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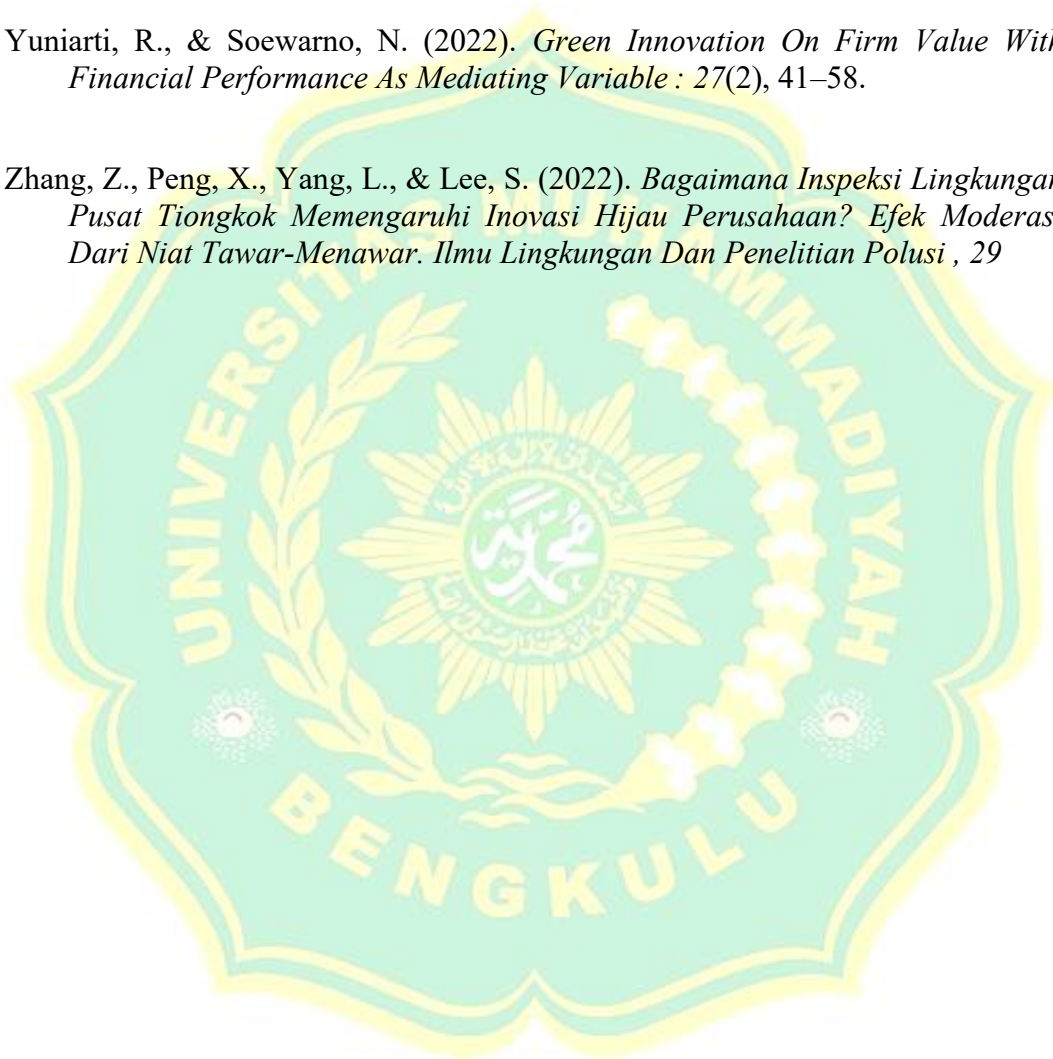
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LAMPIRAN 1

Daftar populasi subsektor makanan dan minuman yang terdaftar di BEI Tahun 2021-2025

No	Kode	Nama Perusahaan
1	AALI	PT.Astra Argo Lestari Tbk
2	ADES	PT.Akasha Wira Interntional
3	AGAR	PT. Asia Sejahtera Mina Tbk
4	AISA	PT. FKS Food Sejahtera Tbk
5	ALTO	PT. Tri Banyan Tirta Tbk
6	AMMS	PT. Agung Menjangan Mas Tbk
7	ANDI	PT. Andira Agro Tbk
8	ANJT	PT. Austindo Nusantara Jaya Tbk
9	ASHA	PT. Cilacap Samudera Fishing Indus
10	BEEF	PT. Estika Tata Tiara Tbk
11	BISI	PT. Bisi International Tbk
12	BOBA	PT. Formosa Ingredient Factory Tbk
13	BTEK	PT. Bumi Teknokultura Unggul Tbk
14	BUDI	PT. Budi Starch & Sweetener Tbk
15	BWPT	PT. Eagle High Plantation Tbk
16	CAMP	PT. Campina Ice Cream Industry Tbk
17	CBUT	PT. Citra Borneo Utama Tbk
18	CEKA	PT. Wilmar Cahaya Indonesia Tbk
19	CLEO	PT. Sariguna Primatirta Tbk
20	CMRY	PT. Cisarua Mountain Dairy Tbk
21	COCO	PT. Wahana Interfood Nusantara Tbk
22	CPIN	PT. Charoen Pokphand Indonesia Tbk
23	CPRO	PT. Central Proteina Prima Tbk
24	CRAB	PT. Toba Surimi Industr Tbk
25	CSRA	PT. Cisadane Sawit Raya Tbk
26	DEWI	PT. Dewi Shri Farmino Tbk
27	DLTA	PT. Delta Djakarta Tbk

28	DPUM	PT. Dua Putra Utama Makmur Tbk
29	DSFI	PT. Dharma Samudera Fishing Ind. Tbk
30	DSNG	PT. Dharma Satya Nusantra Tbk
31	ENZO	PT. Morenzo Abadi Perkasa Tbk
32	FAPA	PT. FAP Agri Tbk
33	FISH	PT. FKS Multi Agro Tbk
34	FOOD	PT. Senta Food Indoesia Tbk
35	GOLL	PT. Golden Plantations
36	GOOD	PT. Garudafood Putra Putri Jaya Tbk
37	GULA	PT. Aman Agrindo Tbk
38	GZCO	PT. Gozko Plantations Tbk
39	HOKI	PT. Buyung Poetra Sembada Tbk
40	IBOS	PT. Indo Boga Sukses Tbk
41	ICBP	PT. Indofood CBP Sukses Makmur Tbk
42	IKAN	PT. Era Mandiri Cemerlang Tbk
43	INDF	PT. Indofood Sukses Makmur Tbk
44	IPPE	PT. Indo Pureco Pratama Tbk
45	JARR	PT. Jhonlin Agro Raya Tbk
46	JAWA	PT. Jaya Agra White Tbk
47	JPFA	PT. Jafpa Comfeed Indonesia Tbk
48	KEJU	PT. Mulia Boga Raya Tbk
49	LSPI	PT. London Sumatra Indonesia Tbk
50	MAGP	PT. Multi Agro Gemilang Plantation Tbk
51	MAIN	PT. Malindo Feedmill Tbk
52	MKTR	PT. Mentobi Karyatama Raya Tbk
53	MGRO	PT. Mahkota Group Tbk
54	MLBI	PT. Multi Bintang Indonesia Tbk
55	MYOR	PT. Mayora Indah Tbk
56	NASI	PT. Wahan Inti Makmur Tbk
57	OILS	PT. Oil Perkasa Tbk
58	PALM	PT. Provident Investasi Bersama Tbk
59	PGUN	PT. Pradiksi Gunatama Tbk
60	PMMP	PT. Panca Mitra Multi Perdana Tbk
61	PSDN	PT. Prasadha Aneka Niaga Tbk
62	PSGO	PT. Palma Serasih Tbk
63	ROTI	PT. Nippon Indosari Corpindo Tbk
64	SGRO	PT. Sampoerna Agro Tbk

65	SIMP	PT. Salim Ivomas Pratama Tbk
66	SIPD	PT. Sreeya Sewu Indonesia Tbk
67	SKBM	PT. Sekar Bumin Tbk
68	SKLT	PT.Sekar Laut Tbk
69	SMAR	PT. Smart Tbk
70	SSMS	PT. Sawit Sumbermas Sarana Tbk
71	STAA	PT. Sumber Tani Agung Resources Tbk
72	STTP	PT. Siantar Top Tbk
73	TAPG	PT. Triputra Agro Persada Tbk
74	TAYS	PT. Jaya Swarasa Agung Tbk
75	TBLA	PT. Tunas Baru Lampung Tbk
76	TGKA	PT. Tigaraksa Satria Tbk
77	TLDN	PT. Teladan Prima Agro Tbk
78	TRGU	PT. Cerestar Indonesia Tbk
79	ULTJ	PT. ULTra Jaya Milk Industri & Trading Company TBK
80	UNSP	PT. Bakrie Sumatera Plantations Tbk
81	WAPO	PT. Wahana Pronaturl Tbk
82	WMPP	PT. Widodo Makmur Perkasa Tbk
83	WMUU	PT. Widodo Makmur Unggas Tbk
84	AYAM	PT Janu Putra Sejahtera Tbk.
85	BEER	PT.Jobubu Jarum Minahasa
86	BRRC	PT.Raja Roti Cemerlang Tbk
87	FORE	PT.Fore kopi indonesia Tbk
88	GPRM	PT.Graha prima mentari Tbk
89	GUNA	PT.Gunanusa Eramandiri Tbk
90	ISEA	PT.Indo American Seafood Tbk
91	MAXI	PT.Maxindo Karya Anugerah Tbk
92	NAYZ	PT.Hassana Boga Sejahtera Tbk
93	NEST	PT.Esta Indonesia Tbk
94	NSSS	PT. Nusantara Sawit Sejahtera Tbk
95	PTPS	PT.Pulau Subur Tbk
96	PANI	PT.Pantai Inda Kapuk Dua Tbk
97	RLCO	PT.Abadi Lestari Indonesia Tbk
98	SOUL	PT.Mitra Tirta Buwana Tbk
99	STRK	PT.Lovina Beach Brewery Tbk
10	TGUK	PT.Platinum Wahab Nusantara Tbk
101	UDNG	PT.Agro Bahari Nusantara Tbk
102	WINE	PT.Hatten Bali Tbk

