	0.782	0.777
	(1.428)	(1.336)	(1.029)	(1.026)
mom	-0.386	0.295	-4.709*	-4.712*
	(3.283)	(3.210)	(2.419)	(2.475)
	,	,	,	,
investa	1.648	0.635	3.205	3.210
	(3.847)	(3.756)	(2.526)	(2.633)
roe	0.0396	0.0407	0.0299	0.0300
	(0.0266)	(0.0271)	(0.0282)	(0.0279)
	(0.0_00)	(313_1)	(3:3-3-)	(010_10)
logppe	0.632***	0.312	0.220	0.223
	(0.237)	(0.240)	(0.323)	(0.298)
beta	0.456*	0.488**	0.160	0.160
5000	(0.229)	(0.237)	(0.171)	(0.172)
	(0:==0)	(31_31)	(====)	(3.2.2)
volat	-0.168	-0.219	-0.382	-0.381
	(0.243)	(0.266)	(0.268)	(0.268)
salesgr	-0.236	-0.206	-0.190	-0.190
balebgi	(0.173)	(0.175)	(0.181)	(0.182)
	(0.110)	(0.110)	(0.101)	(0.102)
epsgr	-0.000611	-0.000772	0.000261	0.000260
	(0.00162)	(0.00160)	(0.00156)	(0.00156)
log_total_emissions		0.146*		-0.00241
log_total_emissions		(0.0753)		(0.133)
		(0.0755)		(0.133)
Constant	-5.012	-4.166	-7.527*	-7.533**
	(4.466)	4(4.549)	(3.784)	(3.685)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3078	3078	3078	3078
R2-Adj	0.0811	0.0994	0.385	0.385

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 4: Carbon Beta and Firm Characteristics: $log_energy_consumption$

emissions

emissions	(1)	(2)	(3)	(4)
	carbon_beta	carbon_beta	carbon_beta	carbon_beta
logsize	-0.279	-0.140	0.168	0.160
1000120	(0.266)	(0.236)	(0.287)	(0.280)
	(0.200)	(**=**)	(**=**)	(0.200)
bm	-0.112	-0.0925	-0.350	-0.353
	(0.290)	(0.281)	(0.323)	(0.327)
leverage	-0.503	0.413	-0.112	-0.196
	(1.661)	(1.688)	(1.093)	(1.043)
mom	2.761	3.057	-2.003	-2.060
	(2.705)	(2.558)	(1.803)	(1.768)
investa	5.579	4.451	4.129	4.301
	(5.585)	(5.129)	(2.898)	(2.921)
roe	0.0193	0.0188	0.00985	0.0109
	(0.0290)	(0.0279)	(0.0254)	(0.0247)
logppe	0.686***	0.331*	0.291	0.347
	(0.205)	(0.181)	(0.237)	(0.214)
beta	0.545**	0.575**	0.173	0.183
	(0.214)	(0.222)	(0.154)	(0.159)
volat	0.350	0.296	-0.0348	-0.0279
	(0.335)	(0.311)	(0.186)	(0.193)
salesgr	-0.142	-0.127	-0.130	-0.140
	(0.108)	(0.108)	(0.0990)	(0.0990)
epsgr	0.00260	0.00237	0.00166	0.00170
	(0.00299)	(0.00281)	(0.00237)	(0.00243)
log_energy_consumption		0.296***		-0.0785
-		(0.108)		(0.240)
Constant	-8.495*	-8.851*	-9.368***	-9.176***
	(4.713) 5	(4.559)	(3.066)	(2.959)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3224	3224	3224	3224
R2-Adj	0.0406	0.0536	0.428	0.428

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 5: Carbon Beta and Firm Characteristics: change_scope1 emissions

