

BAB V

KESIMPULAN, KETERBATASAN DAN SARAN

5.1. Kesimpulan

Penelitian ini dilakukan untuk mengetahui apakah terdapat pengaruh ukuran perusahaan, profitabilitas, dan kepemilikan institusional terhadap pengungkapan emisi karbon pada perusahaan manufaktur yang terdaftar di BEI pada periode 2018-2022. Berdasarkan hasil penelitian dan analisis yang telah dilakukan, maka diperoleh kesimpulan sebagai berikut:

1. Ukuran perusahaan berpengaruh positif terhadap pengungkapan emisi karbon.
2. Profitabilitas tidak berpengaruh terhadap pengungkapan emisi karbon.
3. Kepemilikan institusional tidak berpengaruh terhadap pengungkapan emisi karbon.

5.2. Keterbatasan Penelitian

Penelitian ini menemui beberapa keterbatasan seperti sebaran data yang tidak normal, laporan keuangan dan laporan tahunan yang tidak memiliki informasi/data yang diperlukan dalam penelitian. Keterbatasan lain yaitu subjektivitas peneliti dalam mengukur variabel pengungkapan emisi karbon melalui *checklist* CDP.

5.3. Saran

Penelitian selanjutnya dengan topik pengungkapan emisi karbon yaitu dapat menggunakan variabel bebas, proksi pengukuran yang berbeda, dan sektor industri transportasi sehingga dapat menambah referensi untuk penelitian berikutnya dan membantu pengguna riset



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LAMPIRAN

Lampiran I: Daftar Sampel Perusahaan

NO	KODE	NAMA PERUSAHAAN
1	INTP	PT. Indocement Tunggul Prakasa Tbk
2	SMBR	PT. Semen Baturaja (Persero) Tbk
3	SMCB	PT. Solusi Bangun Indonesia Tbk
4	SMGR	PT. Semen Indonesia (Persero) Tbk
5	WSBP	PT. Waskita Beton Precast Tbk
6	WTON	PT. Wijaya Karya Beton Tbk
7	AMFG	PT. Asahimas Flat Glass Tbk
8	ARNA	PT. Arwana Citra Mulia Tbk
9	KIAS	PT. Inti Keramik Alamasri Industri Tbk
10	MARK	PT. Mark Dynamics Indonesia Tbk
11	MLIA	PT. Mulia Industrindo Tbk
12	ALKA	PT. Alaskan Industrindo Tbk
13	ALMI	PT. Alumindo Light Metal Industry Tbk
14	BAJA	PT. Saranacentral Bajatama Tbk
15	CTBN	PT. Citra Turbindo Tbk
16	GDST	PT. Gunawan Dianjaya Steel Tbk
17	INAI	PT. Indal Alumunium Industry Tbk
18	ISSP	PT. Steel Pipe Industry of Indonesia Tbk
19	KRAS	PT. Krakatau Steel (Persero) Tbk
20	LION	PT. Lion Metal Works Tbk
21	LMSH	PT. Lionmesh Prima Tbk
22	TBMS	PT. Tembaga Mulia Semanan Tbk
23	AGII	PT. Aneka Gas Industri Tbk
24	BRPT	PT. Barito Pasific Tbk
25	DPNS	PT. Duta Pertiwi Nusantara Tbk
26	EKAD	PT. Ekadharma International Tbk
27	ETWA	PT. Eterindo Wahanatama Tbk
28	INCI	PT. Intan Wijaya International Tbk
29	MDKI	PT. Emdeki Utama Tbk
30	SRSN	PT. Indo Acitama Tbk
31	TPIA	PT. Chandra Asri Petrochemical Tbk
32	UNIC	PT. Unggul Indah Cahaya Tbk
33	AKPI	PT. Argha Karya Prima Industry Tbk
34	APLI	PT. Asiaplast Industries Tbk
35	BRNA	PT. Berlina Tbk
36	FPNI	PT. Lotte Chemical Titan Tbk
37	IGAR	PT. Champion Pasific Indonesia Tbk