26	DEWI	PT. Dewi Shri Farmino Tbk	x	✓	✓	✓	x	✗	✗	✗	✗	✗	18 Jul 2022	Laporan Annual dan sustainability tidak lengkap
27	DLTA	PT. Delta Djakarta Tbk	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	27 Feb 1984	Sustainability nya tidak lengkap
28	DPUM	PT. Dua Putra Utama Makmur Tbk	✓	✓	✓	x	✓	✗	✗	✗	✗	✗	08 Dec 2015	Laporan Annual dan sustainability tidak lengkap
29	DSFI	PT. Dharma Samudera Fishing Ind. Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	24 Mar 2000	Tidak mengungkapkan proper
30	DSNG	PT. Dharma Satya Nusantara Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14 Jun 2013	Tidak mengungkapkan proper
31	ENZO	PT. Morenzo Abadi Perkasa Tbk	✓	✓	x	✓	✓	✓	✓	✗	✓	✓	14 Sep 2020	Laporan Annual dan sustainability tidak lengkap
32	FAPA	PT. FAP Agri Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	04 Jan 2021	
33	FISH	PT. FKS Multi Agro Tbk	✓	✓	x	x	✓	✓	✓	✓	✓	✓	18 Jan 2002	Laporan Annual tidak lengkap
34	FOOD	PT. Senta Food Indonesia Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	08 Jan 2019	Sustainability nya tidak lengkap
35	GOLL	PT. Golden Plantations	x	x	x	x	x	✗	✓	✓	✓	✗	23 Dec 2014	Laporan Annual dan sustainability tidak lengkap
36	GOOD	PT. Garudafood Putra Putri Jaya Tbk	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	10 Oct 2018	Sustainability nya tidak lengkap
37	GULA	PT. Aman Agrindo Tbk	x	✓	✓	✓	✓	✗	✓	✓	✓	✓	03 Agt 2022	Laporan Annual dan sustainability tidak lengkap
38	GZCO	PT. Gozko Plantations Tbk	✓	x	✓	✓	x	✗	✗	✗	✗	✗	15 May 2008	Laporan Annual dan sustainability tidak lengkap
39	HOKI	PT. Buyung Poetra Sembada Tbk	✓	x	x	x	✓	✓	✓	✓	✓	✗	22 Jun 2017	Laporan Annual dan sustainability tidak lengkap
40	IBOS	PT. Indo Boga Sukses Tbk	✓	✓	✓	✓	x	✗	✓	✓	✓	✗	25 Apr 2022	Laporan Annual dan sustainability tidak lengkap
41	ICBP	PT. Indofood CBP Sukses Makmur Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	07 Oct 2010	
42	IKAN	PT. Era Mandiri Cemerlang Tbk	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	12 Feb 2020	sustainability tidak lengkap
43	INDF	PT. Indofood Sukses Makmur Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14 Jul 1994	
44	IPPE	PT. Indo Pureco Pratama Tbk	x	x	✓	x	✗	✗	✗	✓	✗	✓	09 Dec 2021	Laporan Annual dan sustainability tidak lengkap
45	JARR	PT. Jhonlin Agro Raya Tbk	x	✓	✓	✓	✓	✗	✓	✓	✓	✓	04 Agt 2022	Laporan Annual dan sustainability tidak lengkap
46	JAWA	PT. Jaya Agra White Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	30 May 2011	tidak mengungkapkan proper
47	JPFA	PT. Jafpa Comfeed Indonesia Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	23 Oct 1989	
48	KEJU	PT. Mulia Boga Raya Tbk	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	25 Nov 2019	sustainability tidak lengkap
49	LSPI	PT. London Sumatra Indonesia Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	05 Jul 1996	Laporan Annual tidak lengkap
50	MAGP	PT. Multi Agro Gemilang Plantation Tbk	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	16 Jan 2013	Laporan Annual dan sustainability tidak lengkap
51	MAIN	PT. Malindo Feedmill Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	10 Feb 2006	Sustainability nya tidak lengkap
52	MKTR	PT. Mentobi Karyatama Raya Tbk	x	✓	✓	✓	✓	✗	✗	✓	✓	✓	08-Nov-22	Laporan Annual dan sustainability tidak lengkap
53	MGRO	PT. Mahkota Group Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	12 Jul 2018	Sustainability nya tidak lengkap
54	MLBI	PT. Multi Bintang Indonesia Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15 Dec 1981	tidak mengungkapkan laporan GRI
55	MYOR	PT. Mayora Indah Tbk	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	04 Jul 1990	Sustainability nya tidak lengkap

56	NASI	PT. Wahana Inti Makmur Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	13 Dec 2021	sustainability tidak lengkap
57	OILS	PT. Oil Perkasa Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	06 Sep 2021	sustainability tidak lengkap
58	PALM	PT. Provident Investasi Bersama Tbk	✓	✓	✓	✓	✗	✗	✗	✓	✓	✗	08-Oct-12	Laporan Annual dan sustainability tidak lengkap
59	PGUN	PT. Pradiksi Gunatama Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓		Laporan Annual tidak lengkap
60	PMMP	PT. Panca Mitra Multi Perdana Tbk	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	18 Dec 2020	Laporan Annual dan sustainability tidak lengkap
61	PSDN	PT. Prasadha Aneka Niaga Tbk	✓	✗	✗	✓	✓	✓	✓	✗	✗	✓	18 Oct 1994	Laporan Annual dan sustainability tidak lengkap
62	PSGO	PT. Palma Serasih Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	25 Nov 2019	tidak mengungkapkan proper
63	ROTI	PT. Nippon Indosari Corpindo Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	28 Jun 2010	
64	SGRO	PT. Sampoerna Agro Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	18 Jun 2007	Laporan Annual dan sustainability tidak lengkap
65	SIMP	PT. Salim Ivomas Pratama Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	09 Jun 2011	
66	SIPD	PT. Sreeya Sewu Indonesia Tbk	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	27 Dec 1996	Laporan Annual dan sustainability tidak lengkap
67	SKBM	PT. Sekar Bumi Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	28 Sep 2012	tidak mengungkapkan proper
68	SKLT	PT.Sekar Laut Tbk	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	08 Sep 1993	Sustainability nya tidak lengkap
69	SMAR	PT. Smart Tbk	✓	✗	✓	✗	✗	✗	✗	✓	✗	✗	20 Nov 1992	Laporan Annual dan sustainability tidak lengkap
70	SSMS	PT. Sawit Sumbermas Sarana Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12 Dec 2013	
71	STAA	PT. Sumber Tani Agung Resources Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10 Mar 2022	tidak mengungkapkan proper
72	SITP	PT. Siantar Top Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	16 Dec 1996	Laporan Annual tidak lengkap
73	TAPG	PT. Triputra Agro Persada Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12 Apr 2021	
74	TAYS	PT. Jaya Swarasa Agung Tbk	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	06 Dec 2021	Laporan Annual dan sustainability tidak lengkap
75	TBLA	PT. Tunas Baru Lampung Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14 Feb 2000	tidak menampilkan laporan GRI
76	TGKA	PT. Tigaraksa Satria Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11 Jun 1990	tidak menampilkan laporan GRI
77	TLDN	PT. Teladan Prima Agro Tbk	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	12 Apr 2022	Laporan Annual dan sustainability tidak lengkap
78	TRGU	PT. Cerestar Indonesia Tbk	✗	✓	✓	✓	✓	✗	✗	✓	✓	✓	08 Jul 2022	Laporan Annual dan sustainability tidak lengkap
79	ULTJ	PT. UIltra Jaya Milk Industri & Trading Company TBK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	02 Jul 1990	
80	UNSP	PT. Bakrie Sumatera Plantations Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	06 Mar 1990	
81	WAPO	PT. Wahana Pronaturi Tbk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	22 Jun 2001	tidak mengungkapkan proper
82	WMPP	PT. Widodo Makmur Perkasa Tbk	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	06 Dec 2021	Laporan Annual dan sustainability tidak lengkap
83	WMUU	PT. Widodo Makmur Unggas Tbk	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	02 Feb 2021	sustainability tidak lengkap
84	AYAM	PT Janu Putra Sejahtera Tbk.	✗	✗	✓	✓	✓	✗	✗	✓	✓	✗	30 Nov 2023	Laporan Annual dan sustainability tidak lengkap
85	BEER	PT.Jobubu Jarum Minahasa	✗	✓	✓	✗	✓	✗	✓	✓	✗	✓	06 Jan 2023	Laporan Annual dan sustainability tidak lengkap
86	BRRC	PT.Raja Roti Cemerlang Tbk	✗	✗	✗	✓	✗	✗	✗	✗	✓	✗	09 Jan 2025	Laporan Annual dan sustainability tidak lengkap
87	FORE	PT.Fore kopi indonesia Tbk	✗	✗	✗	✓	✓	✗	✗	✗	✗	✓	14 Apr 2025	Laporan Annual dan sustainability tidak lengkap
88	GPRM	PT.Graha prima mentari Tbk	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗	10 Jul 2023	Laporan Annual dan sustainability tidak lengkap
89	GUNA	PT.Gunanusa Eramandiri Tbk	✗	✗	✗	✓	✓	✗	✗	✗	✗	✓	09 Jul 2024	Laporan Annual dan sustainability tidak lengkap
90	ISEA	PT.Indo American Seafood Tbk	✗	✗	✗	✓	✓	✗	✗	✗	✗	✓	08 Jul 2024	Laporan Annual dan sustainability tidak lengkap
91	MAXI	PT.Maxindo Karya Anugerah Tbk	✗	✓	✓	✓	✗	✗	✗	✓	✓	✗	12 Jun 2023	Laporan Annual dan sustainability tidak lengkap
92	NAYZ	PT.Hassana Boga Sejahtera Tbk	✗	✓	✓	✓	✗	✗	✓	✓	✓	✗	06 Feb 2023	Laporan Annual dan sustainability tidak lengkap
93	NEST	PT.Esta Indonesia Tbk	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	08 Agt 2024	Laporan Annual dan sustainability tidak lengkap
94	NSSS	PT. Nusantara Sawit Sejahtera Tbk	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	10 Mar 2023	Laporan Annual dan sustainability tidak lengkap
95	PTPS	PT.Pulau Subur Tbk	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	09 Oct 2023	Laporan Annual dan sustainability tidak lengkap
96	PANI	PT.Pantai Inda Kapuk Dua Tbk	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	Sep-18	Laporan Annual dan sustainability tidak lengkap
97	RLCO	PT.Abadi Lestari Indonesia Tbk	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	08 Dec 2025	Laporan Annual dan sustainability tidak lengkap
98	SOUL	PT.Mitra Tirta Buwana Tbk	✗	✗	✗	✓	✗	✗	✗	✗	✓	✗	06 Jan 2023	Laporan Annual dan sustainability tidak lengkap
99	STRK	PT.Lovina Beach Brewery Tbk	✗	✗	✗	✓	✗	✗	✗	✗	✓	✗	10 Oct 2023	Laporan Annual dan sustainability tidak lengkap
100	TGUK	PT.Platinum Wahab Nusantara Tbk	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	10 Jul 2023	Laporan Annual dan sustainability tidak lengkap
101	UDNG	PT.Agro Bahari Nusantara Tbk	✗	✗	✓	✓	✓	✗	✗	✗	✓	✓	31-Oct-23	Laporan Annual dan sustainability tidak lengkap
102	WINE	PT.Hatten Bali Tbk	✗	✗	✓	✓	✗	✗	✗	✓	✓	✗	10 Jan 2023	Laporan Annual dan sustainability tidak lengkap
103	YUPI	PT.Yupi Indo Jelly Gum Tbk	✗	✗	✗	✓	✗	✗	✗	✗	✓	✗	25 Mar 2025	

