

Buyer's Role in Improving BHR Practices in Indonesian Mineral Mining Industry

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ABSTRACT

Indonesia is a resource-rich nation known for its substantial reserve in a wide variety of minerals such as gold, copper, tin, bauxite, and nickel. The mining sector has long served as a key pillar of Indonesia's economy by contributing approximately 7.5 percent of the State's GDP. Despite the vital importance of these mining industries, their presence continues to raise concerns on business and human rights (BHR), owing to the social and environmental impacts they posed. Nearly 34 percent of Indonesia's land has been handed over to corporations through 10,235 mineral mining permits, which accounts for about 70 percent of all cases of environmental destruction in the country. This includes tailings and pollution, illegal land grabbing, and the oppression of indigenous communities living near mining sites. Realizing how business activities continues to violate human rights, States have voiced their awareness to impose a legally binding obligation for businesses to uphold human rights in all aspects of its operation, which is evident in the culmination of the United Nations Guiding Principles on Business and Human Rights, and more specifically, the Due Diligence Guidance for Responsible Supply Chains of Minerals, and the Responsible Mining Initiatives. This paper seeks to discuss the flaws of existing legal norms in the enforcement of BHR standards in the mining sector, the implication of raising compliance from Buyers to the practices of supplier in Indonesia. Finally, a qualitative review on the operation of PT Timah Tbk in implementing the BHR standards shall provide an insight on how Buyer's role may become an effective drive for BHR compliance by mining corporations in Indonesia.

Keywords: *mineral mining, tin, Business and Human Rights, buyers*

1. INTRODUCTION

The Republic of Indonesia has extensive mineral reserves and has become the world's largest exporter of thermal coal, as well as second in tin, third in copper and fourth in nickel during the period of 2011. The following statement is supported by the information provided in the ASEAN Minerals Cooperation Action Plan 2016-2025 (AMCAP III), where it is known that in 2013 the exportation for major minerals namely gold, copper, nickel, tin, iron, bauxite, zinc, coal and gemstones between ASEAN Member States was dominated by Indonesia with the value of USD 10.9 billion in 2012 and USD 12.1 billion in 2013[1].

In terms of mineral, common minerals have their own distinctive usages in various sector of industries. In this case we intend to only mention the uses of the following common minerals:

(a) Aluminum (Al¹³) is used in transportation (automobiles), packaging, building/construction, electrical, machinery and other uses;

- (b) Copper (Cu²⁹) is used in building construction, electric and electronic products (cables and wires, switches, plumbing, heating), transportation equipment, roofing, chemical and pharmaceutical machinery and various alloys;
- (c) Gold (Au⁷⁹) is used in jewelry and arts, dentistry and medicine, in medallions and coins, in ingots as a store of value, for scientific electronic instruments, as well as an electrolyte in the electroplating industry;
- (d) Lithium (Li³) compounds are used in ceramics and glass, batteries, lubricating greases, air treatment, in primary aluminum production, in the manufacture of lubricants and greases, rocket propellants, vitamin A synthesis, silver solder, batteries, and medicine;
- (e) Nickel (Ni²⁸) is vitally used as an alloy to stainless steel and has key role in the chemical and aerospace industries;
- (f) Tin (Sn⁵⁰) is widely used for plating steel cans used as food containers, in metals used for bearings, and in solder;

- (g) Tantalum (Ta⁷³) is used to produce electronic components, tantalum capacitors (in auto electronics, pagers, personal computers and portable telephones); and
- (h) Tungsten (W⁷⁴) is primarily used in the construction metalworking, mining and oil and gas drilling industries.

On the other hand, business operations in mineral mining industries have been criticized for their complicity in the human rights abuses. Pursuant to a report of International Institute for Environment and Development for Mining, Minerals and Sustainable Development (MMSD), it is known that there were several cases of mining health and safety problems in different countries around the world, albeit the adoption of standards for health and safety practices in mining sector within the period of 1999-2001, where it involved deaths of miners, violation of fundamental workers' rights, crushes to the association of workers by military forces, labor disputes [2]. Recently, the data provided by Responsible Mining Index 2018 established by Responsible Mining Foundation stated that only 30% of the assessed companies can provide evidence of having put in place systems to assess human rights issues in order to avoid, minimize and mitigate adverse impacts [3].

Further, human rights issues in mineral mining industries was largely discussed in connection with conflict minerals, which are defined as minerals mined in conditions of armed conflict and human rights abuses, and which are sold or traded by armed groups. In relation to the issue of conflict minerals, the Organization for Economic Co-operation and Development ("OECD") has issued a guidance concerning Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the "OECD Due Diligence Guidance"), where such guidance is applicable to business actors operating in a conflict-affected and high-risk area, or potentially supplying or using tin (*cassiterite*), tantalum (tantalite), tungsten (wolframite) or gold, or their smelted derivatives, from a conflict affected and high-risk area. These minerals are commonly known as 3TG. The importance of this guidance is to help business actors in respecting human rights and avoid contributing to conflict, which brings about a sustainable development and responsible exploitation of the natural resources sited in conflicted-affected and high-risk areas [4].

Voluntary initiatives and regulations have been issued by authorities and industry associations and growing in number in order to improve respect for human rights in global mineral mining. Beginning in the late 1990s, it had become a realization for a group of the largest companies in mining industry that having a mine in a community would result in economic opportunities and poverty reduction for local residents, even more in a greater level to the concepts of sustainable development, environmental stewardship and social responsibility. Many mining companies, including the members of World Economic Forum have initiated or participate in a

number of issue-specific and more broad-based assurance systems and some are seeking to develop new systems, such as the Initiative for Responsible Mining Assurance (IRMA)[5].

This paper discusses voluntary and mandatory initiatives for buyers in assuring responsible mineral mining practice. Further, this paper seeks to analyze to what extent compliance to these initiatives can improve respect for human rights in mineral mining industry, particularly by PT Timah Tbk. as a State-Owned Enterprises operating in tin mining industry.

2. BACKGROUND

2.1 Mandatory and Voluntary Initiatives in the Mineral Mining Industry

The trend of growth in global demand for 3TG minerals is expected by experts to be higher in the near future. In this case, we would like to briefly elaborate the trend of demand and price of each of the 3TG minerals [6].

