

A high-angle photograph of a river with clear, turquoise water. The river is surrounded by dense green forest. In the lower-left quadrant, a group of people in a blue inflatable raft are navigating the river. The raft is filled with people wearing helmets and life jackets, holding paddles. The water shows some white rapids. A large red diagonal shape cuts across the bottom right corner of the image, serving as a background for the text.

TOWARD EXCELLENT SUSTAINABILITY

2019

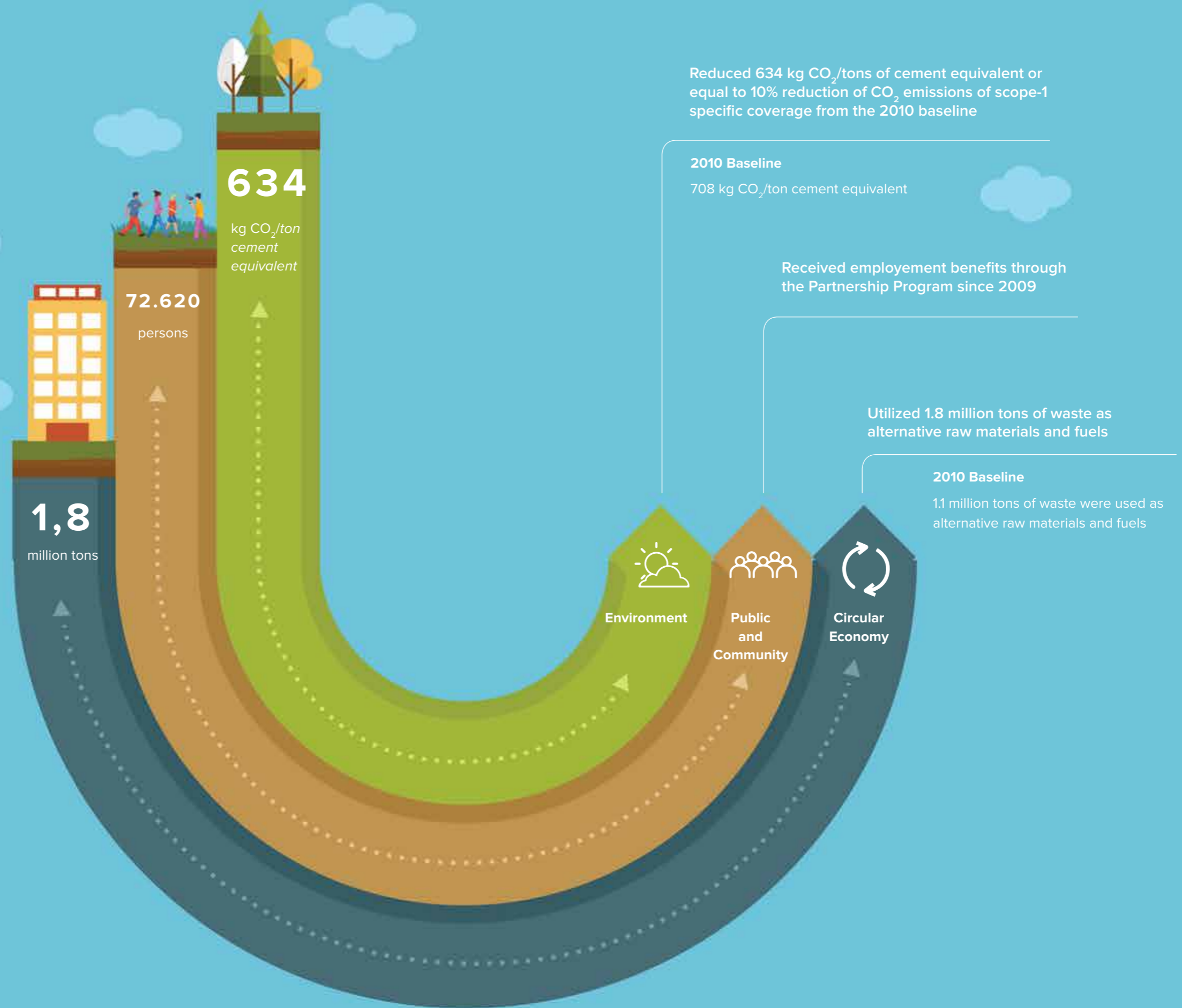
Sustainability Report
PT Semen Indonesia (Persero) Tbk



TOWARD EXCELLENT SUSTAINABILITY

PT Semen Indonesia (Persero) Tbk (SIG) is the largest cement producer in Indonesia. Our operations span across the Archipelago and our presence touches many stakeholders both in Indonesia and globally. At SIG, we understand that our business objectives must be balanced with environmental consciousness, economic contribution, and social progress for the best interest of all stakeholders and the society, both in the present and the future. We take this as the spirit that underlies the Company's short-term and long-term business strategies. We aspire to be excellent in both policies and day-to-day implementation, which will ultimately help us to contribute to the actualization of sustainable development. On top of that, we strive to be the industry's market leader and always provide a lasting contribution to the nation's economic growth.

2019 SUSTAINABILITY PERFORMANCE



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Sustainability Strategy [103-2] [103-3]

Innovation and adaptability are keys to the Company's sustainability. These are the capabilities that help us to overcome challenges and navigate through business dynamics now and in the future.