	Perusahaan subsektor makanan dan minuman yang terdaftar di BEI 2021-2024	103
1	Perusahaan subsektor makanan dan minuman Yang terdaftar di BEI secara berturut-	72
2	perusahaan yang tidak mengungkapkan laporan Annual Report	-20
3	perusahaan yang tidak mengungkapkan sustainability	25
4	Perusahaan yang tidak mengungkapkan laporan proper & GRI	9
4	sampel yang diteliti dan mempunyai data lengkap	18
	Total Data keseluruhan yang diteliti (18 x 5)	90



Lampiran 3

Kriteria penentuan sampel subsektor makanan minuman berdasarkan IPO Tahun 2021-2025

No	Kode	Nama Perusahaan	IPO
1	AALI	PT.Astra Argo Lestari Tbk	09 Dec 1997
2	ADES	PT.Akasha Wira Interntional	13 Jun 1994
3	AGAR	PT. Asia Sejahtera Mina Tbk	02 Dec 2019
4	AISA	PT. FKS Food Sejahtera Tbk	11 Jun 1997
5	ALTO	PT. Tri Banyan Tirta Tbk	10 Jul 2012
6	ANDI	PT. Andira Agro Tbk	16 Agt 2018
7	ANJT	PT. Austindo Nusantara Jaya Tbk	08 May 2013
8	BEEF	PT. Estika Tata Tiara Tbk	10 Jan 2019
9	BISI	PT. Bisi International Tbk	28 May 2007
10	BOBA	PT. Formosa Ingredient Factory Tbk	01 Nov 2021
11	BTEK	PT. Bumi Teknokultura Unggul Tbk	14 May 2004
12	BUDI	PT. Budi Starch & Sweetener Tbk	08 May 1995
13	BWPT	PT. Eagle High Plantation Tbk	27 Oct 2009
14	CAMP	PT. Campina Ice Cream Industry Tbk	19 Dec 2017
15	CEKA	PT. Wilmar Cahaya Indonesia Tbk	09 Jul 1996
16	CLEO	PT. Sariguna Primatirta Tbk	05 May 2017
17	CMRY	PT. Cisarua Mountain Dairy Tbk	06 Dec 2021
18	COCO	PT. Wahana Interfood Nusantara Tbk	20 Mar 2019
19	CPIN	PT. Charoen Pokphand Indonesia Tbk	18 Mar 1991
20	CPRO	PT. Central Proteina Prima Tbk	28 Nov 2006
21	CSRA	PT. Cisadane Sawit Raya Tbk	09 Jan 2020
22	DLTA	PT. Delta Djakarta Tbk	27 Feb 1984
23	DPUM	PT. Dua Putra Utama Makmur Tbk	08 Dec 2015
24	DSFI	PT. Dharma Samudera Fishing Ind. Tbk	24 Mar

			2000
25	DSNG	PT. Dharma Satya Nusantara Tbk	14 Jun 2013
26	ENZO	PT. Morenzo Abadi Perkasa Tbk	14 Sep 2020
27	FAPA	PT. FAP Agri Tbk	04 Jan 2021
28	FISH	PT. FKS Multi Agro Tbk	18 Jan 2002
29	FOOD	PT. Senta Food Indonesia Tbk	08 Jan 2019
30	GOLL	PT. Golden Plantations	23 Dec 2014
31	GOOD	PT. Garudafood Putra Putri Jaya Tbk	10 Oct 2018
32	GZCO	PT. Gozko Plantations Tbk	15 May 2008
33	HOKI	PT. Buyung Poetra Sembada Tbk	22 Jun 2017
34	ICBP	PT. Indofood CBP Sukses Makmur Tbk	07 Oct 2010
35	IKAN	PT. Era Mandiri Cemerlang Tbk	12 Feb 2020
36	INDF	PT. Indofood Sukses Makmur Tbk	14 Jul 1994
37	IPPE	PT. Indo Pureco Pratama Tbk	09 Dec 2021
38	JAWA	PT. Jaya Agra White Tbk	30 May 2011
39	JPFA	PT. Jafpa Comfeed Indonesia Tbk	23 Oct 1989
40	KEJU	PT. Mulia Boga Raya Tbk	25 Nov 2019
41	LSPI	PT. London Sumatra Indonesia Tbk	05 Jul 1996
42	MAGP	PT. Multi Agro Gemilang Plantation Tbk	16 Jan 2013
43	MAIN	PT. Malindo Feedmill Tbk	10 Feb 2006
44	MGR O	PT. Mahkota Group Tbk	12 Jul 2018
45	MLBI	PT. Multi Bintang Indonesia Tbk	15 Dec 1981
46	MYO R	PT. Mayora Indah Tbk	04 Jul 1990
47	NASI	PT. Wahan Inti Makmur Tbk	13 Dec 2021
48	OILS	PT. Oil Perkasa Tbk	06 Sep 2021
49	PALM	PT. Provident Investasi Bersama Tbk	08-Oct-12
50	PGUN	PT. Pradiksi Gunatama Tbk	07 Jul 2020
51	PMMP	PT. Panca Mitra Multi Perdana Tbk	18 Dec 2020