1. Tantalum. This mineral is not traded on any public commodities exchange. Instead of being sold in pure form, tantalum is sold as tantalite ores from which the metal can then be extracted. There is some persistent demand for the metal, but the supply picture is a bit murky. This has added to the difficulty in pegging the price of the metal. The price of the tantalite is very much dependent on the demand as well. The price of tantalite ore rose from about \$75 per kilo in 2010 to more than \$270 per kilo on 2011 and 2012. But the price has dropped since then. However, some experts point to expected growth in the electronics, aerospace, and power industry to boost the price back up. The use of tantalum can be broken down into numerous products, however the current trend implies that the electronics sector consumes approximately 40% of the global Tantalum production.
2. Tungsten. The price of this metal depends on several factors, but mainly there are two mandatory factors. First is the supply, in which for years China has been keeping the price low by pressing their production so that they can maintain their market share. However, in 2010 they decrease mining activities because of increasing costs in production. On the other side, China has intended to increase their own domestic demand for the metal, which left only a little amount for the rest of the world market. In fact, they even started importing the metal. These policies caused the price of the metal to skyrocket. Secondly, it is the demand. The growth of demand for tungsten is clearly arose by the requirement of tungsten in different sectors such as construction, mining, and manufacturing, in which such demand then drive up the price as well.
3. Tin. There is a historical factor when it comes to the demand and price of tin. Since the formation of the ITC (International Tin Council), the price of

tin has been controlled and agreed upon by the ITC. They bought the metal when the price was low, and then when the price climbed too steeply it sold from its stockpile to increase the supply and lower the price. However, the stockpile it accumulated wasn't enough to set up an artificial ceiling, and the price rose sharply due to the inflation of the 1970s. Until 1985 after recession and crisis occurred, the ITC was dissolved, and the price of tin was dropped sharply. This price remained constant until the end of the century. Meanwhile, the price of tin has bounced back following the global financial crisis in 2008-2009. It reached almost \$15 a pound in 2011, but as of March 7, 2016 its price is at \$7.87 a pound.

4. Gold. Since 1967 up to 8th of March 2016, the price of gold has been drastically gone up and down. Recently, the trend of gold usages is for jewelry, and on small percentage for industrial use, investment products, as well as central banks. One of the new industrial uses of gold is in the manufacture of electronics. This include cell phones, calculators, personal digital assistants, global positioning system units and other small electronic devices [7].

Unfortunately, such global demand has contributed in several abuses of human rights occurred in multiple countries around the world. Firstly, the case of illegally mined gold across Southern America regions reported by Guardian in 2016 which has been driving people trafficking, child labor and sexual exploitation. The proliferation of illegal and artisanal gold mining operation across Bolivia, Brazil, Colombia, Ecuador, Guyana, Mexico, Nicaragua, Peru and Venezuela involved a workforce of hundreds of thousands of small-scale miners, many of whom are vulnerable to abuse, exploitation and trafficking. Guardian also reported that illegal miners in Venezuela were found to be the indigenous Yanomami tribe, in which several people from Yanomami communities were found with slave numbers tattooed on their shoulders [8].

Secondly one of the most recent case in connection with human rights issues in mineral mining activity is human rights abuses in cobalt mining for battery supply chain across Democratic Republic of the Congo (DRC). Cobalt is renowned to be one of conflict minerals alongside 3TG minerals and in this case more than 60% of the world's supply of cobalt is mined in the "copper belt" of the south-eastern provinces of DRC [9]. In order to fulfil the exploding demand on lithium-ion battery production for electric vehicles, the extraction of cobalt was intensified. As reported by Wired in 2016, there were approximately 110,000 to 150,000 artisanal or small scale miners in DRC including up to 40,000 children who were forced to extract cobalt with basic tools, wash it and sell it into a market that by claim eventually resells that material to technology companies including LG, Microsoft, Vodafone, Sony, Hawlett-Packard, Huawei, Lenovo, Apple, Samsung and Dell [10].

Amnesty International also reported in 2016 that miners face the risk of long-term health damage and a high risk of fatal accidents, in the worst case at least 80 artisanal miners have died underground in southern DRC between September 2014 and December 2015 alone. Furthermore, a correspondence from the children telling Amnesty International that the children have worked for up to 12 hours a day in the mines, carrying heavy loads to earn between one and two dollars a day [11].

Reflecting from the above cases, we need to come to understand that it is important for the stakeholders in mineral mining industry to respect the aspect of human rights, environment and social impacts of mineral mining industry, as the extraction of mineral resources has been increasingly causing conflicts between mining companies and local communities. This paper discusses the matter on mandatory instruments to ensure responsible trade of mineral mining, especially on 3GT minerals, which includes the instruments applied within the region of United States of America and Europe namely (1) United States Security and Exchange Regulations as well as (2) European Union Regulation on Conflict Minerals. The Regulations of US Security and Exchange which has required certain companies to disclose the use of conflict minerals provided by the reason "if it is deemed necessary to the functionality or production of a product" manufactured by company. The Congress then enacted the Dodd-Frank Act which was pushed by the concerns on exploitation and trade of conflict minerals by armed groups which have been contributing the finance of conflict in Congo, as well as the crisis of humanitarian issues. The Dodd-Frank Act is applicable to companies that use 3TG minerals, under two main conditions: (1) the company files reports with Security and Exchange Commission (SEC) under the Act; (2) the minerals are necessary to the functionality or production" of a product manufactured or contracted to be manufactured by the company [12].

Pursuant to the stipulation above under SEC Regulation, there are also two considerations which must be taken into account in order to determine whether the Act is applicable to certain companies. First is to determine on whether a company is contracting to manufacture, which is indicated by actual influence a company has over the manufacturing of those 3TG minerals. Such company would not be considered as contracting to manufacture if (1) affixes its brand, marks, logo, or label to a generic product manufactured by a third party, (2) the services, maintenance or repairment is manufactured by a third party, and (3) the company negotiates contractual terms with a manufacturer that does not directly relate to the manufacturing of product. Secondly is to determine whether the conflict minerals originated in DRC or other covered countries. If it is convinced and proven that the minerals originated from such region, then the company is required to undertake due diligence on the source and chain of custody of its conflict minerals and file a Conflict Minerals Report.

In America's continent, the regulation of European Union on Conflict Minerals which is going to be enforced on 1 January 2021 has encouraged all companies to start carrying out due diligence before the enforcement date. European Union Regulation on Conflict Minerals has the following objectives [13]:

- (a) to ensure that EU importers of 3TG (tin, tungsten, tantalum and gold) meet international responsible sourcing standards, set by the OECD;
- (b) to ensure that global and EU smelters and refiners of 3TG source responsibly;
- (c) to help break the link between conflict and the illegal exploitation of minerals; and
- (d) to help put an end to the exploitation and abuse of local communities, including mine workers, and support local development.

The European Union Regulation on Conflict Minerals specifically covers the 3TG minerals due to the reason that those minerals are often linked to armed-conflicts and related human rights abuses. The regulation will be applicable to the activities of importation, smelting or refining, or scheme of due diligence in the sector of minerals or metals which shall be complied for all the business actors in such sector, where companies that practice due diligence shall first check the risks of mining the mineral sources from a fragile or conflict-affected region.