Table 5: Carbon Beta and Firm Characteristics: change_scope1 emissions					
	(1)	(2)	(3)	(4)	
	carbon_beta	carbon_beta	carbon_beta	carbon_beta	
logsize	-0.645***	-0.645***	-0.0548	-0.0549	
	(0.175)	(0.175)	(0.385)	(0.385)	
bm	-0.322	-0.324	-0.152	-0.152	
	(0.421)	(0.421)	(0.380)	(0.379)	
leverage	-3.048**	-3.043**	-0.976	-0.976	
ieverage	(1.354)	(1.354)	(1.358)	(1.356)	
	(1.504)	(1.554)	(1.550)	(1.550)	
mom	-1.103	-1.143	-3.916	-3.921	
	(3.484)	(3.475)	(3.303)	(3.276)	
	,	,	,	,	
investa	-0.0435	-0.0543	1.232	1.233	
	(2.748)	(2.752)	(2.468)	(2.467)	
	0.0700***	0.0702***	0.0051**	0.0051**	
roe	0.0702***	0.0703***	0.0651**	0.0651**	
	(0.0227)	(0.0228)	(0.0323)	(0.0322)	
logppe	0.408**	0.405**	-0.397	-0.397	
108PP0	(0.162)	(0.165)	(0.474)	(0.475)	
	(3:232)	(31233)	(3: =: =)	(3.2.3)	
beta	-0.0156	-0.0103	-0.461*	-0.460*	
	(0.242)	(0.243)	(0.272)	(0.271)	
1	0.100	0.100	0.145	0.145	
volat	0.132	0.130	-0.145	-0.145	
	(0.184)	(0.183)	(0.182)	(0.183)	
salesgr	-0.193*	-0.192*	-0.0978	-0.0976	
5616561	(0.102)	(0.102)	(0.165)	(0.166)	
	(0.102)	(0.10=)	(0.100)	(0.100)	
epsgr	0.00378*	0.00377^*	0.00290	0.00290	
	(0.00216)	(0.00216)	(0.00204)	(0.00205)	
,		4 - 0		4.00	
$change_scope1$		1.78e-08		1.26e-09	
		(2.31e-08)		(2.11e-08)	
Constant	7.461	7.510	11.49**	11.49**	
	(4.487)	(4.519)	(5.648)	(5.722)	
Year/Month FE	yes	6_{yes}	yes	yes	
Industry FE	no	no	yes	yes	
Observations	2879	2879	2879	2879	
R2-Adj	0.119	0.119	0.378	0.377	

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 6: Carbon Beta and Firm Characteristics: change_scope2 emissions

	(1)	(2)	(3)	(4)
	$carbon_beta$	$carbon_beta$	$carbon_beta$	${\it carbon_beta}$
logsize	-0.338	-0.338	-0.669***	-0.675***
	(0.222)	(0.222)	(0.199)	(0.201)
	,	,	,	,
bm	0.143	0.140	-0.0846	-0.0878
	(0.207)	(0.206)	(0.190)	(0.191)
	,	,	,	,
leverage	1.486	1.466	2.085***	2.065***
	(0.955)	(0.952)	(0.774)	(0.773)
	,	,	,	,
mom	2.905	2.883	2.370	2.387
	(3.344)	(3.339)	(2.023)	(2.047)
	,	,	,	,
investa	-5.564**	-5.511**	0.0709	0.117
	(2.559)	(2.562)	(2.536)	(2.525)
	,	,	,	,
roe	0.603**	0.599**	0.280	0.279
	(0.281)	(0.281)	(0.201)	(0.202)
	,	,	,	,
logppe	0.128	0.124	0.263	0.270
	(0.207)	(0.207)	(0.220)	(0.221)
	,	,	,	,
beta	-0.0158	-0.0176	0.0615	0.0499
	(0.233)	(0.233)	(0.157)	(0.159)
	, ,	,	,	,
volat	0.406	0.400	0.178	0.172
	(0.269)	(0.267)	(0.128)	(0.124)
	, ,	, ,	,	,
salesgr	0.113	0.110	0.101	0.0975
	(0.0882)	(0.0885)	(0.0742)	(0.0744)
epsgr	0.00264^{**}	0.00264**	0.000555	0.000569
	(0.00126)	(0.00126)	(0.00105)	(0.00106)
$change_scope2$		0.000000766		0.00000105
		(0.00000110)		(0.000000902)
Constant	4.228	4.313	8.992**	9.000**
	(3.653)	(3.671)	(4.284)	(4.254)
Year/Month FE	yes	$7_{ m yes}$	yes	yes
Industry FE	no	no	yes	yes
Observations	2722	2722	2722	2722
R2-Adj	0.131	0.131	0.485	0.486