52	PSDN	PT. Prasadha Aneka Niaga Tbk	18 Oct 1994
53	PSGO	PT. Palma Serasih Tbk	25 Nov 2019
54	ROTI	PT. Nippon Indosari Corpindo Tbk	28 Jun 2010
55	SGRO	PT. Sampoerna Agro Tbk	18 Jun 2007
56	SIMP	PT. Salim Ivomas Pratama Tbk	09 Jun 2011
57	SIPD	PT. Sreeya Sewu Indonesia Tbk	27 Dec 1996
58	SKBM	PT. Sekar Bumin Tbk	28 Sep 2012
59	SKLT	PT. Sekar Laut Tbk	08 Sep 1993
60	SMAR	PT. Smart Tbk	20 Nov 1992
61	SSMS	PT. Sawit Sumbermas Sarana Tbk	12 Dec 2013
62	STTP	PT. Siantar Top Tbk	16 Dec 1996
63	TAPG	PT. Triputra Agro Persada Tbk	12 Apr 2021
64	TAYS	PT. Jaya Swarasa Agung Tbk	06 Dec 2021
65	TBLA	PT. Tunas Baru Lampung Tbk	14 Feb 2000
66	TGKA	PT. Tigaraksa Satria Tbk	11 Jun 1990
67	ULTJ	PT. UITra Jaya Milk Industri & Trading Company TBK	02 Jul 1990
68	UNSP	PT. Bakrie Sumatera Plantations Tbk	06 Mar 1990
69	WAPO	PT. Wahana Pronaturl Tbk	22 Jun 2001
70	WMPP	PT. Widodo Makmur Perkasa Tbk	06 Dec 2021
71	WMU U	PT. Widodo Makmur Unggas Tbk	02 Feb 2021
72	PANI	PT. Pantai Inda Kapuk Dua Tbk	Sep-18

Lampiran 4
Sampel yang dijadikan objek penelitian

No	Kode	Nama Perusahaan
1	AALI	PT.Astra Argo Lestari Tbk
2	ADES	PT.Akasha Wira Interntional
3	AISA	PT. FKS Food Sejahtera Tbk
4	ANJT	PT. Austindo Nusantara Jaya Tbk
5	BISI	PT. Bisi International Tbk
6	CAMP	PT. Campina Ice Cream Industry Tbk
7	CEKA	PT. Wilmar Cahaya Indonesia Tbk
8	CSRA	PT. Cisadane Sawit Raya Tbk
9	FAPA	PT. FAP Agri Tbk
10	ICBP	PT. Indofood CBP Sukses Makmur Tbk
11	JPFA	PT. Jafpa Comfeed Indonesia Tbk
12	MLBI	PT. Multi Bintang IndonesiaTbk
13	ROTI	PT. Nippon Indosari Corpindo Tbk
14	SSMS	PT. Sawit Sumbermas Sarana Tbk
15	ULTJ	PT. ULTtra Jaya Milk Industri & Trading Company TBK
16	UNSP	PT. Bakrie Sumatera Plantations Tbk
17	INDF	PT. Indofood sukses makmur Tbk
18	TAPG	PT. Triputra Agro Persada Tbk

Lampiran 5

Nilai Perusahaan(PVB=NILAI Per lembar saham/Nilai buku per lembar saham)

Nilai Perusahaan						
Kode P	Tahun	harga saham per lembar	Total Ekuitas	Jumlah Saham Beredar	nilai buku per lembar	PBV
AALI	2021	Rp 9.500	Rp 21.171.173.000.000	Rp 1.924.688.333	10999,79287	0,86
AALI	2022	Rp 8.025	Rp 22.243.221.000.000	Rp 1.924.688.333	11556,7911	0,69
AALI	2023	Rp 7.025	Rp 22.566.006.000.000	Rp 1.924.688.333	11724,49877	0,60
AALI	2024	Rp 6.200	Rp 23.202.062.000.000	Rp 1.924.688.333	12054,97098	0,51
AALI	2025	Rp 7.375	Rp 24.157.634.000.000	Rp 1.924.688.333	12551,4524	0,59
ADES	2021	Rp 3.290	Rp 969.817.000.000	Rp 589.896.800	1644,045196	2,00
ADES	2022	Rp 7.175	Rp 1.334.836.000.000	Rp 589.896.800	2262,829702	3,17
ADES	2023	Rp 9.675	Rp 1.729.808.000.000	Rp 589.896.800	2932,390886	3,30
ADES	2024	Rp 9.100	Rp 2.258.501.000.000	Rp 589.896.800	3828,637484	2,38
ADES	2025	Rp 15.425	Rp 3.000.703.000.000	Rp 589.896.800	5086,827052	3,03
ANJT	2021	Rp 990	Rp 6.182.419.025.285	Rp 3.354.175.000	1843,201093	0,54
ANJT	2022	Rp 665	Rp 6.671.693.129.890	Rp 3.354.175.000	1989,071271	0,33
ANJT	2023	Rp 745	Rp 6.556.820.729.128	Rp 3.354.175.000	1954,823684	0,38
ANJT	2024	Rp 715	Rp 6.369.442.162.466	Rp 3.354.175.000	1898,959405	0,38
ANJT	2025	Rp 1.780	Rp 3.799.057.958.118	Rp 3.354.175.000	1132,635583	1,57
JPFA	2021	Rp 1.720	Rp 13.102.710.000.000	Rp 11.726.575.201	1117,351808	1,54
JPFA	2022	Rp 1.295	Rp 13.654.777.000.000	Rp 11.726.575.201	1164,430089	1,11
JPFA	2023	Rp 1.180	Rp 14.167.212.000.000	Rp 11.726.575.201	1208,128695	0,98
JPFA	2024	Rp 1.940	Rp 16.572.522.000.000	Rp 11.726.575.201	1413,244849	1,37
JPFA	2025	Rp 2.620	Rp 20.018.957.000.000	Rp 11.726.575.201	1707,144384	1,53
MLBI	2021	Rp 7.800	Rp 10.991.570.000.000	Rp 2.107.000.000	5216,691979	1,50
MLBI	2022	Rp 8.950	Rp 10.732.750.000.000	Rp 2.107.000.000	5093,853821	1,76
MLBI	2023	Rp 7.750	Rp 13.914.550.000.000	Rp 2.107.000.000	6603,962981	1,17
MLBI	2024	Rp 6.100	Rp 13.168.850.000.000	Rp 2.107.000.000	6250,047461	0,98
MLBI	2025	Rp 5.675	Rp 13.579.500.000.000	Rp 2.107.000.000	6444,94542	0,88
SSMS	2021	Rp 965	Rp 6.107.507.765.000	Rp 9.525.000.000	641,2081643	1,50
SSMS	2022	Rp 1.470	Rp 6.443.968.832.000	Rp 9.525.000.000	676,5321608	2,17
SSMS	2023	Rp 1.045	Rp 1.996.294.483.000	Rp 9.525.000.000	209,5847226	4,99
SSMS	2024	Rp 1.300	Rp 2.884.768.261.000	Rp 9.525.000.000	302,8628096	4,29
SSMS	2025	Rp 1.580	Rp 2.941.461.800.000	Rp 9.525.000.000	308,8148871	5,12
AISA	2021	Rp 192	Rp 833.757.000.000	Rp 9.311.800.000	89,53768337	2,14