As a state-owned enterprise, SIG holds the mandate of not only striving for our sustainability, but also providing lasting positive benefits for Indonesia's national development, both in socioeconomic areas and the environment. On that note, we envision becoming the leading building material solutions provider in the region, with one of our missions to carry out various sustainability initiatives in line with the Sustainable Development Goals (SGDs).

The Company's commitment is embodied in our four pillars of sustainability:

1. Sustainable Economic Growth;
2. Climate and Energy;
3. Circular Economy;
4. People and Community.



2024

Corporate Vision:

Leading Building Material Solutions Provider in the Region

Corporate Mission:

Focus on Environmental Protection and Sustainable Social Responsibility



Sustainable Economic Growth

Commitment We strive toward on-going innovation for sustainable solutions and to strengthen our supply chain

Strategy Providing sustainable solutions with innovative products and services to mitigate the increasing demand for limited resources

Enhancing the supply chain and developing sustainable-oriented partnership with strategic partners

2024 Target

- Increase the revenue proportion from sustainability solutions every year
- Enforce strategic partner screening using sustainability criteria established by the Company

SDGs



Climate and Energy

Commitment We will continue to support Indonesia's commitment to COP21 (2015) to reduce GHG emissions in 2030 by 29% by independent efforts, or 41% with international assistance

Strategy Reduction of greenhouse gas emissions (CO₂)

Significant reduction of air emissions (dust/particles, NOx, SOx)

Reduction of energy consumption

2024 Target

- Reduce 16% of specific CO₂ emission scope 1 (per cement equivalent) from the 2010 level
- 67% of clinker factor
- 15% of Thermal Substitution Rate

SDGs



Circular Economy

Commitment We are committed to use all materials in a responsible manner

Strategy Using raw materials efficiently through product development

Utilizing renewable resources (waste-derived) as alternative fuels

2024 Target

- Utilizing 1.8 million tons of waste as alternative fuels
- Utilizing 1.9 million tons of waste as alternative raw materials

SDGs



People and Community

Commitment As we value our people and community highly, we implement good corporate governance and ensure proactive stakeholder management

Strategy Promoting health and safety for employees and contractors

Creating shared values for community

2024 Target

- Zero Fatality
- LTIFR ≤ 0.90
- A total of 73,000 people benefited through partnership program (PK), cumulative since the program began

SDGs





Pillars	Indicators	2010 Baseline	2019 Performance	2024 Target
Climate and Energy 	Reduction of specific CO ₂ emission scope 1	708 kg CO ₂ /ton cement equivalent	634 kg CO ₂ /tons of cement equivalent, of specific CO ₂ emission scope 1	595 kg CO ₂ /tons of cement equivalent or equal to 16% reduction of specific CO ₂ emission scope 1 from 2010 baseline
	Clinker factor	83%	72%	67%
	Thermal substitution rate	1%	3%	15%
Circular Economy 	Alternative fuel	44,693 tons	232,904 tons	1.8 million tons
	Alternative raw material	1,112,601 tons	1,659,627 tons	1.9 million tons
People and Community 	Fatality Rate	1 incident	0 incident	0 incident
	Lost Time Injury Frequency Rate (LTIFR)	1.44	1.16	≤ 0.90
	Creating added values for the for the community	Partnership Program started in 2009	A total of 72,620 people benefited through partnership program (PK), cumulative since the program began	A total of 73,000 people benefited through partnership program (PK), cumulative since the program began

Greetings from the President Director

Despite the competitive conditions, limited resources, and increasing environmental issues in the cement industry, sustainability has always been a principal and ongoing commitment of the Company.

Dear Respected Stakeholders,

Our praise and gratitude to God Almighty who has given His blessings, gifts and opportunities to Semen Indonesia Group (SIG) in navigating through the challenging year of 2019. Despite a challenging year, SIG managed to record notable achievements throughout the year by continuing the transformation and efficiency programs, completion of the integration process of PT Solusi Bangun Indonesia Tbk, to the alignment of our vision and mission which has started to becoming even more focus in the actualization efforts to be a prominent building material solution provider of the region.

Commitment to Sustainability

Despite the competitive conditions, limited resources, and increasing environmental issues in the cement industry, sustainability has always been a principal and ongoing commitment of the Company. We are committed to be a pioneer in the building material industry that empowers stakeholders. We present this commitment in our four Pillars of Sustainability, which are Sustainable Economic Growth, Climate and Energy, Circular Economy, and People and Community.

On the pillar of Sustainable Economic Growth, we strive to innovate continuously, formulate sustainable solutions and strengthen our operations by providing innovative products and services which can help satisfy an increasing demand while at the same time able to maintain environmental stewardship. On top of that, we work to build a robust and sound supply chain, and expand our partnership, which is centered on sustainability.

On the Climate and Energy pillar, we will continue to support Indonesia's commitment at COP21 (2015) to reduce GHG emissions by 2030 by 29%, or hopefully up to 41% with international assistance.



Hendi Prio Santoso
President Director

We have achieved the target in a lower GHG emissions, a significant reduction in air emissions, and a more efficient energy consumption. Our 2024 goal is to reduce 16% of the Company's direct CO₂ emissions - Scope 1 (per cement equivalent) from the 2010 baseline, lower our clinker factor by 67%, and a 15% lower Thermal Substitution Rate.