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

 ${\bf Table~7:~Carbon~Beta~and~Firm~Characteristics:~change_total_emissions}$

 $\underline{\text{emissions}}$

carbon_beta	emissions	(1)	(2)	(3)	(4)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
bm 0.446 0.445 1.494 1.493 (1.130) (1.129) (2.014) (2.013) leverage -5.033 -5.036 -0.217 -0.244 (3.348) (3.351) (3.094) (3.093) mom 5.321 5.468 -7.098 -6.975 (9.197) (9.307) (8.877) (8.856) investa -5.103 -5.129 2.404 2.410 (7.337) (7.359) (6.617) (6.634) roe 0.0764 0.0761 -0.00769 -0.00867 (0.0510) (0.0511) (0.0896) (0.0902) logppe -0.295 -0.305 -4.095 -4.112 (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) (1.947) volat -0.590 -0.624 -1.412 -1.445 (0.862) (0.898) (1.524) (1.566) salesgr -0.206 -0.208 -0.0351 -0.0344 (0.328) (0.333) (0.458) (0.463) epsgr -0.00256 -0.00258 -0.0356 (0.0368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions -2.48e-14 (2.98e-14) Constant 23.79 23.90 43.86 43.99 (21.11) 8 (21.21) (39.08) (39.22) Year/Month FE yes yes yes yes lindustry FE no no no yes yes lindustry FE no no no yes yes lindustry FE no no yes yes lindustry FE no no no yes yes lindustry FE no no no yes yes yes lindustry FE no no no yes yes yes lindustry FE no no no yes yes lindustry FE no no no yes yes yes lindustry FE no no yes yes yes lindustry FE no no no yes yes yes lindustry FE no no no yes yes yes yes yes lindustry FE no no no yes yes yes yes	logsize	-0.661**			
leverage $\begin{pmatrix} (1.130) & (1.129) & (2.014) & (2.013) \\ -5.033 & -5.036 & -0.217 & -0.244 \\ (3.348) & (3.351) & (3.094) & (3.093) \\ -0.0000000000000000000000000000000000$		(0.319)	(0.319)	(2.405)	(2.415)
leverage $\begin{pmatrix} (1.130) & (1.129) & (2.014) & (2.013) \\ -5.033 & -5.036 & -0.217 & -0.244 \\ (3.348) & (3.351) & (3.094) & (3.093) \\ -0.0000000000000000000000000000000000$	1	0.440	0.445	1 404	1 400
leverage -5.033 -5.036 -0.217 -0.244 (3.348) (3.351) (3.094) (3.093) mom 5.321 5.468 -7.098 -6.975 (9.197) (9.307) (8.877) (8.856) investa -5.103 -5.129 2.404 2.410 (7.337) (7.359) (6.617) (6.634) roe 0.0764 0.0761 -0.00769 -0.00867 (0.0510) (0.0511) (0.0896) (0.0902) logppe -0.295 -0.305 -4.095 -4.112 (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) (1.947) volat -0.590 -0.624 -1.412 -1.445 (0.862) (0.889) (1.524) (1.566) salesgr -0.206 -0.208 -0.0351 -0.0344 (0.328) (0.333) (0.458) (0.463) epsgr 0.00256 0.00258 0.00366 0.00368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions 0.00256 0.00258 0.00366 0.00368 0.00368 0.00366 0.00368 $0.$	bm				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(1.130)	(1.129)	(2.014)	(2.013)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	leverage	-5.033	-5.036	-0.217	-0.244
investa (9.197) (9.307) (8.877) (8.856) investa -5.103 -5.129 2.404 2.410 (7.337) (7.359) (6.617) (6.634) roe 0.0764 0.0761 -0.00769 -0.00867 (0.0510) (0.0511) (0.0896) (0.0902) (0.0902) (0.876) (0.886) (0.886) (0.9902) (0.876) (0.886) (0.886) (0.129) (0.886) (0.886) (0.129) (0.886) (0.129) (0.1258) (0.1259) $($	O	(3.348)		(3.094)	
investa (9.197) (9.307) (8.877) (8.856) investa -5.103 -5.129 2.404 2.410 (7.337) (7.359) (6.617) (6.634) roe 0.0764 0.0761 -0.00769 -0.00867 (0.0510) (0.0511) (0.0896) (0.0902) (0.0902) (0.876) (0.886) (0.886) (0.9902) (0.876) (0.886) (0.886) (0.129) (0.886) (0.886) (0.129) (0.886) (0.129) (0.1258) (0.1259) $($,	,	,	,
investa -5.103 -5.129 2.404 2.410 (7.337) (7.359) (6.617) (6.634) roe 0.0764 0.0761 -0.00769 -0.00867 (0.0510) (0.0511) (0.0896) (0.0902) logppe -0.295 -0.305 -4.095 -4.112 (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) (1.947) volat -0.590 -0.624 -1.412 -1.445 (0.862) (0.898) (1.524) (1.566) salesgr -0.206 -0.208 -0.0351 -0.0344 (0.328) (0.333) (0.458) (0.463) epsgr 0.00256 0.00258 0.00366 0.00368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions $2.48e-14$ $(2.44e-14)$ $(2.98e-14)$ Constant 23.79 23.90 43.86 43.99 (21.11) 8 (21.21) (39.08) (39.22) Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	mom				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(9.197)	(9.307)	(8.877)	(8.856)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	investa	-5.103	-5.129	2.404	2.410