AISA	2022	Rp	142	Rp	777.861.000.000	Rp	9.311.800.000	83,53497713	1,70
AISA	2023	Rp	144	Rp	968.198.000.000	Rp	9.311.800.000	103,9753861	1,38
AISA	2024	Rp	105	Rp	1.046.138.000.000	Rp	9.311.800.000	112,3454112	0,93
AISA	2025	Rp	134	Rp	1.144.016.000.000	Rp	9.311.800.000	122,8565906	1,09
BISI	2021	Rp	995	Rp	2.728.045.000.000	Rp	3.000.000.000	909,3483333	1,09
BISI	2022	Rp	1.600	Rp	3.050.250.000.000	Rp	3.000.000.000	1016,75	1,57
BISI	2023	Rp	1.600	Rp	3.446.696.000.000	Rp	3.000.000.000	1148,898667	1,39
BISI	2024	Rp	1.200	Rp	3.390.455.000.000	Rp	3.000.000.000	1130,151667	1,06
BISI	2025	Rp	875	Rp	3.494.570.000.000	Rp	3.000.000.000	1164,856667	0,75
CAMP	2021	Rp	290	Rp	1.022.810.000.000	Rp	5.885.000.000	173,7994902	1,67
CAMP	2022	Rp	306	Rp	941.450.000.000	Rp	5.885.000.000	159,9745115	1,91
CAMP	2023	Rp	402	Rp	952.640.000.000	Rp	5.885.000.000	161,8759558	2,48
CAMP	2024	Rp	256	Rp	934.979.192.879	Rp	5.885.000.000	158,8749691	1,61
CAMP	2025	Rp	216	Rp	1.006.660.518.325	Rp	5.885.000.000	171,0553132	1,26
CEKA	2021	Rp	1.880	Rp	1.387.366.962.835	Rp	595.000.000	2331,709181	0,81
CEKA	2022	Rp	1.980	Rp	1.550.042.869.748	Rp	595.000.000	2605,114067	0,76
CEKA	2023	Rp	1.845	Rp	1.642.285.662.293	Rp	595.000.000	2760,14397	0,67
CEKA	2024	Rp	2.080	Rp	1.908.791.069.163	Rp	595.000.000	3208,052217	0,65
CEKA	2025	Rp	2.410	Rp	2.012.653.840.144	Rp	595.000.000	3382,611496	0,71
CSRA	2021	Rp	500	Rp	781.292.859.465	Rp	2.050.000.000	381,118468	1,31
CSRA	2022	Rp	570	Rp	963.111.881.039	Rp	2.050.000.000	469,8106737	1,21
CSRA	2023	Rp	472	Rp	1.115.171.555.082	Rp	2.050.000.000	543,9861244	0,87
CSRA	2024	Rp	725	Rp	1.298.545.253.538	Rp	2.050.000.000	633,436709	1,14
CSRA	2025	Rp	935	Rp	1.466.828.210.052	Rp	2.050.000.000	715,5259561	1,31
FAPA	2021	Rp	3.210	Rp	3.185.826.608.815	Rp	3.629.411.800	877,7804185	3,66
FAPA	2022	Rp	4.300	Rp	3.899.011.991.141	Rp	3.629.411.800	1074,282062	4,00
FAPA	2023	Rp	5.300	Rp	4.063.648.978.866	Rp	3.629.411.800	1119,643954	4,73
FAPA	2024	Rp	5.400	Rp	3.852.735.000.000	Rp	3.629.411.800	1061,531513	5,09
FAPA	2025	Rp	6.375	Rp	3.890.344.000.000	Rp	3.629.411.800	1071,893798	5,95
ICBP	2021	Rp	8.700	Rp	54.723.863.000.000	Rp	11.662.000.000	4692,493826	1,85
ICBP	2022	Rp	10.000	Rp	57.473.007.000.000	Rp	11.662.000.000	4928,229034	2,03
ICBP	2023	Rp	10.575	Rp	62.104.033.000.000	Rp	11.662.000.000	5325,332962	1,99
ICBP	2024	Rp	11.375	Rp	67.043.885.000.000	Rp	11.662.000.000	5748,918282	1,98
ICBP	2025	Rp	8.200	Rp	73.683.004.000.000	Rp	11.662.000.000	6318,213342	1,30
ROTI	2021	Rp	1.360	Rp	2.849.419.530.726	Rp	6.186.488.888	460,5875129	2,95
ROTI	2022	Rp	1.320	Rp	2.681.158.538.764	Rp	6.186.488.888	433,3893728	3,05
ROTI	2023	Rp	1.150	Rp	2.393.431.575.281	Rp	6.186.488.888	386,8804452	2,97
ROTI	2024	Rp	970	Rp	2.308.155.193.504	Rp	6.186.488.888	373,0961512	2,60
ROTI	2025	Rp	790	Rp	2.044.965.035.186	Rp	6.186.488.888	330,553416	2,39
ULTJ	2021	Rp	1.590	Rp	5.138.126.000.000	Rp	10.398.175.200	494,137279	3,22
ULTJ	2022	Rp	1.475	Rp	5.822.679.000.000	Rp	10.398.175.200	559,9712342	2,63
ULTJ	2023	Rp	1.475	Rp	6.686.968.000.000	Rp	10.398.175.200	643,09053	2,29
ULTJ	2024	Rp	1.805	Rp	7.426.918.000.000	Rp	10.398.175.200	714,2520545	2,53
ULTJ	2025	Rp	1.510	Rp	8.316.460.000.000	Rp	10.398.175.200	799,7999495	1,89
INDF	2021	Rp	6.325	Rp	86.632.111.000.000	Rp	8.780.426.500	9866,503751	0,64
INDF	2022	Rp	6.725	Rp	93.623.038.000.000	Rp	8.780.426.500	10662,69822	0,63
INDF	2023	Rp	6.450	Rp	100.464.900.000.000	Rp	8.780.426.500	11441,91572	0,56
INDF	2024	Rp	7.700	Rp	108.991.283.000.000	Rp	8.780.426.500	12412,98279	0,62
INDF	2025	Rp	6.775	Rp	120.235.247.000.000	Rp	8.780.426.500	13693,55429	0,49
TAPG	2021	Rp	610	Rp	7.796.011.000.000	Rp	19.825.540.000	393,2307014	1,55
TAPG	2022	Rp	680	Rp	10.412.744.000.000	Rp	19.825.540.000	525,2186826	1,29
TAPG	2023	Rp	545	Rp	11.339.540.000.000	Rp	19.825.540.000	571,9662617	0,95
TAPG	2024	Rp	765	Rp	11.276.429.000.000	Rp	19.825.540.000	568,7829436	1,34
TAPG	2025	Rp	1.500	Rp	11.687.485.000.000	Rp	19.825.540.000	589,5166033	2,54

Lampiran 6

Variabel X1 Green Innovation (GI = jumlah item yang diungkapkan / jumlah keseluruhan item yang diungkapkan (4 item))

KODE P	TAHUN	KEGIATAN PRODUKSI	PRODUK DIBUAT	KEMASAN PRODUK	DAUR ULANG	DIUNGKAPKAN	TOTAL
AALI	2021	1	0	0	1	2	0,5000
	2022	1	0	0	1	2	0,5000
	2023	1	0	0	1	2	0,5000
	2024	1	0	0	1	2	0,5000
	2025	1	0	0	1	2	0,5000
ANJT	2021	1	0	0	1	2	0,5000
	2022	1	0	0	1	2	0,5000
	2023	1	0	0	1	2	0,5000
	2024	1	0	0	1	2	0,5000
	2025	1	0	0	1	2	0,5000
ADES	2021	1	0	1	1	3	0,7500
	2022	1	0	1	1	3	0,7500
	2023	1	0	1	1	3	0,7500
	2024	1	0	1	1	3	0,7500
	2025	1	1	1	1	4	1,0000
JPFA	2021	1	0	0	1	2	0,5000
	2022	1	0	0	1	2	0,5000
	2023	1	0	0	1	2	0,5000
	2024	1	0	0	1	2	0,5000
	2025	1	0	0	1	2	0,5000
MLBI	2021	1	0	1	1	3	0,7500
	2022	1	0	1	1	3	0,7500
	2023	1	0	1	1	3	0,7500
	2024	1	0	1	1	3	0,7500
	2025	1	0	1	1	3	0,7500
SSMS	2021	1	0	0	1	2	0,5000
	2022	1	0	0	1	2	0,5000
	2023	1	0	0	1	2	0,5000
	2024	1	0	0	1	2	0,5000
	2025	1	0	0	1	2	0,5000

AISA	2021	1	1	0	1	3	120	0,7500
	2022	1	1	1	1	4		1,0000
	2023	1	0	0	1	2		0,5000
	2024	1	0	0	1	2		0,5000
	2025	0	0	0	1	1		0,2500
BISI	2021	1	0	0	0	1		0,2500
	2022	1	0	0	0	1		0,2500
	2023	1	0	0	0	1		0,2500
	2024	1	0	0	0	1		0,2500
	2025	1	0	0	1	2		0,5000
CAMP	2021	1	0	0	1	2		0,5000
	2022	1	0	0	1	2		0,5000
	2023	1	0	0	1	2		0,5000
	2024	1	0	1	1	3		0,7500
	2025	1	0	1	1	3		0,7500
CEKA	2021	1	1	0	1	3		0,7500
	2022	1	1	0	1	3		0,7500
	2023	1	1	0	1	3		0,7500
	2024	1	1	1	1	4		1,0000
	2025	1	0	1	1	3		0,7500
CSRA	2021	1	0	0	1	2		0,5000
	2022	1	0	0	1	2		0,5000
	2023	1	0	0	1	2		0,5000
	2024	1	0	0	1	2		0,5000
	2025	1	0	0	1	2		0,5000
FAPA	2021	1	0	0	1	2		0,5000
	2022	1	0	0	1	2		0,5000
	2023	0	0	0	1	1		0,2500
	2024	1	0	0	1	2		0,5000
	2025	1	0	0	1	2		0,5000
ICBP	2021	1	1	1	1	4		1,0000
	2022	1	0	0	1	2		0,5000
	2023	1	1	1	1	4		1,0000
	2024	1	0	0	1	2		0,5000
	2025	1	1	1	1	4		1,0000
ROTI	2021	1	1	0	1	3		0,7500
	2022	1	1	0	1	3		0,7500
	2023	1	1	0	1	3		0,7500
	2024	1	1	0	1	3		0,7500
	2025	1	0	0	1	2		0,5000
ULTJ	2021	1	0	0	1	2		0,5000
	2022	1	0	0	1	2		0,5000
	2023	1	1	1	1	4		1,0000
	2024	1	1	1	1	4		1,0000
	2025	1	1	1	1	4		1,0000
INDF	2021	1	1	1	1	4		1,0000
	2022	1	1	1	1	4		1,0000
	2023	1	1	1	1	4		1,0000
	2024	1	1	1	1	4		1,0000
	2025	1	1	1	1	4		1,0000
TAPG	2021	1	1	0	1	3		0,75
	2022	1	1	0	1	3		0,75
	2023	1	1	0	1	3		0,75
	2024	1	1	0	1	3		0,75
	2025	1	1	0	1	3		0,75