NO	KODE	NAMA PERUSAHAAN
38	IMPC	PT. Impack Pratama Industri Tbk
39	IPOL	PT. Indopoly Swakarsa Industry Tbk
40	PBID	PT. Panca Budi Idaman Tbk
41	TALF	PT. Tunas Alfin Tbk
42	YPAS	PT. Yana Prima Hasta Persada Tbk
43	CPIN	PT. Charoen Pokphand Indonesia Tbk
44	JPFA	PT. Japfa Comfeed Indonesia Tbk
45	MAIN	PT. Malindo Feedmill Tbk
46	SIPD	PT. Searad Produce Tbk
47	SULI	PT. SLJ Global Tbk
48	TIRT	PT. Trita Mahakam Resources Tbk
49	ALDO	PT. Alkindo Naratama Tbk
50	FASW	PT. Fajar Surya Wisesa Tbk
51	INRU	PT. Toba Pulp Lestari Tbk
52	KDSI	PT. Kedawung Setia Industrial Tbk
53	SPMA	PT. Suparma Tbk
54	AMIN	PT. Ateliers Mecaniques D'Indonesie Tbk
55	GMFI	PT. Garuda Maintenance Facility Aero Asia Tbk
56	ASII	PT. Astra International Tbk
57	AUTO	PT. Astra Otoparts Tbk
58	BOLT	PT. Garuda Metallindo Tbk
59	BRAM	PT. Indo Kordsa Tbk
60	IMAS	PT. Indomobil Sukses International Tbk
61	INDS	PT. Indospring Tbk
62	SMSM	PT. Selamat Sempurna Tbk
63	ADMG	PT. Polychem Indonesia Tbk
64	ARGO	PT. Argo Pantes Tbk
65	BELL	PT. Trisula Textile Industries Tbk
66	ERTX	PT. Eratex Djaya Tbk
67	ESTI	PT. Ever Shine Tbk
68	HDTX	PT. Panasia Indo Resources Tbk
69	MYTX	PT. Asia Pacific Investama Tbk
70	PBRX	PT. Pan Brothers Tbk
71	TFCO	PT. Tifico Fiber Indonesia Tbk
72	TRIS	PT. Trisula International Tbk
73	BIMA	PT. Primarindo Asia Infrastructure Tbk
74	PTSN	PT. Sat Nusa Persada Tbk
75	IKBI	PT. Sumi Indo Kabel Tbk
76	JECC	PT. Jembo Cable Company Tbk
77	KBLI	PT. KMI Wire And Cable Tbk
78	KBLM	PT. Kabelindo Murni Tbk

NO	KODE	NAMA PERUSAHAAN
79	SCCO	PT. Supreme Cable Manufacturing and Commerce Tbk
80	AISA	PT. Tiga Pilar Sejahtera Food Tbk
81	CAMP	PT. Campina Ice Ccream Industry Tbk
82	CLEO	PT. Sariguna Primatirta Tbk
83	HOKI	PT. Buyung Poetra Sembada Tbk
84	ICBP	PT. Indofood CBP Sukses Makmur Tbk
85	INDF	PT. Indofood Sukses Makmur Tbk
86	MYOR	PT. Mayora Indah TBK
87	ROTI	PT. Nippon Indosari Corporindo Tbk
88	SKBM	PT. Sekar Bumi Tbk
89	SKLT	PT. Sekar Laut Tbk
90	GGRM	PT. Gudang Garam Tbk
91	HMSP	PT. Handjaya Mandala Sampoerna Tbk
92	RMBA	PT. Bantoel International Investama Tbk
93	DVLA	PT. Darya Variao Laboratoria Tbk
94	INAF	PT. Indofarma (Persero) Tbk
95	KLBF	PT. Kalbe Farma Tbk
96	MERK	PT. Merck Indonesia Tbk
97	PYFA	PT. Pyridam Farma Tbk
98	SIDO	PT. Industri Jamu & Farmasi Sido Muncul Tbk
99	TSPC	PT. Tempo Scan Pasific Tbk
100	ADES	PT. Akasha Wira International Tbk
101	KINO	PT. Kino Indonesia Tbk
102	MRAT	PT. Mustika Ratu Tbk
103	TCID	PT. Mandom Indonesia Tbk
104	UNVR	PT. Unilever Indonesia Tbk
105	KICI	PT. Kedaung Indah Can Tbk
106	LMPI	PT. Langgeng Makmur Industry Tbk
107	WOOD	PT. Integra Indocabinet Tbk
108	CAKK	PT. Cahayaputra Asa Keramik Tbk
109	GGRP	PT. Gunung Raja Paksi Tbk
110	MOLI	PT. Madusari Murni Indah Tbk
111	ESIP	PT. Sinergi Inti Plastindo Tbk
112	SMKL	PT. Satyamitra Kemas Lestari Tbk
113	IFII	PT. Indonesia Fireboard Industry Tbk
114	ARKA	PT. Arkha Jayanti Persada Tbk
115	POLU	PT. Golden Flower Tbk
116	UCID	PT. Uni-Charm Indonesia Tbk
117	ZONE	PT. Mega Perintis Tbk
118	SLIS	PT. Gaya Abadi Sempurna Tbk
119	COCO	PT. Wahana Interfood Nusantara Tbk

