

**Appendix 1 : List Populations of Mining Companies Listed in Indonesia Stock Exchange For Period 2013 – 2017**

No	Company Code	Company Name
1	ADRO	Adaro Energy Tbk.
2	ANTM	Aneka Tambang Tbk.
3	APEX	Apexindo Pratama Duta Tbk.
4	ARII	Atlas Resources Tbk.
5	ARTI	Ratu Prabu Energi Tbk
6	ATPK	Bara Jaya Internasional Tbk.
7	BIPI	Astrindo Nusantara Infrastrukt
8	BORN	Borneo Lumbung Energi & Metal
9	BOSS	Borneo Olah Sarana Sukses Tbk.
10	BSSR	Baramulti Suksessarana Tbk.
11	BUMI	Bumi Resources Tbk.
12	BYAN	Bayan Resources Tbk.
13	CITA	Cita Mineral Investindo Tbk.
14	CKRA	Cakra Mineral Tbk.
15	CTTH	Citatah Tbk.
16	DEWA	Darma Henwa Tbk
17	DKFT	Central Omega Resources Tbk.
18	DOID	Delta Dunia Makmur Tbk.
19	DSSA	Dian Swastatika Sentosa Tbk
20	ELSA	Elnusa Tbk.
21	ENRG	Energi Mega Persada Tbk.
22	ESSA	Surya Esa Perkasa Tbk.
23	FIRE	Alfa Energi Investama Tbk.
24	GEMS	Golden Energy Mines Tbk.
25	GTBO	Garda Tujuh Buana Tbk
26	HRUM	Harum Energy Tbk.
27	INCO	Vale Indonesia Tbk.
28	INDY	Indika Energy Tbk.
29	ITMG	Indo Tambangraya Megah Tbk.
30	KKGI	Resource Alam Indonesia Tbk.
31	MBAP	Mitrabara Adiperdana Tbk.
32	MDKA	Merdeka Copper Gold Tbk.
33	MEDC	Medco Energi Internasional Tbk
34	MITI	Mitra Investindo Tbk.
35	MYOH	Samindo Resources Tbk.
36	PKPK	Perdana Karya Perkasa Tbk
37	PSAB	J Resources Asia Pasifik Tbk.
38	PTBA	Bukit Asam Tbk.
39	PTRO	Petrosea Tbk.
40	RUIS	Radiant Utama Interinsco Tbk.
41	SIAP	Sekawan Intipratama Tbk
42	SMMT	Golden Eagle Energy Tbk.

43	SMRU	SMR Utama Tbk.
44	SURE	Super Energy Tbk.
45	TINS	Timah Tbk.
46	TOBA	Toba Bara Sejahtera Tbk.
47	ZINC	Kapuas Prima Coal Tbk.

**Appendix 2 : List of Samples of Mining Companies Listed in Indonesia Stock Exchange  
For Period 2013 – 2017**

<b>No</b>	<b>Company Code</b>	<b>Company Name</b>
1	ANTM	Aneka Tambang Tbk.
2	ITMG	Indo Tambangraya Megah Tbk.
3	ADRO	Adaro Energy Tbk.
4	BUMI	Bumi Resources Tbk.
5	INCO	Vale Indonesia Tbk.
6	MEDC	Medco Energi Internasional Tbk
7	ELSA	Elnusa Tbk.
8	PTBA	Bukit Asam Tbk.
9	INDY	Indika Energy Tbk.
10	PTRO	Petrosea Tbk.
11	TINS	Timah Tbk.

**Appendix 3 : 91 GRI G4 Sustainability Report Indicators and Results of ROA, SIZE, DER, and Sustainability Report**

<b>Category : Economy</b>		
Economic Performance	EC1	Direct Economic Value Generated And Distributed
	EC2	Financial Implications and Other Opportunity For The Organization's Activities Due To Climate Change
	EC3	Coverage Of The Organization's Defined Benefit Plan Obligations
	EC4	Financial Assistance Received From Government
Market Presence	EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation
	EC6	Proportion of senior management hired from the local community at significant locations of operation
Indirect Economic Impacts	EC7	Development and impact of infrastructure investments and services supported
	EC8	Significant indirect economic impacts, including the extent of impacts
Procurement Practices	EC9	Proportion of spending on local suppliers at significant locations of operation
<b>Category : Environmental</b>		
Materials	EN1	Materials used by weight or volume
	EN2	Percentage of materials used that are recycled input materials
Energy	EN3	Energy consumption within the organization
	EN4	Energy consumption outside of the organization
	EN5	Energy intensity
	EN6	Reduction of energy consumption
	EN7	Reductions in energy requirements of products and services
Water	EN8	Total water withdrawal by source
	EN9	Water sources significantly affected by withdrawal of water
	EN10	Percentage and total volume of water recycled and reused
Biodiversity	EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas
	EN13	Habitats protected or restored
	EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of