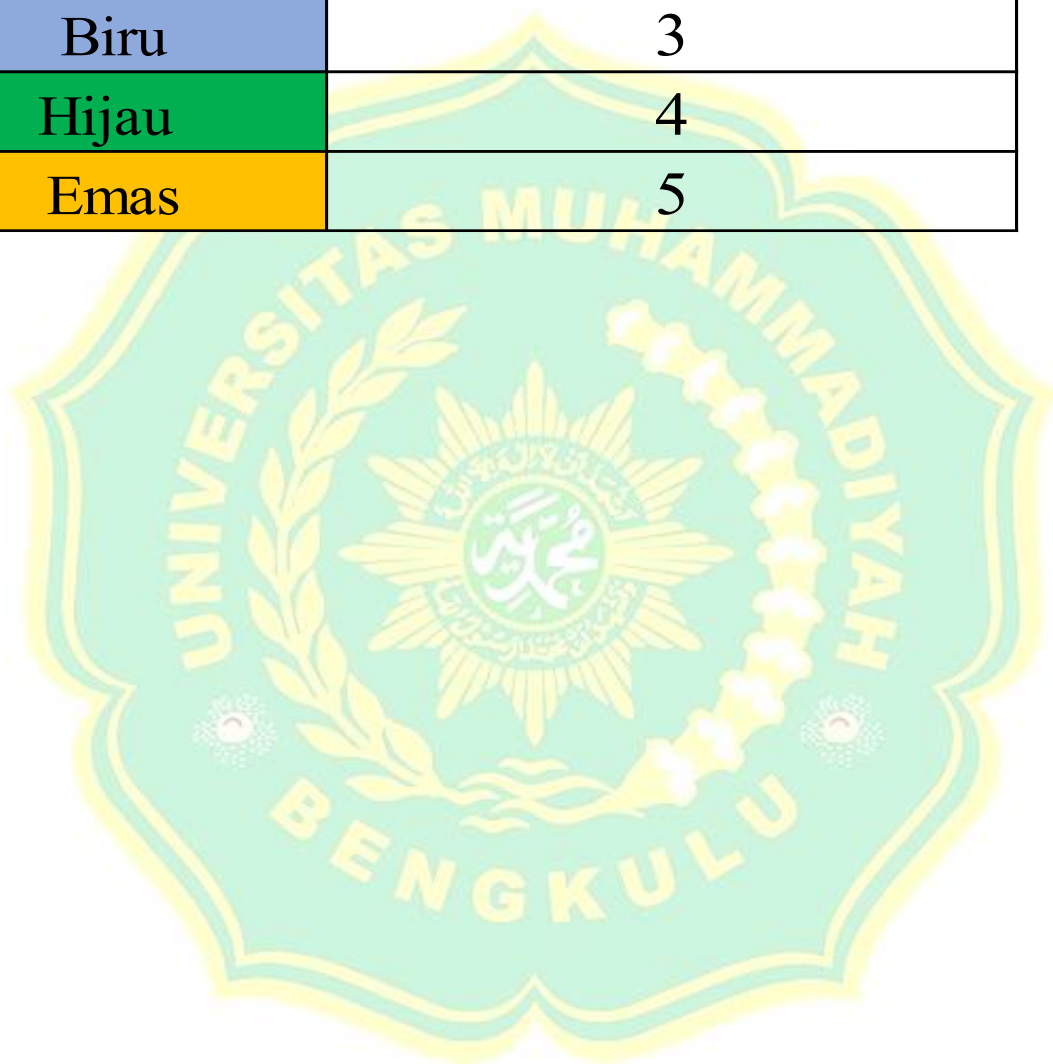
Lampiran 7
Variabel X2 Environmental performance (PROPER)

Kode P	Tahun	Rangking	Poin
AALI	2021	Biru	4
AALI	2022	Biru	4
AALI	2023	Biru	4
AALI	2024	Biru	4
AALI	2025	Biru	4
ADES	2021	Biru	3
ADES	2022	Biru	3
ADES	2023	Biru	3
ADES	2024	Biru	3
ADES	2025	Biru	3
ANJT	2021	Emas	5
ANJT	2022	Emas	5
ANJT	2023	Emas	5
ANJT	2024	Emas	5
ANJT	2025	Emas	5
JPFA	2021	Biru	3
JPFA	2022	Biru	3
JPFA	2023	Biru	3
JPFA	2024	Biru	3
JPFA	2025	Biru	3
MLBI	2021	Biru	3
MLBI	2022	Biru	3
MLBI	2023	Biru	3
MLBI	2024	Biru	3
MLBI	2025	Biru	3
SSMS	2021	Biru	3
SSMS	2022	Biru	3
SSMS	2023	Biru	3
SSMS	2024	Biru	3
SSMS	2025	Biru	3

AISA	2021	Biru	3
AISA	2022	Biru	3
AISA	2023	Biru	3
AISA	2024	Biru	3
AISA	2025	Biru	3
BISI	2021	Biru	3
BISI	2022	Biru	3
BISI	2023	Biru	3
BISI	2024	Biru	3
BISI	2025	Biru	3
CAMP	2021	Biru	3
CAMP	2022	Biru	3
CAMP	2023	Biru	3
CAMP	2024	Biru	3
CAMP	2025	Biru	3
CEKA	2021	Biru	3
CEKA	2022	Biru	3
CEKA	2023	Biru	3
CEKA	2024	Biru	3
CEKA	2025	Biru	3
CSRA	2021	Biru	3
CSRA	2022	Biru	3
CSRA	2023	Biru	3
CSRA	2024	Biru	3
CSRA	2025	Biru	3
FAPA	2021	Hijau	4
FAPA	2022	Hijau	4
FAPA	2023	Hijau	4
FAPA	2024	Hijau	4
FAPA	2025	Hijau	4
ICBP	2021	Hijau	4
ICBP	2022	Hijau	4
ICBP	2023	Hijau	4
ICBP	2024	Hijau	4
ICBP	2025	Hijau	4
ROTI	2021	Biru	3
ROTI	2022	Biru	3
ROTI	2023	Biru	3
ROTI	2024	Biru	3
ROTI	2025	Biru	3
ULTJ	2021	Biru	3
ULTJ	2022	Biru	3
ULTJ	2023	Biru	3
ULTJ	2024	Biru	3
ULTJ	2025	Biru	3
INDF	2021	Biru	3
INDF	2022	Biru	3
INDF	2023	Biru	3
INDF	2024	Biru	3
INDF	2025	Biru	3
TAPG	2021	Biru	3
TAPG	2022	Biru	3
TAPG	2023	Biru	3
TAPG	2024	Biru	3
TAPG	2025	Biru	3

Tabel Penilain Proper

Rangking	Point
Hitam	1
Merah	2
Biru	3
Hijau	4
Emas	5



Lampiran 8

Variabel X3 Carbon Emission Disclosure (CED = jumlah item yang diungkapkan / Total item pengungkapan (18 item))

		CARBON EMISSION DISCLOSURE																				
Kode P	Tahun	CC-1	CC-2	GHG-1	GHG-2	GHG-3	GHG-4	GHG-5	GHG-6	GHG-7	EC-1	EC-2	EC-3	RC-1	RC-2	RC-3	RC-4	AEC-1	AEC-2	jumlah	Item pengungkapan	CED
AALI	2021	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	0	0	8	18	0,4
AALI	2022	1	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	1	1	10	18	0,6
AALI	2023	1	1	1	0	1	1	1	0	1	1	1	1	1	0	0	1	1	1	14	18	0,8
AALI	2024	1	0	0	1	1	1	1	1	1	1	1	0	1	1	0	0	0	1	12	18	0,7
AALI	2025	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	15	18	0,8
ADES	2021	1	1	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	6	18	0,3
ADES	2022	1	1	0	0	1	0	1	0	0	1	0	0	1	1	1	0	0	0	8	18	0,4
ADES	2023	1	1	0	0	1	0	1	0	0	1	0	0	1	1	1	0	0	0	8	18	0,4
ADES	2024	1	1	0	0	1	0	1	0	0	1	0	0	1	1	1	0	0	0	8	18	0,4
ADES	2025	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	0	1	1	14	18	0,8
ANJT	2021	1	1	0	0	0	0	1	1	0	1	1	1	0	0	0	0	1	1	9	18	0,5
ANJT	2022	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	13	18	0,7
ANJT	2023	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	18	1,0
ANJT	2024	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0,9
ANJT	2025	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0,9
JPFA	2021	1	1	0	0	1	1	0	0	0	1	1	1	1	1	0	0	0	0	9	18	0,5
JPFA	2022	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	7	18	0,4
JPFA	2023	1	1	0	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	11	18	0,6
JPFA	2024	1	1	0	0	1	1	0	1	1	1	1	1	1	1	0	0	1	1	13	18	0,7
JPFA	2025	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0,9
MLBI	2021	0	0	0	0	1	1	0	1	1	1	1	1	1	0	0	0	0	1	9	18	0,5
MLBI	2022	1	1	0	0	1	0	0	0	0	1	1	1	1	1	0	0	0	0	8	18	0,4
MLBI	2023	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	18	0,1
MLBI	2024	0	0	0	0	1	1	0	0	0	1	1	1	1	1	0	0	0	0	7	18	0,4
MLBI	2025	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	15	18	0,8
SSMS	2021	0	0	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0	1	8	18	0,4
SSMS	2022	1	1	0	0	1	1	0	1	1	1	1	0	1	1	0	0	0	0	10	18	0,6
SSMS	2023	1	1	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	1	12	18	0,7
SSMS	2024	1	1	0	0	1	1	1	1	0	1	1	1	1	1	0	0	0	0	11	18	0,6
SSMS	2025	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	15	18	0,8
AISA	2021	1	1	1	1	1	1	1	0	0	1	0	1	1	1	0	0	1	1	13	18	0,7
AISA	2022	1	0	0	0	1	0	1	1	1	1	1	1	1	0	1	0	1	1	12	18	0,7
AISA	2023	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	18	0,9
AISA	2024	1	1	1	0	1	1	0	0	1	1	1	1	1	0	1	0	1	0	12	18	0,7