We also committed to responsibly utilize alternative materials, as demonstrated in our Circular Economy pillar. We will achieve this by reducing the required volume of raw material through product development and innovation. Also, we will utilize renewable resources from recycled waste as alternative fuels. We aim to reuse 1.8 million tons of waste as alternative fuels and 1.9 million tons of waste as alternative raw materials by 2024.

Last but certainly not least is the pillars of People and Community. We see People as one of the most crucial aspects of sustainability, as represented in the 3P principle alongside Profit and Planet. To that end, we highly value our employees and communities where ever we operate. We ensure that we apply good corporate governance and proactive stakeholder management. Internally, we strive to promote health and safety for our people: our employees and contractors who work in our operational sites. In a broader society, we strive to create lasting shared value with the communities. We aspire to achieve Zero Fatality at all operational sites and provide positive impacts and socioeconomic benefits to up to 73,000 people through our Partnership Program (PK).

Our Achievement in Sustainability This Year

Similar to the challenges from the previous year, the Company faced a fierce global competition, and

specifically in Indonesia, 2019 was a political year in which General Election was held. Such conditions made 2019 was a "wait and see period" for many entrepreneurs.

We are delighted that the Company managed to overcome these challenges. Furthermore, we can foster our contribution and provide value for our stakeholders through our business, operations, and growth in environment, health, human resources, social, and corporate government areas.

In terms of the Sustainable Development Goals (SDGs), we are all in to support these global goals and committed to become a good corporate citizen through various programs and initiatives. We set several critical success factors to monitor our progress in these programs, namely ethical and responsible business practices, contributions toward the well-being of local, domestic and global communities, environmental awareness, and many more.

One of SIG's strategic steps to achieve those success factors is that we adopt the principles and best practices of sustainability as the cornerstone of everything that we do, including our assessment methods and internal control criteria. Furthermore, to enhance our contribution to the achievement of SDGs, we strive to integrate sustainability into our day-to-day operations and business conduct. Hence, our business can be in line with the best interest of society and the environment.

We fully support the Government of Indonesia's effort in encouraging the business community to strengthen their participation in the achievement of the SDGs as part of the global efforts to actualize these goals by 2030.

On top of that, as one of Indonesia's State-Owned Enterprises (SOEs), SIG joins forces alongside other SOEs in a national program "BUMN Hadir untuk Negeri", which is an initiative of the Ministry of State-Owned Enterprises that organizes various CSR and socioeconomic initiatives across Indonesia. This year, we are glad to be able to contribute to a CSR program in Selayar Islands, South Sulawesi.

In the Partnership Program, SIG continues to assist 39,000 SME partners with a total of 72,620 workers. We hope that SIG's presence in each of our operational area can provide positive socioeconomic benefits, especially to the local communities.

In the environmental area, we succeeded in reducing our GHG emissions to 634 kg CO₂/ton cement equivalent, or equivalent to reducing 10% of CO₂ emissions compared to the 2010 baseline. The Company also continues to support the efforts in utilizing eco-friendly alternative fuel and material (Alternative Fuel & Raw Material - AFR). We had successfully utilized 232,904 tons of waste as alternative fuels and 1,659,627 tons of waste to be reused as alternative raw materials.

In the area of Occupational Health and Safety, we are proud to report that there was zero fatalities throughout 2019, with a Lost Time Injury Frequency Rate (LTIFR) of 1.16.

Be the Provider of Building Material Solution

In developing countries, the demand for packaged cement is more significant than bulk cement. This is driven by the nature of the customers who still prefer to use conservative cement products rather than its derivative products. However, in the last ten years,

Indonesia saw a significant increase in the demand for bulk cement. This means that the market for cement derivative products and building materials has expanded, and customers are now considering using cement derivative products. This development has opened windows of opportunities for SIG, where we can be more than just a cement producer but also be able to provide added value to our customers.

Looking at these facts, SIG stepped up to be a company that is able to provide added value which will better position and distinct ourselves from the competitors. Hence, SIG is here to become the industry leader by providing building material solutions and renewing our vision and mission in 2019: "Leading Building Material Solutions Provider in the Region".

Every element and people in SIG is in full gear to achieve this renewed vision. We will focus on customer satisfaction, excellent products, and the best service quality. All of these will be delivered with the utmost attention toward environmental protection and society. Ultimately, SIG will be able to build shared value for our stakeholders' best interest and raise the bar of sustainability practice in our industry. We will need the support and energy of our employees and partners to achieve this vision and propel SIG to be the largest provider of building material solutions, not only in Indonesia but in Southeast Asia.

We have also formulated Strategic Business Priorities in facing all challenges in 2019. There four priorities this year, i.e. implementing a centralized and integrated operating pattern for all lines with the main objective of creating cost efficiency that increases company competitiveness, creating differentiation through providing excellent product quality and reliable services, being proactive in managing



synergy with stakeholders, and finally conducting a cultural transformation to strengthen internal cohesiveness as one big family of SIG.

We are committed to improve governance by improving the system and the process in everything that we do. Going forward, SIG will continue to contribute to national and global sustainable efforts of reducing GHG emissions, improving energy-saving, strengthening waste management, and protecting biodiversity in operational areas.

With hard work and strong support from the government and all stakeholders, SIG believes that we can navigate whatever challenges that we may face in the path toward sustainability. Moreover, the enthusiasm and dedication of our people will be the driving force behind the Company's improvement and sustainable growth.