Through the regulation, it is expected that all business actors in mineral mining sector have been responsible in conducting their activities. For instance, in order to ensure this, the regulation requires EU importers to put in place internal systems and processes that provide the following information, these includes: the country of mineral source; the quantities and time of importation; list of imported minerals followed by trade name and type; information of the suppliers; and the paid taxes, fees and royalties.

By July of 2016, it is known that there is a large number of voluntary responsible mining initiatives within the last 15 years, among these initiatives are [14]: Extractive Industries Transparency Initiative; Global Reporting Initiative; International Council on Mining and Metals; and the Initiative for Responsible Mining (IRMA).

For instance, IRMA comprises of members from Civil Society Organizations (CSO), communities, mining companies and downstream companies, is developing a best-practice standard for large-scale mining. IRMA is a multi-sector effort to seek agreement on a set of environmental, social and human rights best practices for mine sites through a cross-sector dialogue, as well as to explore voluntary systems or strategies to independently ensure compliance. IRMA includes mining companies, jewelry retailers, civil society representatives, technical experts and trade associations. There are four main principles under IRMA: (a) Independent verification; (b) Fair and

equitable distribution of benefits to communities (including Tribes/First Nations) and indigenous peoples, while respecting and protecting their rights; (c) Effective responsiveness to potentially negative impacts to the environment, health, safety, and culture; and (d) Enhancement of shareholder value [15].

Likewise, Tin production in Indonesia is associated with significant risk areas including social/economic risks, occupational health and safety, environmental degradation, and challenging legal/regulatory issues. The Tin Working Group (TWG) is the first voluntary, collaborative, multi-stakeholder initiative that aims to make meaningful change in the Indonesian tin sector. Launched in 2014, the TWG works with downstream companies, midstream processors, local tin producers, civil society, industry associations, and the central and regional Indonesian government. Through the TWG, companies are contributing to the development of responsible tin mining in Indonesia via direct engagement with government and local stakeholders, providing support to their supply chain partners, and setting supply chain expectations for responsibly produced tin.

2.2. How These Initiatives Work on the Ground?

Indonesia is a country with abundant mineral deposits, the mining industry in Indonesia has been playing a significant role in the world's production of gold, nickel, and copper [16]. Based on Indonesia's formation of geology, mineral deposits remained vast. Indonesia has potential deposit of lead, zinc and silver, but its most important metal minerals are nickel, bauxite, tin, copper and gold [17].

Mining sector is also a major contributor to the Indonesian economy, it contributes to almost 5% to Indonesian GDP in 2018 [18]. Further, mining sector has also been one of the largest contributors to the total amount of incoming foreign direct investment to Indonesia for the last five years. A data from the Indonesia Investment Coordinating Board shows that since 2014, mining sector has attracted foreign investment amounting at US\$18.84 billion [19].

Indonesia is the world's second-largest tin producer after China, and the world's largest tin exporter thus far. Indonesia's strong position in the global tin trade is well-acknowledge, as it contributes to 25% of global tin production [20]. According to the United Nations Comtrade database on international trade, Indonesia's exports of tin was at US\$1.55 billion in 2018. The island Bangka Belitung, off the coast of Sumatra, accounts for 90 percent of Indonesia's annual tin export [21].

According to the International Tin Association, the world's top ten producers of refined tin in the world are as follows [22]:

Table 1: The International Tin Association List of the World's Top 10 Biggest Tin Producer's

Rank	Company Name	Country of Origin	Production Capacity
1.	Yunnan Tin	China	74,500
2.	PT Timah (Persero) Tbk	Indonesia	30,200
3.	Malaysia Smelting Corporation	Malaysia	27,200
4.	Yunnan Chengfeng	China	26,800
5.	Minsur	Peru	18,000
6.	EM Vinto	Bolivia	12,600
7.	Guangxi China Tin	China	11,500
8.	Thaisarco	Thailand	10,600
9.	Metallo Chimique	Belgium	9,700
10.	Gejiu Zi Li	China	8,700

In 2018, the overall tin production in Indonesia reached 75,000 ton in aggregate, which is a 7,75% increase from the year 2017 at 69,600 ton. Aside from PT Timah (Persero) Tbk, other notable tin producing companies are: Indometal (London) Limited, Eunindo Usaha Mandiri, PT Prima Timah Utama, PT Inti Stania Prima, PT Mitra Stania Prima, PT Refined Bangka Tin, PT Tambang Timah, PT Arsari Tambang, and PT Comexindo International.

The next section will be a further elaboration on how mandatory regulations and voluntary initiatives affects the way companies are producing and selling its products and what steps has been taken by to ensure compliance with these mandatory/voluntary initiatives. For the purpose of this research, the writer takes PT Timah (Persero) Tbk as a company study to analyze and evaluate compliance.

2.2.1. An Overview of PT Timah (Persero) Tbk

In this part, the writer will provide a brief introduction of PT Timah operations, total production capacity and estimated Tin deposits, company structure, shareholders, and profits. Further elaboration on the company's largest tin export destination and largest buyers will be presented.

2.2.1.1. Company profile

PT Timah (Persero) Tbk ("PT Timah") is an Indonesian leading producer and exporter of tin. It is known as the largest state-owned tin producer in the world. The Company was established on August 2nd, 1976. PT Timah engaged in tin mining and has been listed on Indonesia Stock Exchange since 1995. The Company has an integrated tin mining business ranging from exploration, mining, processing to marketing. The company is one of the largest integrated tin mining companies in the world and accounts for eight percent of total global tin production. The company is in Pangkalpinang,

Bangka Belitung province. Its operational areas are located in various cities, some notable ones are in Bangka Belitung Province, Riau Province, South Kalimantan, Southwest Sulawesi, and Cilegon, Banten [23].

PT Timah has a long history in the Indonesian mining industry, especially tin mining. The Company's history started since the era of the Dutch East Indies government who conducted tin mining on land and ocean around the islands of Bangka, Belitung and Singkep. Tin mining in Bangka was managed by a business entity owned by the Dutch Indies Government, Banka Tin Winning Bedrijf (BTW); mining in Belitung by a Dutch private company, Gemeenschappelijke Mijnbouw Billiton Maatschappij (GMB); and in Singkep by a Dutch private company NV. Singkep Tin Exploitatie Maatschappij (NV. SITEM) [24].