NO	KODE	NAMA PERUSAHAAN
120	DLTA	PT. Delta Djakarta Tbk
121	DMND	PT. Diamond Food Indonesia Tbk
122	FOOD	PT. Sentra Food Indonesia Tbk
123	GOOD	PT. Garudafood Putra Putri Jaya Tbk
124	IKAN	PT. Era Mandiri Cemerlang Tbk
125	KEJU	PT. Mulia Boga Raya Tbk
126	PANI	PT. Pratama Abadi Nusa Industri Tbk
127	PSDN	PT. Prashida Aneka Niaga Tbk
128	PSGO	PT. Palma Serasih Tbk
129	ITIC	PT. Indonesia Tobacco Tbk
130	CINT	PT. Chitose International Tbk
131	NIKL	PT. Pelat Timah Nusantara Tbk
132	INKP	PT. Indah Kiat Pulp & Paper Tbk
133	TKIM	PT. Pabrik Kertas Tjiwi Kimia Tbk
134	GJTL	PT. Gajah Tunggal Tbk
135	PRAS	PT. Prima Alloy Steel Universal Tbk
136	VOKS	PT. Voksel Electric Tbk
137	ALTO	PT. Tri Banyan Tirta Tbk
138	CEKA	PT. Wilmar Cahaya Indonesia Tbk, PT
139	STTP	PT. Siantar Top Tbk
140	ULTJ	PT. Ultrajaya Milk Industry and Trading Company Tbk
141	KAEF	PT. Kimia Farma (Persero) Tbk
142	MBTO	PT. Martina Berto Tbk
143	JSKY	PT. Sky Energi Indoensia Tbk
144	CCSI	PT. Communication Cable System Indonesia Tbk
145	SSTM	PT. Sunson Textile Manufacturer Tbk

LAMPIRAN II: Hasil Uji Normalitas

		Unstandardized Residual
N		599
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.18290682
Most Extreme Differences	Absolute	.132
	Positive	.132
	Negative	-.083
Test Statistic		.132
Asymp. Sig. (2-tailed)		.000 ^c

Hasil Uji Normalitas setelah Transformasi Ln

		Unstandardized Residual
N		472
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.19931299
Most Extreme Differences	Absolute	.108
	Positive	.108
	Negative	-.095
Test Statistic		.108
Asymp. Sig. (2-tailed)		.000 ^c

Hasil Uji Normalitas setelah Transformasi SQRT

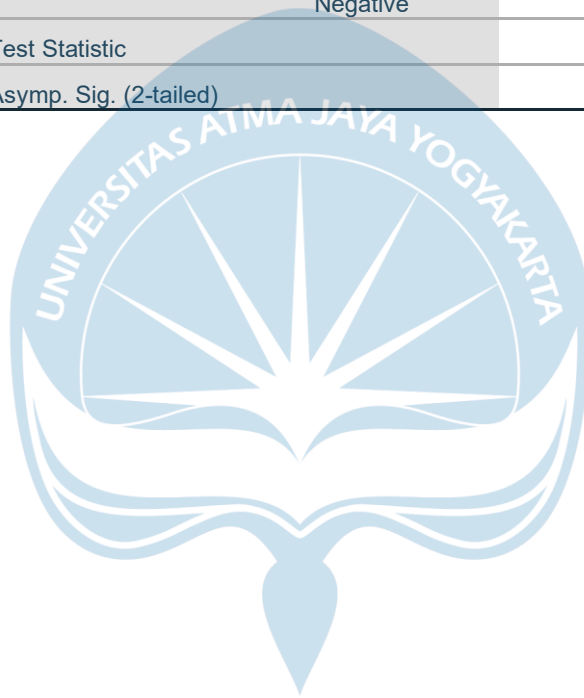
		Unstandardized Residual
N		450
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.86757664
Most Extreme Differences	Absolute	.123
	Positive	.102
	Negative	-.123
Test Statistic		.123
Asymp. Sig. (2-tailed)		.000 ^c

Hasil Uji Normalitas setelah *Trimming*

		Unstandardized Residual
N		408
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.36140977
Most Extreme Differences	Absolute	.116
	Positive	.116
	Negative	-.090
Test Statistic		.116
Asymp. Sig. (2-tailed)		.000 ^c

Hasil Uji Normalitas setelah Transformasi SQRT dan *Trimming*

		Unstandardized Residual
N		403
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.20184900
Most Extreme Differences	Absolute	.110
	Positive	.110
	Negative	-.096
Test Statistic		.110
Asymp. Sig. (2-tailed)		.000 ^c