Closing

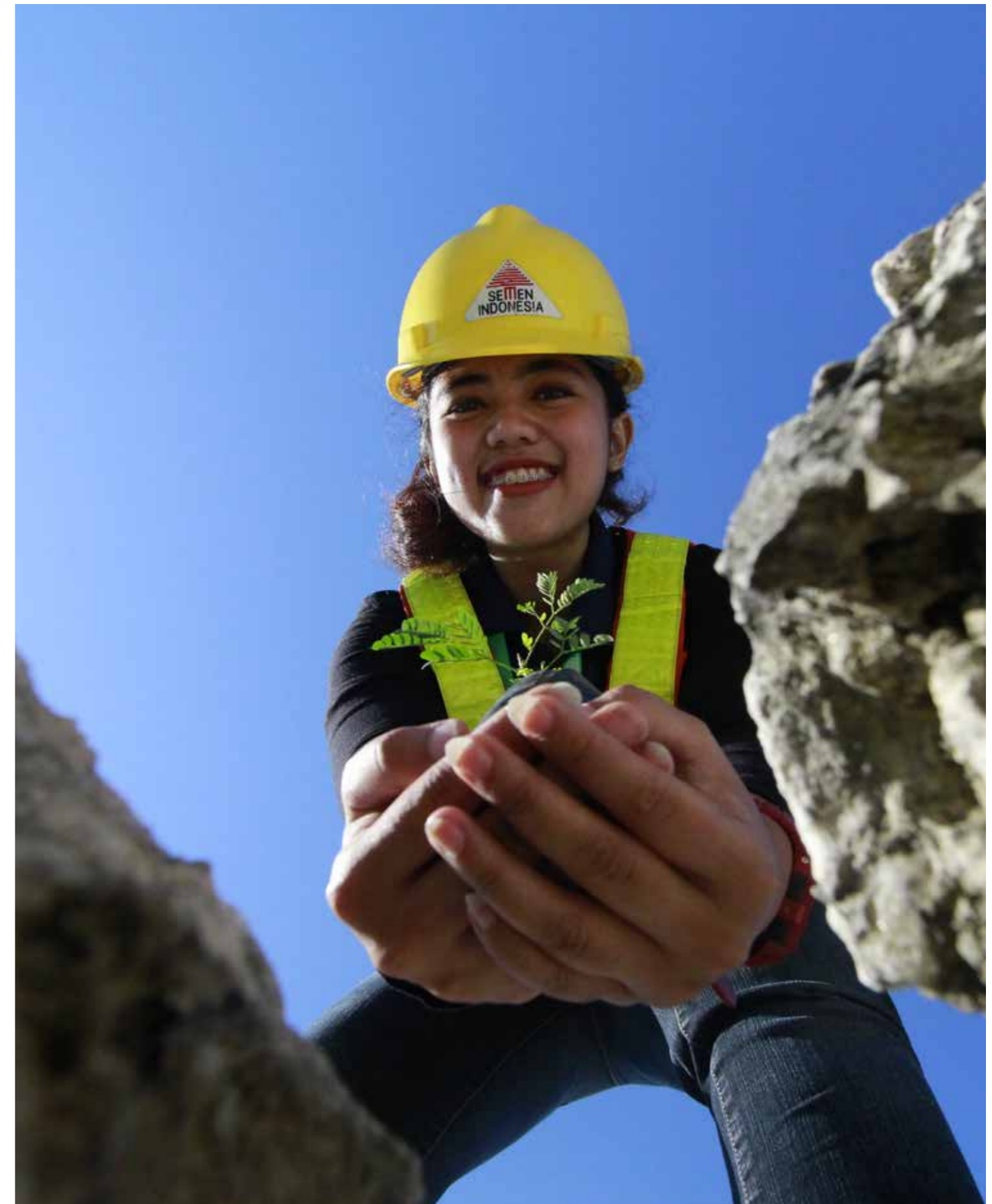
Our best endeavor in integrating, consolidating, and improving profitability and cost-efficiency has served

as the backbone that enabled us to record notable achievements throughout 2019. Using this as a cornerstone, SIG will continue our journey to become the largest building material solution provider in the region, with a steadfast commitment of being a pioneer in our industry so we can empower and inspire all stakeholders.

Finally, on behalf of the Board of Directors of SIG, I would like to express my greatest gratitude and appreciation to the Board of Commissioners and Shareholders for their directions and supports throughout 2019. We also extend our high appreciation to all other stakeholders for their supports and trust throughout this year and beyond.

Jakarta, March 31, 2020

Hendi Prio Santoso
President Director





SIG at a Glance

About Us

PT Semen Indonesia (Persero) Tbk (SIG) is the largest cement producer in Indonesia. Our operations span across the Archipelago and our presence touches many stakeholders both in Indonesia and globally. The Company commands upstream and downstream operations with an integrated supply chain of production and distribution.



PT Semen Indonesia (Persero) Tbk was established on 7 August 1957 in Gresik with the name NV Semen Gresik. In 1991, PT Semen Gresik was the first state-owned company to be listed on the Indonesia Stock Exchange (IDX). In 2013, PT Semen Gresik (Persero) Tbk was transformed into PT Semen Indonesia (Persero) Tbk - Semen Indonesia Group (SIG) and became a Strategic Holding Company for state-owned cement companies, comprising of PT Semen Gresik, PT Semen Padang, PT Semen Tonasa, and Thang Long Cement JSC. Thus, SIG is the largest cement company in Indonesia.