During the independence era, the Indonesian Government nationalized three tin companies in 1961 and changed their name to the State Mining Company (PN) of Tambang Timah Bangka, PN Tambang Timah Belitung and PN Tambang Timah Singkep. At the same year, the Government also formed the General Directorate of the National Tin Mining Company (BPU Timah) to coordinate the three state companies. In 1968, based on the Government Regulation No.21 of Year 1968, the three State Companies together with the BPU Timah and the Muntok Tin Smelting Project were merged into the State Mining Company (PN) of Tambang Timah. Furthermore, based on the Government Regulation No. 3 of Year 1976 dated January 24, 1976, PN Tambang Timah was transformed into Public Company (Persero) under the name of PT Tambang Timah (Persero), as set forth in Deed No.1 of Year 1976 made before the Notary, Imas Fatimah SH, dated August 2, 1976, which was announced in the State Gazette of the Republic of Indonesia No.26 dated April 1, 1977, Additional State Gazette No.200 and approved by the Minister of Justice of the Republic of Indonesia with the Decree Letter No.Y.A.5/65/17 dated February 5, 1977. The Company began its commercial operations in August 2, 1976 [25].

In 1991 to 1995, the financial crisis and the fall of The International Tin Council (ITC) in 1985 prompted the Company to restructure and privatize. After restructuring, the Government privatized the Company in 1995 by listing its shares at the Jakarta Stock Exchange and Surabaya Stock Exchange (now the Indonesia Stock Exchange). The Company's Global Depository Receipts (GDRs) were also listed at the London Stock Exchange [26].

2.2.1.2. Company structure

Aligned with the Government's intention to establish a Holding for Mining companies in Indonesia, in

2017, the PT Timah became a member of the Holding for the State-owned Mining Company, PT Indonesia Asahan Aluminum (Persero) ("Inalum"). As a result, a total of 4,841,053,951 shares of PT Timah previously owned by the Republic of Indonesia were transferred to Inalum. Despite a major change in share ownership of Inalum in accordance with the Government Regulation No.72 of Year 2016, the Company continues to be controlled by the State through the presence of golden shares, thus is treated equally with other SOEs in strategic matters. As such, to date, the State retains control over the Company, both through golden shares directly and through Inalum indirectly [27].

Diagram 1: Structure of Holding Company for Indonesian Mining Industries



PT Timah also has the following subsidiaries:

1. PT Timah Industri (wholly owned by PT Timah)
2. PT Tambang Timah (wholly owned by PT Timah)
3. PT Timah Investasi Mineral (99,9% shares owned by PT Timah)
4. PT Dok & Perkapalan Air Kantung (wholly owned by PT Timah)
5. Indometal London Ltd (wholly owned by PT Timah)
6. Great Force Trading (GFT)
7. PT Rumah Sakit Bakti Timah
8. PT Timah Karya Persada Properti
9. PT Timah Agro Manunggal

In terms of their internal company structure, its organs constitute of the General Meeting of the Shareholders (GMS), the Board of Commissioners and the Board of Directors, pursuant to the Law No. 40 of 2007 on Limited Liability Companies. PT Timah adopts the two-tier system, which are the Board of Commissioners and the Board of Directors, with clear authorities and responsibilities for respective functions in accordance with regulations of the Company and the State. PT Timah also has a set of regulations as the Company's basic management. The regulations are established based on hierarchy, which means the lower regulation shall not go against the higher regulation. The hierarchy of the Company's regulation is shown in the following scheme. As of 2018, PT Timah's shareholder composition is as follows [28]:

No.	Name of Shareholder	Number of Shares	Percentage
1	PT Indonesia Asahan Aluminium (Persero)	4.841.053.951	65%
2	Public	2.606.699.502	35%

The list of Top 10 public shareholders as of 2018 is as follows:

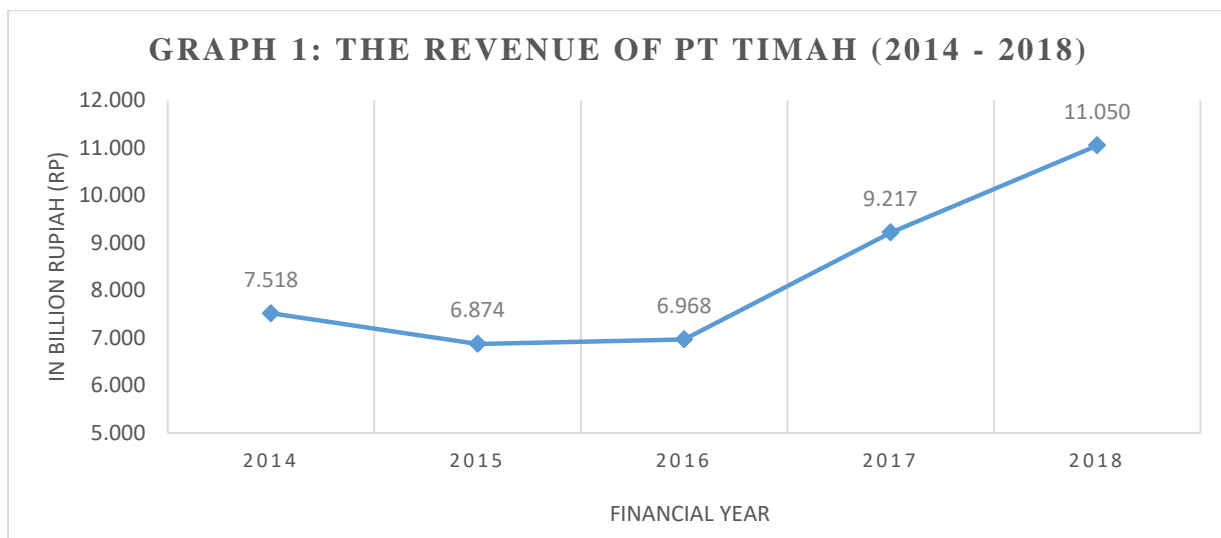
No.	Name of Shareholder	Number of Shares	Percentage
1	PT Taspen (Asuransi) - AFS	196.523.743	2,64
2	DJS Ketenagakerjaan Program JHT	140.746.333	1,89
3	PT Prudential Life Assurance - REF	129.273.644	1,74
4	Citibank Singapore A/C Lembaga Tabung Haji-AS Pacific	95.491.300	1,28
5	RD Panin D Maksima-910334000	70.482.131	0,95
6	Citibank New York S/A Government of Norway – 16	58.000.000	0,78
7	PT Asuransi Jiwa Adisarana Wanaartha - Desk 2	56.000.000	0,75
8	SSB 2Q27 S/A Ishares Core MSCI Emerging Markets Etf-2144613424	47.242.652	0,63
9	Citibank New York S/A Emerging Markets Core Equity Portfolio of DFA Inv Dimensions Grp Inc.	46.839.367	0,63
10	Citibank New York S/A Dimensional Emerging Markets Value Fund	44.150.560	0,59