LAMPIRAN III: Hasil Uji Asumsi Klasik

Hasil Uji Multikolinearitas

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.988	.192		-5.147	.000		
	SQRT_PROFIT	.044	.090	.023	.484	.629	.973	1.028
	SQRT_SIZE	.376	.051	.363	7.374	.000	.899	1.112
	SQRT_INST	-.019	.107	-.009	-.177	.860	.915	1.093

a. Dependent Variable: SQRT_CED

Hasil Uji Heteroskedastisitas

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.038	.084		.456	.649
	SQRT_PROFIT	.062	.040	.078	1.559	.120
	SQRT_SIZE	.012	.022	.028	.539	.590
	SQRT_INST	.090	.047	.099	1.919	.056

a. Dependent Variable: ABSRES

Hasil Uji Autokorelasi sebelum *Cochrane-Orcutt*

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.364 ^a	.133	.126	.202606	1.503

a. Predictors: (Constant), SQRT_X3, SQRT_X2, SQRT_X1

b. Dependent Variable: SQRT_CED

Hasil Uji Autokorelasi setelah *Cochrane-Orcutt*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.419 ^a	.176	.168	.18891	1.987

a. Predictors: (Constant), LAGSQRT_X3, LAGSQRT_X2, LAGSQRT_X1

b. Dependent Variable: LAGSQRT_CED

LAMPIRAN III: Hasil Uji Statistik Deskriptif

	N	Minimum	Maximum	Mean	Std. Deviation
SQRTCED	403	.000	.850	.46048	.216663
SQRTSIZE	403	3.356	4.360	3.87043	.208939
SQRTPROFIT	403	.000	.539	.23076	.113565
SQRTINST	403	.580	1.000	.90201	.098851
Valid N (listwise)	403				



LAMPIRAN IV: Hasil Uji Hipotesis

Hasil Uji Kelayakan Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.506	3	.835	20.348	.000 ^b
	Residual	16.379	399	.041		
	Total	18.884	402			

a. Dependent Variable: SQRT_CED

b. Predictors: (Constant), SQRT_INST, SQRT_PROFIT, SQRT_SIZE

Hasil Uji Regresi

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.988	.192		-5.147	.000
	SQRT_SIZE	.376	.051	.363	7.374	.000
	SQRT_PROFIT	.044	.090	.023	.484	.629
	SQRT_INST	-.019	.107	-.009	-.177	.860

a. Dependent Variable: SQRT_CED

Hasil Uji Koefisien Determinasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.364 ^a	.133	.126	.202606

a. Predictors: (Constant), SQRT_INST, SQRT_PROFIT, SQRT_SIZE

LAMPIRAN V: Checklist Pengukuran Emisi Karbon

Carbon Emission Disclosure Checklist

<i>Climate Change: Risks and Opportunities</i>	<i>CC1 – Assessment/description of the risks (regulatory, physical or general) relating to climate change and actions taken or to be taken to manage the risks</i>
	<i>CC2 – Assessment/description of current (and future) financial implications, business implications and opportunities of climate change</i>
<i>GHG Emissions Accounting</i>	<i>GHG1 – Description of the methodology used to calculate GHG emissions (e.g. GHG protocol or ISO)</i>
	<i>GHG2 – Existence external verification of quantity of GHG emission– if so by whom and on what basis</i>
	<i>GHG3 – Total GHG emissions – metric tonnes CO₂- e emitted</i>
	<i>GHG4 – Disclosure of Scopes 1 and 2, or Scope 3 direct GHG emissions</i>
	<i>GHG5 – Disclosure of GHG emissions by sources (e.g. coal, electricity, etc.)</i>
	<i>GHG6 – Disclosure of GHG emissions by facility or segment level</i>
	<i>GHG7 – Comparison of GHG emissions with previous years</i>
<i>Energy Consumption Accounting</i>	<i>EC1 – Total energy consumed (e.g. tera-joules or peta-joules)</i>
	<i>EC2 – Quantification of energy used from renewable sources</i>
<i>GHG Reduction and Cost</i>	<i>RC1 – Detail of plans or strategies to reduce GHG emissions</i>
	<i>RC2 – Specification of GHG emissions reduction target level and target year</i>
	<i>RC3 – Emissions reductions and associated costs or savings achieved to date as a result of the reduction plan</i>
	<i>RC4 – Cost of future emissions factored into capital expenditure planning</i>
<i>Carbon Emission Accountability</i>	<i>ACC1 – Indication of which board committee (or other executive body) has overall responsibility for actions related to climate change</i>
	<i>ACC2 – Description of the mechanism by which the board (or other executive body) reviews the company’s progress regarding climate change</i>