roe $ \begin{array}{ccccccccccccccccccccccccccccccccccc$					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,	,	,	,
logppe -0.295 -0.305 -4.095 -4.112 (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) (1.947) volat -0.590 -0.624 -1.412 -1.445 (0.862) (0.898) (1.524) (1.566) salesgr -0.206 -0.208 -0.0351 -0.0344 (0.328) (0.333) (0.458) (0.463) epsgr 0.00256 0.00258 0.00366 0.00368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions $2.48e-14$ $(2.98e-14)$ Constant 23.79 23.90 43.86 43.99 (21.11) 8 (21.21) (39.08) (39.22) Year/Month FE yes yes yes yes lndustry FE no no yes yes Observations 2879 2879 2879 2879	roe				
beta (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) $(1.947)volat -0.590 -0.624 -1.412 -1.445(0.862)$ (0.898) (1.524) $(1.566)salesgr -0.206 -0.208 -0.0351 -0.0344(0.328)$ (0.333) (0.458) $(0.463)epsgr 0.00256 0.00258 0.00366 0.00368(0.00540)$ (0.00541) (0.00627) $(0.00629)change_total_emissions 2.48e-14 (2.44e-14) (2.98e-14)Constant 23.79 23.90 43.86 43.99(21.11)$ 8 (21.21) (39.08) $(39.22)Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879$		(0.0510)	(0.0511)	(0.0896)	(0.0902)
beta (0.876) (0.886) (4.129) (4.148) beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) $(1.947)volat -0.590 -0.624 -1.412 -1.445(0.862)$ (0.898) (1.524) $(1.566)salesgr -0.206 -0.208 -0.0351 -0.0344(0.328)$ (0.333) (0.458) $(0.463)epsgr 0.00256 0.00258 0.00366 0.00368(0.00540)$ (0.00541) (0.00627) $(0.00629)change_total_emissions 2.48e-14 (2.44e-14) (2.98e-14)Constant 23.79 23.90 43.86 43.99(21.11)$ 8 (21.21) (39.08) $(39.22)Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879$	lognne	-0.295	-0.305	-4 095	-4 112
beta -1.108 -1.096 -2.229 -2.216 (1.269) (1.259) (1.962) (1.947) volat -0.590 -0.624 -1.412 -1.445 (0.862) (0.898) (1.524) (1.566) salesgr -0.206 -0.208 -0.0351 -0.0344 (0.328) (0.333) (0.458) (0.463) epsgr 0.00256 0.00258 0.00366 0.00368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions $2.48e-14$ $(2.44e-14)$ $(2.98e-14)$ Constant 23.79 23.90 43.86 43.99 (21.11) 8 (21.21) (39.08) (39.22) Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	108ppc				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$,	,	,	,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	beta				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(1.269)	(1.259)	(1.962)	(1.947)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	volat	-0.590	-0 624	-1 412	-1 445
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	VOICE				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		()	()	(-)	()
epsgr 0.00256 0.00258 0.00366 0.00368 (0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions $2.48e-14$ $(2.44e-14)$ $(2.98e-14)$ $(2.98e-14)$ Constant 23.79 23.90 43.86 43.99 (21.11) 8 (21.21) (39.08) (39.22) Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	salesgr				
(0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions		(0.328)	(0.333)	(0.458)	(0.463)
(0.00540) (0.00541) (0.00627) (0.00629) change_total_emissions	ensor	0 00256	0 00258	0 00366	0 00368
change_total_emissions 2.48e-14 (2.44e-14) 2.58e-14 (2.98e-14) Constant 23.79 (21.11) 8 (21.21) 43.86 (39.08) 43.99 (39.22) Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	chogi				
(2.44e-14) (2.98e-14) Constant 23.79 (21.11) 8 (21.21) 43.86 (39.29) Year/Month FE yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879		(0.000 =0)	(3.333 ==)	(0.000_1)	(0.000=0)
Constant 23.79 (21.11) 8 (21.21) 23.90 (39.08) 43.86 (39.22) Year/Month FE yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	change_total_emissions				
Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879			(2.44e-14)		(2.98e-14)
Year/Month FE yes yes yes yes Industry FE no no yes yes Observations 2879 2879 2879 2879	Constant	23 79	23 90	43 86	43 99
Year/Month FEyesyesyesyesIndustry FEnonoyesyesObservations2879287928792879					
Industry FE no no yes yes Observations 2879 2879 2879	Year/Month FE	/	,	,	,
Observations 2879 2879 2879 2879	Industry FE	•		•	
R2-Adj 0.0199 0.0196 0.0323 0.0321					
	R2-Adj	0.0199	0.0196	0.0323	0.0321