SIG has nine Integrated Cement Plant in eight locations, including one plant in Quang Ninh, Vietnam. Our operations and subsidiaries span across the Indonesian Archipelago, and our presence touches many stakeholders both in Indonesia and globally. The Company commands upstream and downstream operations with an integrated supply chain of production and distribution. [\[102-1\]](#)



On 31 January 2019, PT Semen Indonesia (Persero) Tbk through its subsidiary PT Semen Indonesia Industri Bangunan (SIIB) acquired 80.6% ownership of Holderfin B.V shares in PT Holcim Indonesia Tbk. Following the acquisition, PT Holcim Indonesia Tbk officially changed its name to PT Solusi Bangun Indonesia Tbk as stipulated in the Extraordinary General Meeting of Shareholders on 11 February 2019.

Milestones

1957

The Company establishment year, has one production facility with a capacity of 250,000 tons per year (design capacity)

1991

Initial Public Offering (IPO) of the Company with the SMGR stock code, market capitalization value: IDR 0.63 trillion. Company ownership structure: Government of Indonesia: 73%; Public: 27%

1995

The acquisition of domestic cement companies, PT Semen Padang (Persero) and PT Semen Tonasa (Persero).

1998

Cemex became a strategic partner, with 14.0% share ownership. The Company's ownership structure becomes: Indonesian Government: 51%; Public: 35%; Cemex: 14.0%; The market capitalization value is IDR 4.9 trillion.

1999

Cemex became a strategic partner, with 25.5% share ownership. The Company's ownership structure becomes: Indonesian Government: 51%; Public: 23.5%; Cemex: 25.5%; The market capitalization value is IDR 6.6 trillion

2006

Blue Valley Holdings bought SMGR share ownership from Cemex, capitalization value: IDR 21.5 trillion. Ownership: Government of Indonesia: 51%; Public: 24.1%; Blue Valley: 24.9%

2014

Begin the physical construction phase of new mills in Rembang and in Padang (Indarung VI). Established PT Sinergi Informatika Semen Indonesia

2013

Established PT Krakatau Semen Indonesia, a Joint venture company in the field of processing slag powder waste for cement raw material. Followed by the establishment of PT Semen Gresik as a further step of the Corporate Transformation process.

2012

The capitalization as at 31 December 2012 was IDR 94 trillion, the production capacity (installed) was 28.5 tons per year.

- Completed the construction of 2 units of the cement mills.
- Acquisition of Thang Long Cement Joint Stock Company (TLCC), in Vietnam.
- Become a Strategic Holding Company and change its name to PT Semen Indonesia (Persero) Tbk.

2010

Blue Valley Holdings, sold all SMGR shares. Market value (April 2010): IDR 72.31 trillion. Ownership: Indonesian Government: 51%; Public: 49%

2016

Established PT Semen Indonesia International (SII), PT Semen Indonesia Aceh (SIA) and PT Semen Kupang Indonesia (SKI) and changed the name of PT SGG Prima Beton to PT Semen Indonesia Beton (SIB) as part of expansion plans in the cement and non-cement sector.

2017

- Establish a joint venture in the building materials sector called PT Semen Indonesia Industri Bangunan (SIIB) to capture the growth opportunities of the building materials industry as a new source of growth as well as to increase synergy between subsidiaries.
- Commercial operations of the Rembang mill in Central Java and the Indarung VI mill in West Sumatra with each mill has a capacity of 3 million tons/year.

2019

- Acquired 80.64% of PT Holcim Indonesia Tbk shares owned by Holdervin B.V. through a subsidiary of PT Semen Indonesia Industri Bangunan on 31 January 2019 and became the majority shareholder of PT Holcim Indonesia Tbk.
- PT Holcim Indonesia Tbk. change its name to PT Solusi Bangun Indonesia Tbk
- Conduct Mandatory Tender Offer so that the ownership of PT Solusi Bangun Indonesia Tbk's shares increased to 98.3%
- The Holcim brand changed to Dynamix

Vision, Mission, and Corporate Culture [102-16]

VISION

Leading Building Material Solutions Provider
in the Region

MISSION

Being customer satisfaction oriented in every
business initiative

Applying the best standards to guarantee the quality

Focusing on environmental preservation and
sustainable social responsibility

Providing the best added values for all stakeholders

Focusing on human capital as the center of the
Company's development

Compete with Clear and Synergized Vision

Able to properly and appropriately direct all the
company's resources and capabilities to compete and
achieve the company's synergic ambitions.

C

Have a High Spirit For Continuous Learning

Open and willing to keep on learning continuously to
perform better each day, and able to adapt with the
dynamics and changes within cement industry.

H

Act with High Accountability

Reliable and accountable for every word, action and
decision made.

A

Meet Customer Expectation

Able to meet customers' demand and expectation on
products and solutions in a focused and responsive
manner in accordance with applicable standardized
procedures.

M

Perform Ethically with High Integrity

Able to demonstrate the philosophy, life principles and
actions in accordance with high moral and ethical values,
undeterred by anything.