2.2.1.3. Company Production, Sales and Revenue

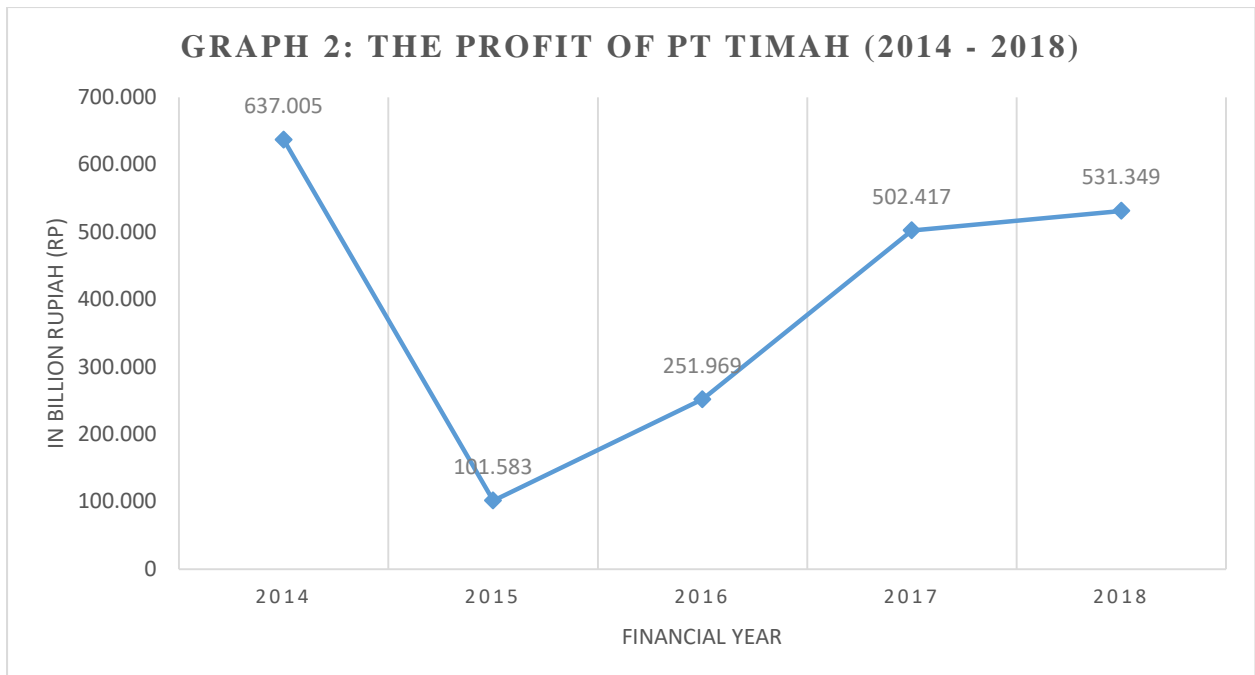
As of 2018, the Company has 4,537 permanent employees, and owns 14 subsidiaries (both directly and indirectly) and 129 mining permits (*Izin Usaha Pertambangan*) covering an area of 473,401 hectares,

with total tin ore resources of 1,043,633 tons and tin ore reserves of 415,359 tons [29].

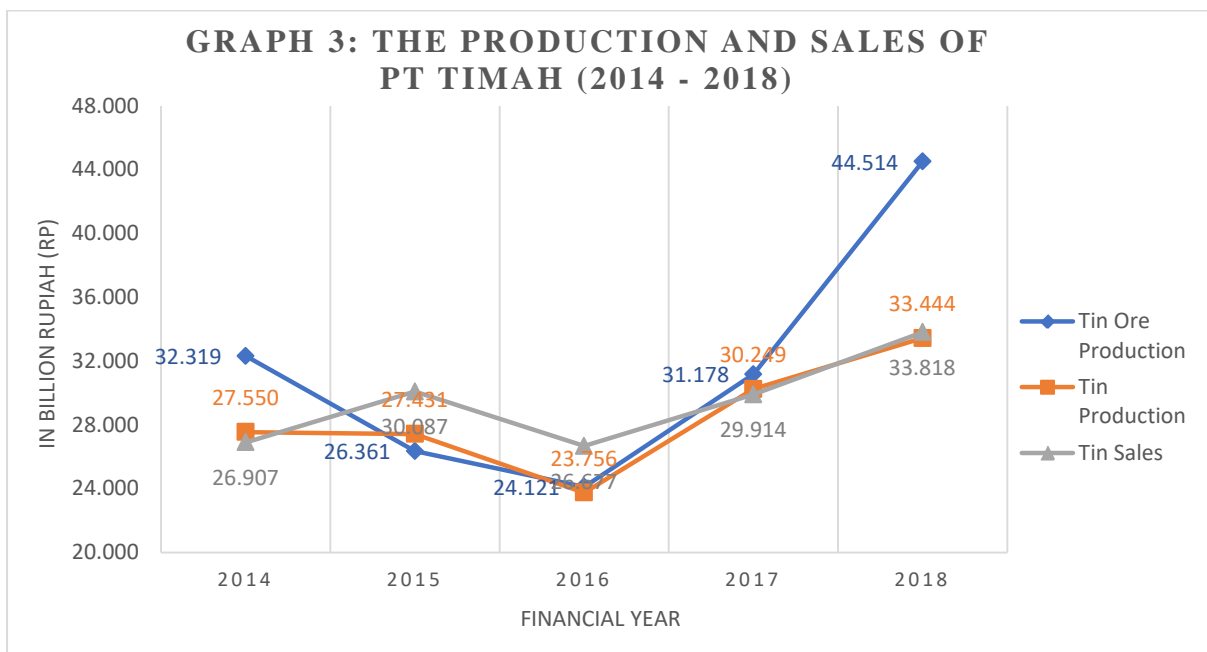
In 2018, the total revenue of PT Timah reached Rp 11.05 billion, which is 19,88% increase from the previous year at Rp 9.217 billion. Its revenue in 2016 totaled at Rp 6.968 billion, Rp 6.874 billion in 2015 and Rp 7.518 billion in 2014 [30].