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 8: Carbon Beta and Firm Characteristics: change_energy_consumption

emissions

211112210112	(1)	(2)	(3)	(4)
	carbon_beta	carbon_beta	carbon_beta	carbon_beta
logsize	-0.662***	-0.662***	-0.821**	-0.819**
	(0.204)	(0.204)	(0.383)	(0.384)
bm	-0.161	-0.160	-0.359	-0.356
	(0.355)	(0.354)	(0.408)	(0.409)
leverage	-1.242	-1.239	0.647	0.666
	(1.261)	(1.264)	(1.194)	(1.199)
mom	1.413	1.419	2.491	2.510
	(3.849)	(3.855)	(2.292)	(2.281)
investa	-3.133	-3.139	-0.774	-0.794
	(3.321)	(3.319)	(2.587)	(2.580)
roe	-0.00818	-0.00822	0.0363	0.0363
	(0.0279)	(0.0278)	(0.0311)	(0.0310)
logppe	0.444**	0.445**	0.522	0.522
	(0.213)	(0.213)	(0.324)	(0.324)
beta	0.303	0.300	0.188	0.185
	(0.314)	(0.314)	(0.164)	(0.165)
volat	0.138	0.138	0.00637	0.00556
	(0.187)	(0.187)	(0.115)	(0.115)
salesgr	-0.0818	-0.0817	0.0300	0.0290
	(0.128)	(0.127)	(0.106)	(0.105)
epsgr	0.00320	0.00320	0.000500	0.000511
	(0.00223)	(0.00223)	(0.00190)	(0.00190)
change_energy_consumption		-1.21e-09		-1.60e-09
		(2.64e-09)		(1.25e-09)
Constant	5.829	5.804	7.613**	7.560**
	(3.798)	(3.789)	(3.770)	(3.773)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2853	2853	2853	2853
R2-Adj	0.212	0.212	0.678	0.678

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 9: Carbon Beta and Firm Characteristics: scope1_int emissions