		extinction risk
Emissions	EN15	Direct greenhouse gas (GHG) emissions (Scope 1)
	EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)
	EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)
	EN18	Greenhouse gas (GHG) emissions intensity
	EN19	Reduction of greenhouse gas (GHG) emissions
	EN20	Emissions of ozone-depleting substances (ODS)
	EN21	NOX, SOX, and other significant air emissions
Effluents and Waste	EN22	Total water discharge by quality and destination
	EN23	Total weight of waste by type and disposal method
	EN24	Total number and volume of significant spills
	EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention <sup>2</sup> Annex I, II, III, and VIII, and percentage of transported waste shipped internationally
	EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff
Products and Service	EN27	Extent of impact mitigation of environmental impacts of products and services
	EN28	Percentage of products sold and their packaging materials that are reclaimed by category
Compliance	EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations
Transport	EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce
Overall	EN31	Total environmental protection expenditures and investments by type
Supplier Environmental Assessment	EN32	Percentage of new suppliers that were screened using environmental criteria
	EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken
Environmental Grievance Mechanisms	EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms
<b>Category : Social</b>		
<b>Sub Category : Employment Practices and Work Convenience</b>		

Employment	LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region
	LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation
	LA3	Return to work and retention rates after parental leave, by gender
Labor / Management Relations	LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements
Occupational Health and Safety	LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs
	LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of workrelated fatalities, by region and by gender
	LA7	Workers with high incidence or high risk of diseases related to their occupation
	LA8	Health and safety topics covered in formal agreements with trade unions
Training and Education	LA9	Average hours of training per year per employee by gender, and by employee category
	LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings
	LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category
Diversity and Equal Opportunity	LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity
Equal Remuneration for Women and Men	LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation
Supplier Assesment for Labor Practices	LA14	Percentage of new suppliers that were screened using labor practices criteria
	LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken
Labor Practices Grievance Mechanisms	LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms
<b>Sub Category : Human Rights</b>		

Investment	HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening
	HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained
Non-discrimination	HR3	Total number of incidents of discrimination and corrective actions taken
Freedom of Association and Collective Bargaining	HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights
Child Labor	HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor
Forced or Compulsory Labor	HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor
Security Practices	HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations
Indigenous Rights	HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken
Assesment	HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments
Supplier Human Rights Assesment	HR10	Percentage of new suppliers that were screened using human rights criteria
	HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken
Human Rights Grievance Mechanism	HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms
<b>Sub Category : Society</b>		
Local Communities	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs
	SO2	Operations with significant actual or potential negative impacts on local communities

Anti-corruption	SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified
	SO4	Communication and training on anti-corruption policies and procedures
	SO5	Confirmed incidents of corruption and actions taken
Public Policy	SO6	Total value of political contributions by country and recipient/beneficiary
Anti-competitive Behavior	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations
	SO9	Percentage of new suppliers that were screened using criteria for impacts on society
Supplier Assesment for Impacts on Society	SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken
Grievance Mechanism for Impacts on Society	SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms
<b>Sub Category : Product Responsibility</b>		
Customer Health and Safety	PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes
Products and Service Labeling	PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes
	PR5	Results of surveys measuring customer satisfaction
Marketing Communications	PR6	Sale of banned or disputed products