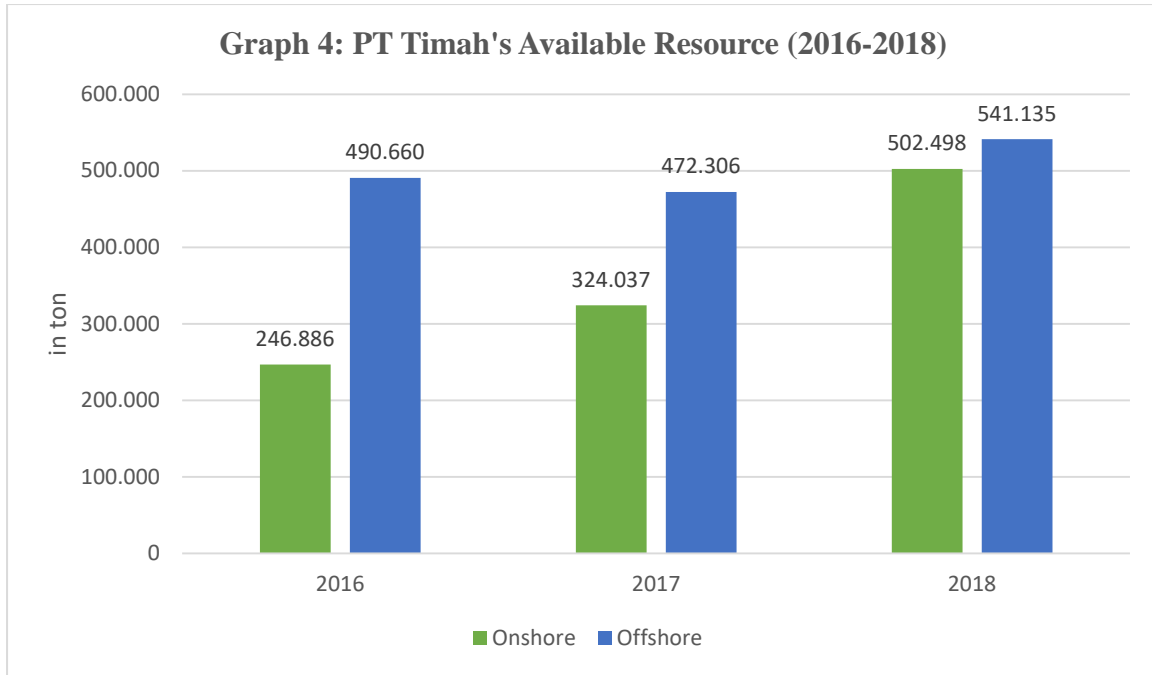
In terms of company profit, PT Timah earns profit at Rp 531 billion in 2018, which is a 6% increase from Rp 502.417 billion in 2017, and Rp 251.969 billion in 2016.



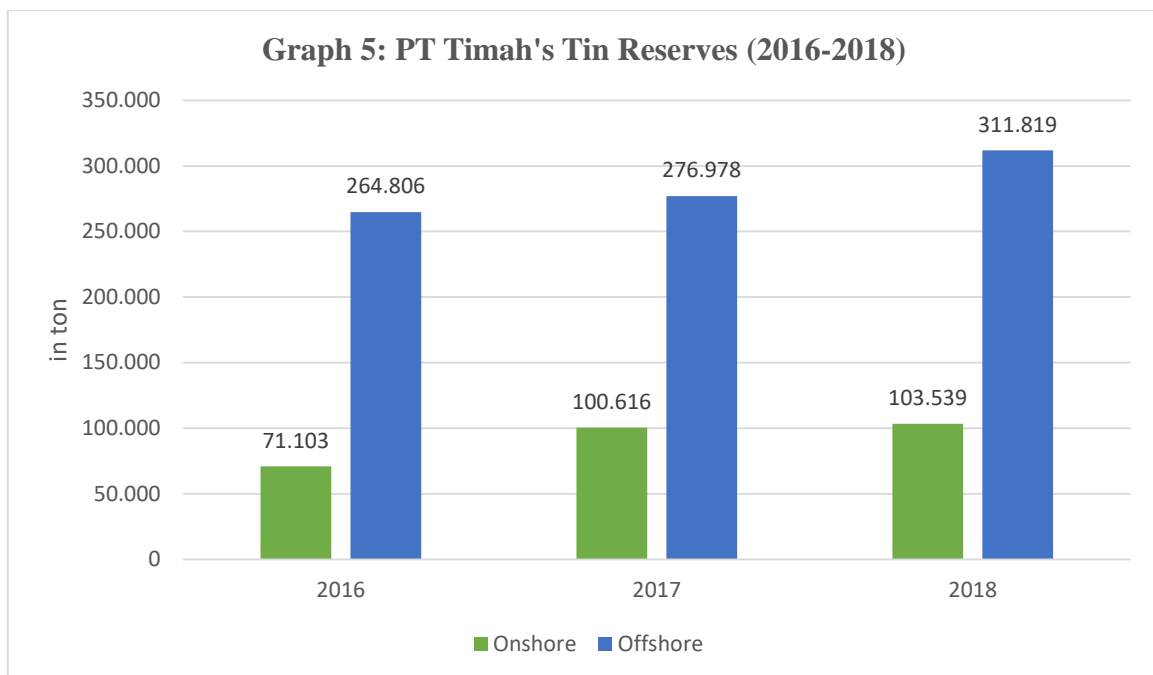
The Company's tin production in 2018 reached 33,444 metric ton, which is the highest since 2012. In 2018, tin sales reached 33,818 ton, which is a 13% increase from sales in 2017, at 29,914 ton, and 26,677 ton in 2016 [31].



As of 2018, the available resources possessed by PT Timah is at 502,498 onshore and 541,135 offshore, as indicated in the graph below:



Meanwhile, the available tin reserves that have been indicated by PT Timah in 2018 is at 103.539 onshore and 311.819 offshore, as indicated in the graph below.



Said statistics only proves PT Timah’s positive records and its qualities for which it is named as the second largest tin producer in the world.

2.3 A Review on How Regulations and Initiatives Affects PT Timah’s Corporate Operation

PT Timah’s mining operations was under global scrutiny for human rights violations, including the loss of workers life and child labor. A report by

Businessweek in 2012 found that work safety standard that was implemented by the Company was low [32]. Apart from concern on working conditions, an article published by The Guardian showed that tin mining activities by PT Timah has also caused environmental degradation, loss of forest areas, coral reefs destruction and affecting the source of income for local communities (farmers and fishermen) [33].

Another important human rights issue with tin mining is the massive practice of illegal mining. An investigation by BBC Panorama in 2014 found that illegal mining operations had used child labor and put them in a continuous dangerous working condition [34].

Indeed, human rights violation brings in a significant impact on PT Timah's business. Despite no formal declaration from PT Timah regarding the correlation of human rights violation and the declining of profit, at the best of our research and analysis, we conclude that the decline indeed closely ties to the neglect of human rights awareness by the Company. At the third-quarter of 2012, PT Timah experienced significant decrease of net profit, from Rp860 billion in the same period the previous year to only Rp370 billion. This situation had also impacted the company's Earnings per Share ratio, declining from Rp171, - to Rp73 per share. This condition continued to the first quarter of 2013, where the company experienced another fall in net profit at 51% than the same period of the previous year [35].