		rm Characteris		
	(1)	(2)	(3)	(4)
	$carbon_beta$	$carbon_beta$	$carbon_beta$	$carbon_beta$
logsize	0.220	0.330	1.994***	1.997***
	(0.566)	(0.613)	(0.703)	(0.730)
	, ,	,	,	,
bm	1.323	1.644	1.762^{**}	1.771**
	(0.887)	(1.023)	(0.741)	(0.852)
leverage	-0.0330	-0.374	4.029**	3.998**
	(1.925)	(1.897)	(1.934)	(1.774)
	11 40**	10.00**	1 501	1 (1)
mom	11.43**	12.20**	1.591	1.617
	(4.907)	(5.142)	(2.342)	(2.532)
investa	1.964	1.738	5.096	5.085
mvesta	(5.123)	(5.200)	(3.284)	(3.385)
	(0.120)	(5.200)	(3.264)	(3.360)
roe	-0.0205	-0.0321	-0.0686	-0.0691
100	(0.0788)	(0.0837)	(0.0572)	(0.0627)
	(0.0100)	(0.0001)	(0.0012)	(0.0021)
logppe	0.221	0.206	-1.309**	-1.308**
011	(0.433)	(0.430)	(0.585)	(0.574)
	,	,	,	,
beta	0.375	0.370	-0.140	-0.134
	(0.306)	(0.313)	(0.244)	(0.208)
volat	0.110	-0.00281	-0.265	-0.267
	(0.215)	(0.236)	(0.186)	(0.199)
,	0.0440	0.000=	0.400	0.400
salesgr	0.0116	-0.0237	-0.196	-0.198
	(0.432)	(0.427)	(0.272)	(0.265)
onder	0 00200	-0.00213	0.000644	0.000689
epsgr	-0.00388			
	(0.00585)	(0.00472)	(0.00380)	(0.00381)
scope1_int		0.0000380		0.00000127
scoper_int		(0.0000360)		(0.0000207)
		(0.0000202)		(0.0000201)
Constant	-11.90**	-14.15**	-18.79***	-18.88**
-	(5.676)	(6.525)	(6.502)	(7.605)
Year/Month FE	yes	10 _{yes}	yes	yes
Industry FE	no	no	yes	yes
Observations	3347	3347	3347	3347
R2-Adj	0.167	0.183	0.621	0.621
	0.101	J.100	J.U21	J.U21

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 10: Carbon Beta and Firm Characteristics: $scope2_int\ emissions$

Table 10: Carbo				iit eimssions
	(1)	(2)	(3)	(4)
	$carbon_beta$	$carbon_beta$	$carbon_beta$	$carbon_beta$
logsize	-0.0643	-0.0299	0.741**	0.729**
	(0.265)	(0.272)	(0.289)	(0.293)
	,	,	,	,
bm	0.603^{**}	0.674^{**}	0.767^{***}	0.739^{***}
	(0.300)	(0.318)	(0.207)	(0.238)
	,	,	,	,
leverage	-0.300	-0.363	0.334	0.474
	(1.424)	(1.436)	(0.867)	(0.862)
mom	3.110	3.257	-1.485	-1.558
	(3.023)	(3.031)	(2.307)	(2.361)
investa	8.204**	8.315**	8.105***	8.089***
	(3.627)	(3.565)	(2.984)	(2.929)
	0.0000	0.0000	0.000000	0.00100
roe	0.0323	0.0306	0.000820	0.00192
	(0.0227)	(0.0230)	(0.0179)	(0.0183)
lamna	0.129	0.123	-0.517*	-0.525*
logppe				
	(0.237)	(0.236)	(0.268)	(0.273)
beta	0.171	0.178	-0.100	-0.136
beta	(0.300)	(0.298)	(0.228)	(0.231)
	(0.500)	(0.290)	(0.220)	(0.251)
volat	-0.183	-0.211	-0.237	-0.227
, 0100	(0.168)	(0.176)	(0.174)	(0.172)
	(0.100)	(0.110)	(0.111)	(0.112)
salesgr	-0.124	-0.133	-0.300***	-0.293***
O	(0.152)	(0.154)	(0.0786)	(0.0797)
	(31232)	(31232)	(313133)	(313131)
epsgr	0.00000282	0.000436	0.00275^{***}	0.00256^{**}
- 0	(0.00196)	(0.00176)	(0.00102)	(0.00109)
	,	,	,	,
$scope2_int$		0.000406		-0.000234
		(0.000416)		(0.000489)
		•		•
Constant	-2.695	-3.371	-6.570**	-6.122*
	(3.006)	(3.254)	(3.185)	(3.523)
Year/Month FE	yes	$11_{ m yes}$	yes	yes
Industry FE	no	no	yes	yes
Observations	3346	3346	3346	3346
R2-Adj	0.0966	0.0990	0.603	0.603
	. 1			

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table 11:	Carbon	Beta and Firm	Characteristics:	total_emissic	ons_int emis-
sions					
		(1)	(2)	(3)	(4)
		$carbon_beta$	$carbon_beta$	$carbon_beta$	carbon_beta
			0.010	0.00.4 (1)	0.000