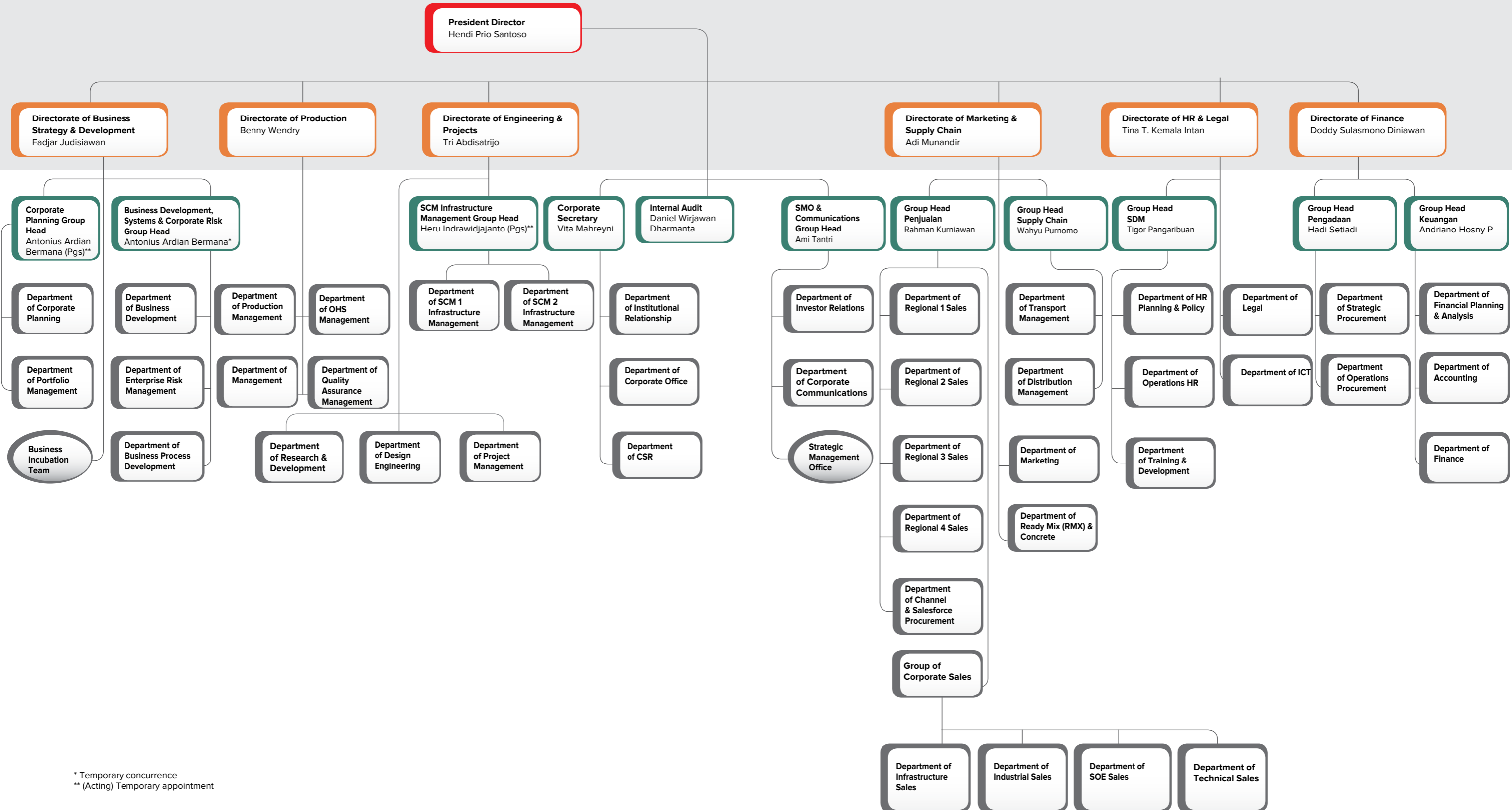
P

Strengthen Teamwork

Able to collaborate toward achieving the best
performance and provide the best added-values for the
company as well as all stakeholders

S

Organizational Structure [102-18]



* Temporary concurrence
 ** (Acting) Temporary appointment

Legal Entity Form and Ownership ^[102-5]

SIG is a State-Owned Enterprise (SOE) in the form of Limited Liability Company (PT). The Company's shares have been listed on the Jakarta Stock Exchange (IDX), through an Initial Public Offering (IPO) held on July 8, 1991 with ticker code SMGR. At present the percentage of the Company's shareholding consists of 51.01% owned by the Indonesian government and 48.99% by the public. SMGR is also included in the Sustainable and Responsible Investment (SRI) index list of Keanekaragaman Hayati Indonesia (KEHATI) or Indonesian Biodiversity.

Activities, Operations Areas, and Business Lines ^{[102-3][102-4][102-6]}

SIG manages six cement brands, and ten supporting businesses with an operational area spans across Indonesia. The Company's main cement brand is Portland Type I-V and various types of specialty cement, as well as special blend cement products for specific uses. The Company ensures that our production processes adhere to the highest quality standard; hence our products meet the highest national and international quality standards. SIG serves both individual and commercial customers from various industries in Indonesia, including logistics, constructions, mining, and many more.