	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

Appendix 4 : Results of ROA, SIZE, DER, and Sustainability Report

No	Company Name	Year	ROA	SIZE	DER	Sustainability Report
1	Aneka Tambang Tbk.	2013	0,019	19,410	0,006	0,505
2	Aneka Tambang Tbk.	2014	-0,048	19,430	0,848	0,516
3	Aneka Tambang Tbk.	2015	-0,048	19,850	0,657	0,857
4	Aneka Tambang Tbk.	2016	0,002	26,720	0,629	0,341
5	Aneka Tambang Tbk.	2017	0,005	26,730	0,623	0,385
6	Indo Tambangraya Megah Tbk.	2013	0,166	23,560	0,444	0,319
7	Indo Tambangraya Megah Tbk.	2014	0,153	23,510	0,455	0,396
8	Indo Tambangraya Megah Tbk.	2015	0,054	23,510	0,412	0,330
9	Indo Tambangraya Megah Tbk.	2016	0,108	23,510	0,333	0,275
10	Indo Tambangraya Megah Tbk.	2017	0,186	23,640	0,418	0,132
11	Adaro Energy Tbk.	2013	0,034	18,230	1,108	0,868
12	Adaro Energy Tbk.	2014	0,029	18,190	0,969	0,868
13	Adaro Energy Tbk.	2015	0,025	18,220	0,777	0,264
14	Adaro Energy Tbk.	2016	0,052	18,290	0,723	0,264
15	Adaro Energy Tbk.	2017	0,079	18,340	0,665	0,264
16	Bumi Resources Tbk.	2013	-0,097	15,440	17,908	0,154
17	Bumi Resources Tbk.	2014	-129,581	22,250	-7,174	0,038
18	Bumi Resources Tbk.	2015	-0,064	21,950	-5,217	0,516
19	Bumi Resources Tbk.	2016	0,039	21,860	-2,114	0,540
20	Bumi Resources Tbk.	2017	0,066	17,730	11,909	0,198
21	Vale Indonesia Tbk.	2013	0,017	24,060	0,331	0,319
22	Vale Indonesia Tbk.	2014	0,074	24,090	0,307	0,374
23	Vale Indonesia Tbk.	2015	0,022	24,180	0,248	0,495
24	Vale Indonesia Tbk.	2016	0,001	24,120	0,213	0,088
25	Vale Indonesia Tbk.	2017	-0,007	24,110	0,201	0,143
26	Medco Energi Internasional Tbk.	2013	0,007	17,240	1,823	0,308
27	Medco Energi Internasional Tbk.	2014	0,004	17,330	1,936	0,308
28	Medco Energi Internasional Tbk.	2015	-0,064	17,510	3,147	0,341
29	Medco Energi Internasional Tbk.	2016	0,051	31,510	3,039	0,341
30	Medco Energi Internasional Tbk.	2017	0,037	18,060	2,679	0,341
31	Elnusa Tbk.	2013	0,056	15,290	0,913	0,176
32	Elnusa Tbk.	2014	0,099	15,260	0,644	0,495
33	Elnusa Tbk.	2015	0,085	15,300	0,668	0,473
34	Elnusa Tbk.	2016	0,008	15,250	0,456	0,264
35	Elnusa Tbk.	2017	0,049	15,400	0,591	0,154
36	Bukit Asam Tbk.	2013	0,159	16,270	0,555	0,473
37	Bukit Asam Tbk.	2014	0,136	16,510	0,718	0,154
38	Bukit Asam Tbk.	2015	0,121	16,640	0,829	0,927
39	Bukit Asam Tbk.	2016	0,109	16,740	0,770	0,538
40	Bukit Asam Tbk.	2017	0,207	16,910	0,602	0,231
41	Indika Energy Tbk.	2013	-0,023	30,980	1,439	0,231
42	Indika Energy Tbk.	2014	-0,013	30,980	1,510	0,110

43	Indika Energy Tbk.	2015	-0,036	31,020	15,861	0,110
44	Indika Energy Tbk.	2016	-0,057	30,830	1,459	0,132
45	Indika Energy Tbk.	2017	0,089	31,530	2,261	0,110
46	Petrosea Tbk.	2013	0,034	22,560	1,577	0,495
47	Petrosea Tbk.	2014	0,005	15,580	1,426	0,165
48	Petrosea Tbk.	2015	-0,030	15,580	1,386	0,154
49	Petrosea Tbk.	2016	-0,020	15,480	1,308	0,132
50	Petrosea Tbk.	2017	0,019	15,590	1,447	0,143
51	Timah Tbk.	2013	0,065	15,880	0,611	0,901
52	Timah Tbk.	2014	0,065	16,090	0,739	0,560
53	Timah Tbk.	2015	0,011	16,040	0,728	0,538
54	Timah Tbk.	2016	0,030	16,070	0,689	0,637
55	Timah Tbk.	2017	0,043	16,290	0,959	0,495