	(1)	(2)	(3)	(4)
	$carbon_beta$	$carbon_beta$	$carbon_beta$	${\it carbon_beta}$
logsize	0.864	0.916	3.024**	3.062**
	(0.920)	(0.924)	(1.327)	(1.337)
	,	,	,	, ,
bm	1.835	1.845	2.727*	2.731*
	(1.505)	(1.497)	(1.442)	(1.439)
1	1 100	0.055	0.0 7 *	a F 20*
leverage	-1.166	-0.957	6.375*	6.532*
	(2.174)	(2.169)	(3.478)	(3.532)
mom	11.81	12.45	2.912	3.498
mom	(7.598)	(7.633)	(3.656)	(3.805)
	(1.000)	(1.000)	(0.000)	(0.000)
investa	-6.427	-7.157	-2.864	-3.468
	(6.994)	(7.291)	(4.417)	(4.775)
	,	,	,	,
roe	-0.115	-0.114	-0.165	-0.165
	(0.135)	(0.135)	(0.110)	(0.110)
1	0.000	0.040	4.050*	2.020*
logppe	-0.236	-0.343	-1.972*	-2.020*
	(0.718)	(0.744)	(1.089)	(1.105)
beta	0.376	0.420	-0.383	-0.338
Deta	(0.411)	(0.426)	(0.423)	(0.416)
	(0.411)	(0.410)	(0.420)	(0.410)
volat	-0.531	-0.683	-0.642*	-0.732*
	(0.465)	(0.588)	(0.329)	(0.412)
	,	,	,	,
salesgr	0.207	0.210	0.0494	0.0555
	(0.617)	(0.615)	(0.415)	(0.418)
ongen	-0.0101	-0.0101	-0.00282	-0.00267
epsgr				
	(0.0111)	(0.0110)	(0.00825)	(0.00818)
total_emissions_int		2.20e-10		1.73e-10
		(2.73e-10)		(2.10e-10)
		(2.130 10)		(2:100 10)
Constant	-15.89*	-14.98*	-27.84**	-27.85**
	(8.238)	12(8.422)	(10.61)	(10.67)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3347	3347	3347	3347
R2-Adj	0.153	0.155	0.434	0.436
Standard arrors in par	.1			

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01

Table 12: Carbon Beta and Firm Characteristics: energy_consumption_int

emissions

emissions	(4)	(2)	(2)	(1)
	(1)	(2)	(3)	(4)
	carbon_beta	carbon_beta	carbon_beta	carbon_beta
logsize	-0.928*	-0.514	-0.537	0.516
	(0.512)	(0.346)	(0.880)	(0.370)
bm	-0.722	-0.378	-1.091	-0.250
	(0.828)	(0.611)	(0.989)	(0.480)
leverage	-1.114	-0.935	-2.391	-1.071
	(1.835)	(1.879)	(2.396)	(1.590)
mom	0.435	1.291	-2.760	-0.665
	(4.783)	(4.030)	(2.652)	(2.298)
investa	9.049	7.507	9.631**	5.725
	(5.859)	(5.345)	(4.297)	(3.639)
roe	0.138*	0.104**	0.110	0.0278
	(0.0721)	(0.0492)	(0.0758)	(0.0331)
logppe	1.102**	0.733**	0.603	-0.235
	(0.433)	(0.309)	(0.714)	(0.320)
beta	0.599**	0.761**	0.501	0.471*
	(0.270)	(0.294)	(0.305)	(0.245)
volat	0.378	0.291	-0.0720	-0.153
	(0.273)	(0.253)	(0.229)	(0.232)
salesgr	-0.608*	-0.526**	-0.586*	-0.381***
	(0.318)	(0.207)	(0.319)	(0.119)
epsgr	0.00476	0.00404	0.00351	0.00299
	(0.00674)	(0.00522)	(0.00611)	(0.00355)
energy_consumption_int		0.0000737		0.000166***
		(0.0000548)		(0.0000558)
Constant	-3.275	-5.484	-0.417	-7.725*
	(5.051)13	(4.374)	(6.732)	(4.427)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3181	3181	3181	3181
R2-Adj	0.165	0.221	0.489	0.599

^{*} p < 0.10, ** p < 0.05, *** p < 0.01