In 2014, PT Timah started to adopt the Global Reporting Initiative (GRI) Sustainability Reporting Standards. The GRI helps companies to identify and inform their impact on critical sustainability issues. These issues include climate change, human rights, governance and social welfare. This report assists companies to take necessary action in create social, environmental and economic benefits for the affected groups [36]. From this point on, PT Timah's profit began to rise as the Company gains trust from giant corporations abroad.

Indonesia's strong position in the global tin trade led policymakers to implement various regulation for tin exports in an attempt to boost global tin prices and combat illegal mining. One of which is the Ministry of Trade Regulation No. 33 of 2015 on Tin Export Provision ("**Tin Export Regulation**") [37]. This regulation requires all the transaction of Indonesia's Tin either for export or domestic sales to be traded through the Indonesian Commodity and Derivatives Exchange ("**ICDX**") [38].

Under the Tin Export Regulation, export and domestic sales of pure tin bars are to be done solely through the Tin Exchange, which refers to the ICDX. Only companies that have obtained the Tin Exporter Recognition from the Minister of Trade. To apply for the document for recognition from the Director General of International Trade from the Ministry of Trade. The ICDX also sets up a product quality requirement for products transacted therein; specifically, the quality of tin that can be transacted in the Exchange shall have a minimum purity level of 99.90% and a maximum lead content (Pb) of 300ppm and iron (Fe) of 50ppm. Further, the Tin Export Regulation also requires tin exporters to have a complete set of mining operational and production licenses that is clear and clean [39].

With the implementation of the Indonesian single window for tin sales, PT Timah only transacts through the ICDX, along with other tin producers in Indonesia. Both seller and buyer must first register as a member

at ICDX, after which they can conduct transactions at the Exchange located in Jakarta [40]. To date, the most prominent tin seller in the Exchange are: PT Timah, PT Tambang Timah, PT Refined Bangka Tin, PT Mitra Stania Prima, H Co. Ltd (Korea), Daewoo International Corporation (Korea), Gold Matrix Resources (Singapore), Great Force Trading (Hongkong), Noble Resources International Put Ltd (Singapore), Purple Products Pvt Ltd (India), Toyota Tsusho Corporation (Japan) [41].

In terms of buyers, to date, PT Timah exports more than 95% of the total its production to various parts of the world, and the remaining in domestic market. The refined tin export destination countries in Asia include Japan, Korea, Taiwan, China, and Singapore, meanwhile in Europe, it is marketed to UK, Netherlands, France, Spain, Italy, as well as United States of America and Canada [42].

Most of PT Timah's refined tin exports are distributed through the port in Singapore, while for the domestic market are directly marketed through the existing warehouse in Jakarta. Meanwhile, the type of refined tin buyers is differentiated by the end user group, such as factories, solder industries, tin plate industries and distributors.

For years, PT Timah is known to supply tin produces to giant corporations such as Apple Inc., Samsung, Electrolux, and Intel Corp. Based on the environmental organizations Friends of the Earth investigation, for handphones and tablets produced by Apple and Samsung, includes at least 7 grams of tin in each of these telephone units. Further, the adhesive that holds all resistors, transistors, and integrated circuits in electronic equipment is a tin-rich solder material — a mixture of 95% tin plus silver and copper [43].

Aside from Samsung and Apple, more major smartphone manufacturers have acknowledged the use of tin from Bangka Island in their products. They are Nokia, Sony, BlackBerry, Motorola, and LG Electronics. Each of them stated that they used tin from Bangka Island, which suffered environmental and social damage due to mining activities. One name that is still absent from the list is Apple, which has not made a direct statement regarding the matter. As a result, the iPhone and iPad gadget manufacturers are drawn criticism from Friends of the Earth, which urged industry players to improve the situation on Bangka Island [44].

In 2012, these giant companies were heavily criticized for using tins originating from Bangka Belitung, which, at that time, involves massive human rights violations. It is caused by the absence of obligation for processing companies to disclose to the public regarding their human rights standards because there are no regulations that require these companies to announce the origin of the material used, nor was there any standards of human rights companies are obliged to submit to. The report explained that Samsung and Apple obtained tin supplies from PT Timah through intermediaries of Shenmao and Chernan [45]. Apple was also known to cooperate with a tin supplier named Electronic Industry

Citizenship Coalition (EICC). Unfortunately, a number of tins obtained by EICC was allegedly taken illegally, one of which is those from Indonesia. The news made Apple immediately sent a special team to investigate to Bangka Belitung [46]. In light of the severe human rights violations surrounding Indonesian tin production, Apple has issued a warning letter, including those issued by the European Parliament, regarding the origin policy for the tin mining sector [47].

With the increased of global awareness and initiatives to business and human rights, Apple, Samsung, Intel, and other companies started to implement global initiatives to support human rights enforcement in the business sector. One of the major leap initiatives was done by Apple, which to date decides to implement the five-step framework of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016) and the related Supplements. This five-step framework include:

1. Step 1: Strong Company Management Systems. Applying internal management systems overseeing human rights compliance and responsible sourcing of materials program.
2. Step 2: Identification and Assessment of Risk in the Supply Chain. Identify and assess risk, requirement for suppliers to submit industry-wide standard of Tin, Tungsten, Tantalum and Gold (known as 3TG) Conflict Minerals Reporting Template ("CMRT"), and collects and processes data provided by suppliers to map supply chain to the smelter and refinery level and to the mine-site level.
3. Step 3: Strategy to Respond to Identified Risks. Implements due diligence program to respond to identified risks in business supply chain.
4. Step 4: Independent Third-Party Audit of Supply Chain Due Diligence. Third Party Auditors to ensure operations and sourcing practices do not support conflict with human rights, and to promote human rights awareness through advocacy and influence.
5. Step 5: Report on Supply Chain Due Diligence. Provides annual report on due diligence requirements through Conflict Mineral Reports and Annual Progress Reports [48].

Further, Apple also has gone as far as making a thorough Supplier Responsibility Standards, which imposes strict obligation to human rights, environment and employment protections at its best [49]. These standards include anti-discrimination, anti-harassment and abuse, prevention of involuntary labor, Third-Party Employment Agencies, Foreign Contract Worker Protections, Prevention of Underage Labor, Working Hours Management, Wages, Benefits, and Contracts, Occupational Health and Safety Management, Incident Management, Hazardous Waste Management, Wastewater Management, Air Emissions Management, Boundary Noise Management, Resource Consumption Management, Responsible Sourcing of Materials [50].