Product Information ^[102-2]

Product	Description
Portland Cement	Our cement products differentiated according to its use (general use and specific construction) and the type of area it's being applied to (land, sea, swamp, underground, underwater)
Special Cement	To meet the demand for specialized cement according to its use, SIG also produces Special Blended Cement (SBC) which can be used in mega projects, such as the Suramadu Bridge, and other special cements including: <ul style="list-style-type: none"> • Super Masonry Cement (SMC) • Oil Well Cement (OWC)
Mortar	The Company's products for wall construction in the form of brick install, plaster and filler. <ul style="list-style-type: none"> • Brick Install Mortar • Plaster Mortar • Filler Mortar
Concrete	Ready Mix Concrete (RMX)
Concrete Innovation and Solutions	<p>SpeedCrete : The solution for road renovation as it dries quickly dry.</p> <p>ThruCrete : The solution to minimize puddles on the surface of the concrete with its ability to quickly absorb rainwater from the surface of roads, parking lots, garages and sidewalks into the soil or water reservoir.</p> <p>DekoCrete : An innovative and aesthetic concrete for parks, sidewalks, parking areas and roads.</p> <p>ApexCrete : The solution for large applications such as warehouse floors.</p>

Non-cement Services

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Logistic 2. Ready-mix Concrete Manufacture 3. Building Material Manufacture 4. Mining Service 5. Cement Packaging Manufacture | <ol style="list-style-type: none"> 6. Industrial Estate 7. Property 8. Information System 9. Industrial Waste Management 10. International Trading |
|--|---|

We are a national company that always strives for the better. On that note, expansion and continuous improvement are always on our agenda. We have expanded our operation beyond Indonesia to Vietnam.

The Company's cement plants in Indonesia are located in East Java Province (Gresik and Tuban), Central Java Province (Rembang and Cilacap), West Java Province (Narogong), West Sumatra Province (Indarung), Aceh Special Region (Lhoknga) and South Sulawesi Province (Pangkep). Whereas in Vietnam, it is located in Quang Ninh.



9 Plants | **8** Location

Integrated Cement Plant



6 Locations

Grinding Plant



32 Plants

Packing Plant



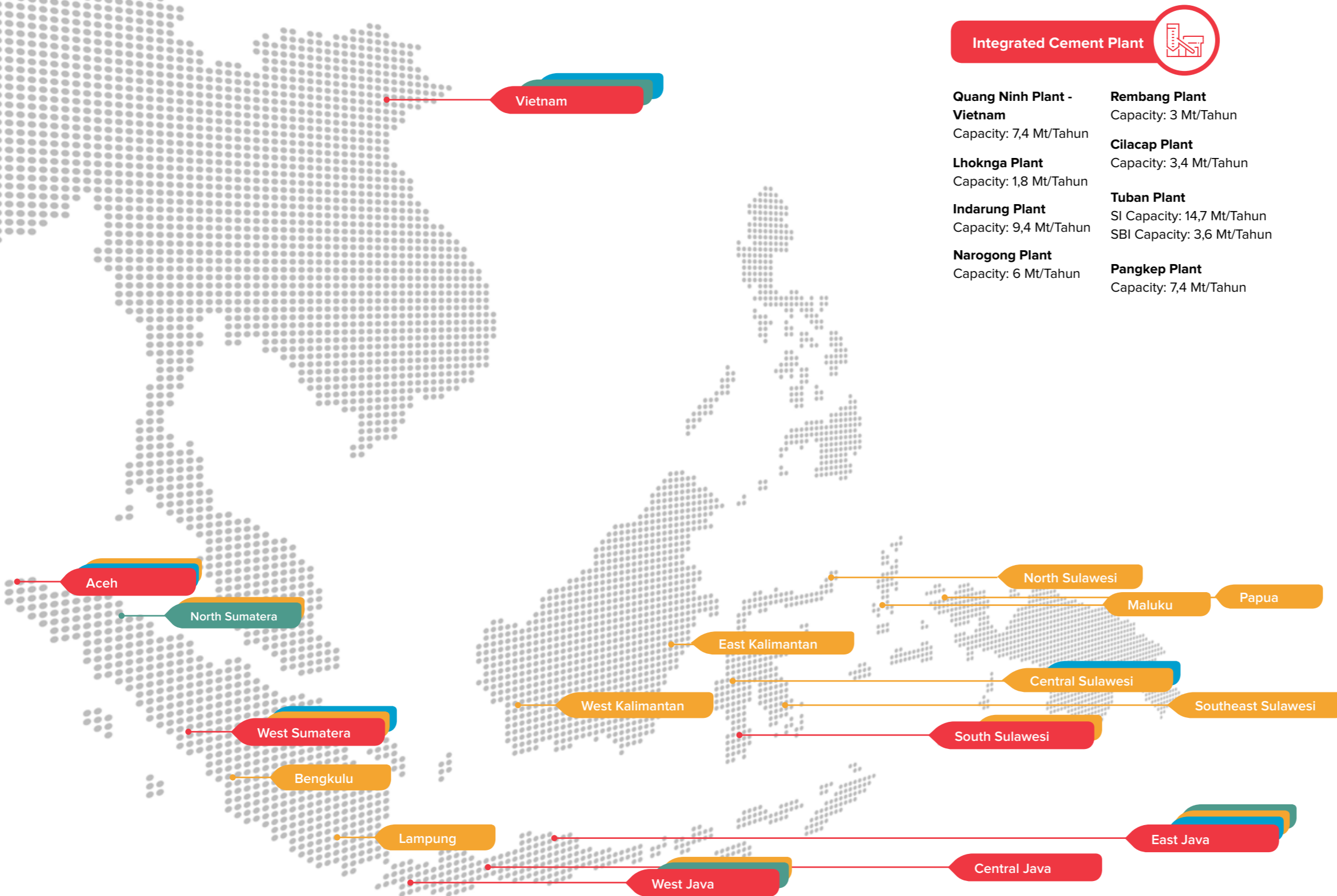
7 Locations

Seaport



Rembang Plant, Central Java

Operational Map [102-4]