AISA	2025	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	15	18	0.8		
BISI	2021	1	0	0	0	0	0	1	0	0	1	1	1	1	0	1	0	1	0	8	18	0.4	
BISI	2022	1	1	0	0	0	0	1	0	0	1	1	1	1	0	1	0	1	1	10	125	18	0.6
BISI	2023	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	18	0.9	
BISI	2024	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
BISI	2025	1	1	0	0	1	1	1	0	1	1	0	1	1	1	1	0	1	1	13	18	0.7	
CAMP	2021	0	0	0	0	1	1	1	0	1	1	0	1	1	0	0	0	1	0	8	18	0.4	
CAMP	2022	0	0	0	0	1	1	1	0	1	1	0	1	1	0	0	0	1	0	8	18	0.4	
CAMP	2023	1	1	0	0	0	0	1	0	0	1	0	1	1	1	1	0	0	0	8	18	0.4	
CAMP	2024	1	1	0	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	8	18	0.4	
CAMP	2025	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
CEKA	2021	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	15	18	0.8	
CEKA	2022	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	15	18	0.8	
CEKA	2023	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
CEKA	2024	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0.9	
CEKA	2025	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
CSRA	2021	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	18	0.9	
CSRA	2022	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
CSRA	2023	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	18	0.9	
CSRA	2024	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
CSRA	2025	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	18	1.0	
FAPA	2021	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	15	18	0.8	
FAPA	2022	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	15	18	0.8	
FAPA	2023	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	18	0.9	
FAPA	2024	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	18	1.0	
FAPA	2025	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	16	18	0.9	
ICBP	2021	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0.9	
ICBP	2022	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	16	18	0.9	
ICBP	2023	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0.9	
ICBP	2024	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0.9	
ICBP	2025	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	17	18	0.9	
ROTI	2021	0	0	1	1	1	0	1	0	1	1	0	1	1	0	1	0	0	0	9	18	0.5	
ROTI	2022	0	0	1	1	1	0	1	0	1	1	0	1	1	0	1	0	0	0	9	18	0.5	
ROTI	2023	0	0	1	1	1	1	1	0	1	1	0	1	1	0	1	0	0	0	10	18	0.6	
ROTI	2024	1	0	1	0	1	1	1	0	1	1	0	1	1	0	0	0	1	0	10	18	0.6	
ROTI	2025	1	0	1	0	1	1	1	0	1	1	0	1	1	0	0	0	1	0	10	18	0.6	
ULTJ	2021	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	18	0.1	
ULTJ	2022	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	18	0.1	
ULTJ	2023	1	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	1	1	8	18	0.4	
ULTJ	2024	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	1	1	9	18	0.5	
ULTJ	2025	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	1	1	9	18	0.5	
INDF	2021	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
INDF	2022	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	16	18	0.9	
INDF	2023	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
INDF	2024	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
INDF	2025	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
TAPG	2021	1	0	1	0	1	1	1	0	0	1	1	1	1	0	0	0	0	1	10	18	0.6	
TAPG	2022	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	0	0	1	13	18	0.7	
TAPG	2023	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
TAPG	2024	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	
TAPG	2025	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	15	18	0.8	

Lampiran 9
OLA DATA MENGGUNAKAN MEAN CENTRING

OLA DATA MENGGUNAKAN MEAN CENTRING

Kode P	Tahun	X1	X2	X3	Z	Y	MC1	MC2	MC3
AALI	2021	-0,1382	0,7059	-0,2490	-0,06305	0,86	0,008715287	-0,044503593	0,01569988
AALI	2022	-0,1382	0,7059	-0,1379	0,14208	0,69	-0,01964067	0,100292787	-0,01959424
AALI	2023	-0,1382	0,7059	0,0843	0,18482	0,60	-0,02554816	0,130458699	0,01558257
AALI	2024	-0,1382	0,7059	-0,0268	0,18482	0,51	-0,02554816	0,130458699	-0,0049526
AALI	2025	-0,1382	0,7059	0,1399	0,15063	0,59	-0,02082217	0,106325969	0,02106829
ADES	2021	0,1118	-0,2941	-0,3601	-0,19980	2,00	-0,02233046	0,058764381	0,07195372
ADES	2022	0,1118	-0,2941	-0,2490	-0,13997	3,17	-0,01564369	0,041167598	0,03485523
ADES	2023	0,1118	-0,2941	-0,2490	-0,11433	3,30	-0,01277793	0,03362612	0,02847012
ADES	2024	0,1118	-0,2941	-0,2490	-0,18270	2,38	-0,02041996	0,053736728	0,0454971
ADES	2025	0,3618	-0,2941	0,0843	-0,12288	3,03	-0,04445213	0,036139946	-0,01036012
ANJT	2021	-0,1382	1,7059	-0,1935	0,16772	0,54	-0,02318517	0,286114808	-0,03244827
ANJT	2022	-0,1382	1,7059	0,0288	0,16772	0,33	-0,02318517	0,286114808	0,00482339
ANJT	2023	-0,1382	1,7059	0,3065	0,16772	0,38	-0,02318517	0,286114808	0,05141297
ANJT	2024	-0,1382	1,7059	0,2510	0,16772	0,38	-0,02318517	0,286114808	0,04209505
ANJT	2025	-0,1382	1,7059	0,2510	-0,00322	1,57	0,000444799	-0,005489013	-0,00080758
JPFA	2021	-0,1382	-0,2941	-0,1935	0,05661	1,54	-0,00782569	-0,016650401	-0,01095226
JPFA	2022	-0,1382	-0,2941	-0,3046	0,03952	1,11	-0,00546269	-0,011622749	-0,012036
JPFA	2023	-0,1382	-0,2941	-0,0824	0,15063	0,98	-0,02082217	-0,044302487	-0,0124047
JPFA	2024	-0,1382	-0,2941	0,0288	0,09080	1,37	-0,01255168	-0,026705705	0,00261122
JPFA	2025	-0,1382	-0,2941	0,2510	0,09935	1,53	-0,01373318	-0,029219531	0,024934
MLBI	2021	0,1118	-0,2941	-0,1935	-0,08014	1,50	-0,00895691	0,023570816	0,01550436
MLBI	2022	0,1118	-0,2941	-0,2490	0,07371	1,76	0,00823766	-0,021678053	-0,01835408
MLBI	2023	0,1118	-0,2941	-0,5824	-0,17416	1,17	-0,0194647	0,051222902	0,10142135
MLBI	2024	0,1118	-0,2941	-0,3046	-0,10578	0,98	-0,01182267	0,031112294	0,03221851
MLBI	2025	0,1118	-0,2941	0,1399	-0,09723	0,88	-0,01086742	0,028598468	-0,01360016
SSMS	2021	-0,1382	-0,2941	-0,2490	-0,13142	1,50	0,018167273	0,038653772	0,03272686
SSMS	2022	-0,1382	-0,2941	-0,1379	0,16772	2,17	-0,02318517	-0,049330139	-0,02313035
SSMS	2023	-0,1382	-0,2941	-0,0268	0,32157	4,99	-0,04445213	-0,094579008	-0,0086172
SSMS	2024	-0,1382	-0,2941	-0,0824	0,33012	4,29	-0,04563363	-0,097092834	-0,02718599
SSMS	2025	-0,1382	-0,2941	0,1399	0,33012	5,12	-0,04563363	-0,097092834	0,04617304