Aside from the OECD Due Diligence Guidelines, Intel Corp. specifically also applies the Responsible Mining Initiative ("RMI"). However, unlike the mandatory compliance to OECD Due Diligence Guidelines, compliance rate to the RMI still lies on the stage of encouragement. Intel Corp in its latest Responsible Minerals Sourcing Policy vows to collaborate with its suppliers to implement RMI to foster long-term responsible sourcing and encourages smelters in their supply chain to undergo a third-party assessment, such as the Responsible Minerals Assurance Process (RMAP) [51].

These companies require all their suppliers to adhere to these requirements through all levels of their supply chain. In this way, these Companies implement its requirement that smelters and refiners in its supply chain comply with strict standards [52]. As suppliers to these Companies, PT Timah is required to pass the high standard in order to sustain their Buyers. This led PT Timah to raise their human rights standards to comply with their buyer's standards.

As cited from PT Timah's 2018 Annual Report, the Company has implemented several initiatives and policies to prevent the violations of human rights occurrence, particularly on employment practices. This effort had a fairly positive note for the Company sustainability. Overall, there were no reports or discrimination cases that occurred involving the Company.

2.3.1 Child Labor and Forced Labor Prohibition

To prevent under-age worker, the Company's policy is to impose the prospective employees minimum age requirement is 19 years. This is in line with Director decree No. 2070 / Tbk / SK0000/2013-S11.2 dated December 31, 2013 which affirms "*The age requirement for employee appointment from Trainee Management participant to Permanent Employee shall be at least 19 (nineteen) years old*". PT Timah understands that the work which performed by their partner, in practice, has the potential to violating human rights obligations, should be treated the same. The worker's minimum age requirement is also imposed on PT Timah's mining contractor partners. PT Timah upheld and monitored the adherence to this requirement closely, therefore at the 2017 reporting period, it is recorded that no under-age children are being employed by the Company or by any of its mining vendors [53].

In 2018, PT Timah also ensure that their business partners along their supply chains can comply with the minimum age and no forced labor requirement. As to the former, PT Timah campaigns strict age requirement for employees recruitment, and as to the later, PT Timah ensures that their work schedule complies to the applicable labor regulations and according to the Collective Labor Agreement, which is done through the implementation of shift work system at several operational sites. The shift work

system will be adjusted according to specific needs, with implementation of overtime incentives for any work that is done after close of business hours. To prevent any violation, PT Timah carefully monitored their partners and supply chains, resulting in zero violation in regard to child labor and forced labor either by PT Timah or their business partners [54].

2.3.2. Safeguards that Maintains Human Rights

To ensure implementation in running corporate duties according to the Human Rights corridor, PT Timah has constantly engaged their employees into trainings and certifications, one of which is the Gada Pratama certification. The Gada Pratama training emphasize on the field security practices in accordance with the Human Rights corridor, each member that engaged and graduated from the training achieves Gada Pratama certificate. The number of participants that engaged and graduated on Gada Pratama Training year 2017 are 6 people. With the addition of these 6 people, then in 2016 and 2017, The company has been had 110 people who have the certificate from Gada Pratama. This made up 79% from the total number of security unit personnel that is hired by the company. In 2018, PT Timah employees are also given Latma Pampro, which is a joint Security and Production training that has been participated by a total 195 employees. During the reporting period, there has not been any violations against the human rights or workplace discrimination [56].

3. CONCLUSION

Indonesia is a country with abundant mineral deposits, the mineral mining industry in Indonesia has been playing a significant role in the world's production of tin. Indonesia is the world's second-largest tin producer after China, and the world's largest exporter thus far. Indonesia's strong position in the global trade of tin is well-acknowledged, as it contributes to 25% of global tin production. In 2018, the overall tin production in Indonesia reached 75,000 ton in aggregate, which is a 7,75% increase from the year 2017 at 69,600 ton.

PT Timah is known as Indonesian leading producer and exporter of tin; it is known as the largest state-owned tin producer in the world, and the second largest tin exporter in the world. The Company was established on August 2nd, 1976. PT Timah engaged in tin mining and has been listed on Indonesia Stock Exchange since 1995. Nevertheless, their achievement today would not be as good had it not been tainted after being under global scrutiny for human rights violations, including the loss of workers life and child labor. These human rights violations bring in a significant impact on PT Timah's business. At the third-quarter of 2012, PT Timah experienced significant decrease of net profit, from Rp860 billion in the same period the previous year to only Rp370 billion.

Since PT Timah exports more than 95% of the total its production to various parts of the world In 2012, and having giant companies such as Apple, Samsung, and Intel as its buyer, these companies were heavily criticized for using tins originating from PT Timah in Bangka Belitung, which, at that time, involves massive human rights violations. In order to secure its buyers, PT Timah must ensure compliance to their Buyer's standards on human rights and environment.

As a breakthrough, in 2014, PT Timah started to adopt the Global Reporting Initiative (GRI) Sustainability Reporting Standards. The GRI helps companies to identify and inform their impact on critical sustainability issues. These issues include climate change, human rights, governance and social welfare. This report assists companies to take necessary action in create social, environmental and economic benefits for the affected groups. From this point on, PT Timah's profit began to rise as the Company gains trust from giant corporations abroad.

Apple, one of PT Timah's buyers, adheres to the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2016) and the related Supplements, and had also enacted their own Supplier Responsibility Standards. Meanwhile, Intel applies the Responsible Mining Initiative (RMI) to foster long-term responsible sourcing and encourages smelters in their supply chain to undergo a third-party assessment, such as the Responsible Minerals Assurance Process (RMAP). These initiatives had forced PT Timah to raise its standard and comply with the Buyer's standards. This is supported by the fact that PT Timah has been profit growing positively. In 2018, the total revenue of PT Timah reached Rp 11.05 billion, this is a 19,88% increase from the previous year at Rp 9.217 billion.

In conclusion, the enactment of global initiatives for mining industries to uphold human rights, social and environmental protection has led giant companies to adhere to these initiatives. These companies began to enact standards for their operation as well as their suppliers and the whole supply chain to be free from human rights violations. The enactment of this standard by global Buyers change the behavior of suppliers. These suppliers whether genuinely willing or for mere sake of commercial branding, were forced to comply to the standards imposed by their Buyers to sustain their business in the market.

With the above findings, this article argues that there is a possible positive relation between the enactment of global standards by Buyers to the improved human rights, social and environmental practice and standard in tin production and export in Indonesia. In order to sell its products to these Buyers, PT Timah should also maintain its compliance and respect to human rights performance standards, i.e. OECD Guidelines and RMI. This finding may be a good example for other mining companies in improving their respect to human rights, social and environmental practice and awareness.

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