AISA	2021	0,1118	-0,2941	0,0288	-0,07159	2,14	-0,00800166	0,02105699	-0,00205891
AISA	2022	0,3618	-0,2941	-0,0268	0,17627	1,70	0,063768077	-0,051843965	-0,00472356
AISA	2023	-0,1382	-0,2941	0,1954	0,17627	1,38	-0,02436666	-0,051843965	0,03444743
AISA	2024	-0,1382	-0,2941	-0,0268	0,15918	0,93	-0,02200367	-0,045716313	-0,00426549
AISA	2025	-0,3882	-0,2941	0,1399	0,13353	1,09	-0,05184278	-0,039274835	0,01867737
BISI	2021	-0,3882	-0,2941	-0,2490	-0,36219	1,09	0,14061574	0,106527075	0,09019292
BISI	2022	-0,3882	-0,2941	-0,1379	-0,22544	1,57	0,087523733	0,066305859	0,03109008
BISI	2023	-0,3882	-0,2941	0,2510	-0,14852	1,39	0,05765948	0,043681424	-0,03727482
BISI	2024	-0,3882	-0,2941	0,1954	-0,19125	1,06	0,074250732	0,056250555	-0,03737537
BISI	2025	-0,1382	-0,2941	0,0288	-0,23399	0,75	0,032345252	0,068819685	-0,00672904
CAMP	2021	-0,1382	-0,2941	-0,2490	-0,14852	1,67	0,020530269	0,043681424	0,03698361
CAMP	2022	-0,1382	-0,2941	-0,2490	-0,07159	1,91	0,009896785	0,02105699	0,01782825
CAMP	2023	-0,1382	-0,2941	-0,2490	-0,25108	2,48	0,034708248	0,073847337	0,06252408
CAMP	2024	0,1118	-0,2941	-0,2490	-0,23399	1,61	-0,02615148	0,068819685	0,05826733
CAMP	2025	0,1118	-0,2941	0,1954	-0,06305	1,26	-0,0070464	0,018543164	-0,0123209
CEKA	2021	0,1118	-0,2941	0,1399	0,18482	0,81	0,020655961	-0,054357791	0,02585015
CEKA	2022	0,1118	-0,2941	0,1399	-0,02031	0,76	-0,00227013	0,005974034	-0,00284098
CEKA	2023	0,1118	-0,2941	0,1954	-0,02031	0,67	-0,00227013	0,005974034	-0,00396941
CEKA	2024	0,3618	-0,2941	0,2510	0,10789	0,65	0,039032029	-0,031733357	0,02707913
CEKA	2025	0,1118	-0,2941	0,1954	0,14208	0,71	0,015879691	-0,041788661	0,02776624
CSRA	2021	-0,1382	-0,2941	0,2510	-0,21689	1,31	0,029982255	0,063792033	-0,05443587
CSRA	2022	-0,1382	-0,2941	0,1399	-0,21689	1,21	0,029982255	0,063792033	-0,03033666
CSRA	2023	-0,1382	-0,2941	0,2510	-0,22544	0,87	0,031163754	0,066305859	-0,056581
CSRA	2024	-0,1382	-0,2941	0,1954	-0,23399	1,14	0,032345252	0,068819685	-0,04572686
CSRA	2025	-0,1382	-0,2941	0,3065	-0,20835	1,31	0,028800757	0,061278207	-0,06386551
FAPA	2021	-0,1382	0,7059	0,1399	-0,28527	5,33	0,039434241	-0,201366338	-0,03990037
FAPA	2022	-0,1382	0,7059	0,1399	0,31302	4,00	-0,04327064	0,220956437	0,04378211
FAPA	2023	-0,3882	0,7059	0,2510	0,33866	4,73	-0,13148079	0,239055984	0,08499768
FAPA	2024	-0,1382	0,7059	0,3065	0,13353	5,09	-0,01845917	0,094259604	0,04093311
FAPA	2025	-0,1382	0,7059	0,1954	-0,10578	5,95	0,014622778	-0,074669506	-0,02067239
ICBP	2021	0,3618	0,7059	0,2510	-0,03741	1,85	-0,01353207	-0,026404046	-0,00938811
ICBP	2022	-0,1382	0,7059	0,1954	0,09080	2,03	-0,01255168	0,064093692	0,01774446
ICBP	2023	0,3618	0,7059	0,2510	0,03952	1,99	0,014295981	0,027894597	0,00991808
ICBP	2024	-0,1382	0,7059	0,2510	0,09080	1,98	-0,01255168	0,064093692	0,02278887
ICBP	2025	0,3618	0,7059	0,2510	0,08225	1,30	0,029756011	0,058060509	0,02064374
ROTI	2021	0,1118	-0,2941	-0,1935	-0,18270	2,95	-0,02041996	0,053736728	0,03534683
ROTI	2022	0,1118	-0,2941	-0,1935	-0,25108	3,05	-0,02806199	0,073847337	0,04857514
ROTI	2023	0,1118	-0,2941	-0,1379	0,27883	2,97	0,031163754	-0,082009878	-0,03845352
ROTI	2024	0,1118	-0,2941	-0,1379	0,27029	2,60	0,0302085	-0,079496052	-0,03727482
ROTI	2025	-0,1382	-0,2941	-0,1379	-0,11433	2,39	0,015804276	0,03362612	0,01576691
ULTJ	2021	-0,1382	-0,2941	-0,5824	-0,33655	3,22	0,046523231	0,098985597	0,19599148
ULTJ	2022	-0,1382	-0,2941	-0,5824	-0,33655	2,63	0,046523231	0,098985597	0,19599148
ULTJ	2023	0,3618	-0,2941	-0,2490	-0,23399	2,29	-0,08464821	0,068819685	0,05826733
ULTJ	2024	0,3618	-0,2941	-0,1935	-0,23399	2,53	-0,08464821	0,068819685	0,04526806
ULTJ	2025	0,3618	-0,2941	-0,1935	-0,33655	1,89	-0,12175228	0,098985597	0,06511053
INDF	2021	0,3618	-0,2941	0,1954	-0,01176	0,64	-0,00425606	0,003460208	-0,00229912
INDF	2022	0,3618	-0,2941	0,1954	0,09935	0,63	0,035940023	-0,029219531	0,01941476
INDF	2023	0,3618	-0,2941	0,1399	0,10789	0,56	0,039032029	-0,031733357	0,01509097
INDF	2024	0,3618	-0,2941	0,1399	0,10789	0,62	0,039032029	-0,031733357	0,01509097
INDF	2025	0,3618	-0,2941	0,1399	0,10789	0,49	0,039032029	-0,031733357	0,01509097
TAPG	2021	0,1118	-0,2941	-0,1379	0,15063	1,55	0,016834945	-0,044302487	-0,02077294
TAPG	2022	0,1118	-0,2941	0,0288	0,15063	1,29	0,016834945	-0,044302487	0,0043318
TAPG	2023	0,1118	-0,2941	0,1399	0,17627	0,95	0,019700707	-0,051843965	0,02465469
TAPG	2024	0,1118	-0,2941	0,1399	0,20191	1,34	0,022566469	-0,059385443	0,02824108
TAPG	2025	0,1118	-0,2941	0,1399	0,21046	2,54	0,023521722	-0,06189927	0,02943654

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OLA DATA

OLA DATA				
X1	X2	X3	Y	Z
0,5	4	0,4	0,86	0,529915
0,5	4	0,6	0,69	0,735043
0,5	4	0,8	0,60	0,777778
0,5	4	0,7	0,51	0,777778
0,5	4	0,8	0,59	0,743590
0,5	3	0,3	2,00	0,393162
0,5	3	0,4	3,17	0,452991
0,5	3	0,4	3,30	0,478632
0,5	3	0,4	2,38	0,410256
0,5	3	0,8	3,03	0,470085
0,75	5	0,5	0,54	0,760684
0,75	5	0,7	0,33	0,760684
0,75	5	1,0	0,38	0,760684
0,75	5	0,9	0,38	0,760684
1	5	0,9	1,57	0,589744
0,5	3	0,5	1,54	0,649573
0,5	3	0,4	1,11	0,632479
0,5	3	0,6	0,98	0,743590
0,5	3	0,7	1,37	0,683761
0,5	3	0,9	1,53	0,692308
0,75	3	0,5	1,50	0,512821
0,75	3	0,4	1,76	0,666667
0,75	3	0,1	1,17	0,418803
0,75	3	0,4	0,98	0,487179
0,75	3	0,8	0,88	0,495726
0,5	3	0,4	1,50	0,461538
0,5	3	0,6	2,17	0,760684
0,5	3	0,7	4,99	0,914530
0,5	3	0,6	4,29	0,923077
0,5	3	0,8	5,12	0,923077
0,75	3	0,7	2,14	0,521368
1	3	0,7	1,70	0,769231
0,5	3	0,9	1,38	0,769231
0,5	3	0,7	0,93	0,752137
0,25	3	0,8	1,09	0,726496
0,25	3	0,4	1,09	0,230769
0,25	3	0,6	1,57	0,367521
0,25	3	0,9	1,39	0,444444

0,25	3	0,9	1,06	0,401709
0,5	3	0,7	0,75	0,358974
0,5	3	0,4	1,67	0,444444
0,5	3	0,4	1,91	0,521368
0,5	3	0,4	2,48	0,341880
0,75	3	0,4	1,61	0,358974
0,75	3	0,9	1,26	0,529915
0,75	3	0,8	0,81	0,777778
0,75	3	0,8	0,76	0,572650
0,75	3	0,9	0,67	0,572650
1	3	0,9	0,65	0,700855
0,75	3	0,9	0,71	0,735043
0,5	3	0,9	1,31	0,376068
0,5	3	0,8	1,21	0,376068
0,5	3	0,9	0,87	0,367521
0,5	3	0,9	1,14	0,358974
0,5	3	1,0	1,31	0,384615
0,5	4	0,8	5,33	0,307692
0,5	4	0,8	4,00	0,905983
0,25	4	0,9	4,73	0,931624
0,5	4	1,0	5,09	0,726496
0,5	4	0,9	5,95	0,487179
1	4	0,9	1,85	0,555556
0,5	4	0,9	2,03	0,683761
1	4	0,9	1,99	0,632479
0,5	4	0,9	1,98	0,683761
1	4	0,9	1,30	0,675214
0,75	3	0,5	2,95	0,410256
0,75	3	0,5	3,05	0,341880
0,75	3	0,6	2,97	0,871795
0,75	3	0,6	2,60	0,863248
0,5	3	0,6	2,39	0,478632
0,5	3	0,1	3,22	0,256410
0,5	3	0,1	2,63	0,256410
1	3	0,4	2,29	0,358974
1	3	0,5	2,53	0,358974
1	3	0,5	1,89	0,256410
1	3	0,9	0,64	0,581197
1	3	0,9	0,63	0,692308
1	3	0,8	0,56	0,700855
1	3	0,8	0,62	0,700855
1	3	0,8	0,49	0,700855
0,75	3	0,6	1,55	0,743590
0,75	3	0,7	1,29	0,743590
0,75	3	0,8	0,95	0,769231
0,75	3	0,8	1,34	0,794872
0,75	3	0,8	2,54	0,803419
	3,2941	0,6935	1,8135	0,5930