Integrated Cement Plant

- Quang Ninh Plant - Vietnam**
Capacity: 7,4 Mt/Tahun
- Lhoknga Plant**
Capacity: 1,8 Mt/Tahun
- Inderung Plant**
Capacity: 9,4 Mt/Tahun
- Narogong Plant**
Capacity: 6 Mt/Tahun
- Rembang Plant**
Capacity: 3 Mt/Tahun
- Cilacap Plant**
Capacity: 3,4 Mt/Tahun
- Taban Plant**
SI Capacity: 14,7 Mt/Tahun
SBI Capacity: 3,6 Mt/Tahun
- Pangkep Plant**
Capacity: 7,4 Mt/Tahun

Packing Plant

- Lhokseumawe
- Malahayati
- Belawan
- Dumai
- Batam
- Teluk Bayur
- Bengkulu
- Palembang
- Lampung
- Ciwandan
- Tanjung Priok
- Banyuwangi
- Pontianak
- Banjarmasin
- Balikpapan
- Samarinda
- Makassar
- Mamuju
- Palu
- Biringkassi
- Kendari
- Bitung
- Celukan Bawang
- Maluku Utara
- Ambon
- Sorong

Grinding Plant

- Ho Chi Minh
- Kuala Indah
- Dumai
- Cigading
- Ciwandan
- Gresik

Seaport

- Thang Long Port
- Lhoknga
- Dumai
- Teluk Bayur
- Taban
- Gresik
- Biringkassi

Production Capacity and Scale of the Company ^[102-7]

Description	Unit	Reporting Period		
		2019	2018	2017
Number of Employee	People	7,498	4,968	5,054
Total Revenue	Million IDR	40,368,107	30,687,626	27,813,664
Total Assets	Million IDR	79,807,067	50,783,836	49,068,650
Quantity of Product Sold	Thousand Tons	43.28	33.38	31.60

Notes: The number of employee does not include TLCC

Association Membership ^[102-13]

SIG is an active member of the Indonesian Cement Association (ASI), Indonesia Chamber of Commerce and Industry (KADIN). In both associations, SIG actively contributes our thoughts and receive knowledge transfer in many areas, namely production development, quality, marketing, research, and development. On top of that, both associations help create and maintain a conducive business climate for the cement industry and trade in Indonesia.

We do not provide any financial contribution and do not participate in projects or committees formed by the association.

In 2019, SIG joined the World Cement Association (WCA). WCA is an international cement association established in 2016 with members comprising of cement producers from around the world.

Market Share ^[102-6]

In 2019, domestic cement demand grew by 0.3% compared to the previous year, reaching 69.8 million tons. Java dominated the domestic cement market sales, reaching 55.7% of the total domestic sales. However, cement sales outside of Java showed outstanding growth in 2019.

This year, SIG managed to maintain our position as the market leader in Indonesia. Moreover, with

Holcim's acquisition, the Company's market position and market share have become even more robust. Based on ASI data, in 2019, the Company controlled 53.4% (including sales of PT Solusi Bangun Indonesia Tbk in January 2019 of 904.7 thousand tons) of the national cement market, an increase of 39.4% compared to the previous year.

SIG Supply Chain ^[102-9]

In order to safeguard the needs of the supply chain in the cement industry, The Company implements a robust Supply Chain Management (SCM) that focuses on least cost-to-serve strategy. This strategy aims to secure the supply of materials and resources needed for our operations with the most cost-effective way possible.

In 2019, PT Solusi Bangun Indonesia Tbk joined SIG. Therefore, expanding our supply chain in terms

of its locations and quantity. With this addition, we conducted the re-mapping of our distribution channels to obtain the most optimal distribution route. Sales points locations in Jakarta and West Java are now can be served by PT Solusi Bangun Indonesia Tbk Narogong plant. Previously sales points in these areas were supplied from our Tuban, East Java plants.



The Port is Owned by the Company in Tuban Plant, East Java



Indarung West Sumatera Plant



About this Report

This report is the Company's 2019 Sustainability Report, which was published alongside our 2019 Annual Report. SIG Sustainability Report provides information and performance data of SIG and our subsidiaries' operations and activities for the period from 1 January to 31 December 2019. It focuses on the actions we have taken on the sustainable development related issues that are most material to our business and our stakeholders. [102-50, 102-51, 102-52]

As Strategic Holding Company (HoldCo), SIG oversees Tuban Business Unit, PT Semen Padang, PT Semen Tonasa, Thang Long Cement, Rembang Plant of PT Semen Gresik and PT Solusi Bangun Indonesia Tbk. Thus, this Sustainability Report use consolidated numbers. [102-45]

Reporting Standards [102-54] [102-55]

This Sustainability Report is prepared in accordance with the standards from the Global Reporting Initiative (GRI): Core option and refers to the Regulation of the Financial Services Authority (POJK) No. 51/POJK.03/2-17. Cross reference index of the content of this report to its appropriate GRI disclosures can be found on page 134 of this report.

Reporting Principles [102-46]

To ensure the quality of this report, we refer to the reporting principles set by the GRI Standards of balance, comparability, accuracy, timeliness, clarity, and reliability. This report's content was selected based on stakeholder engagement, sustainability context, materiality, and completeness. Several stages determine the contents of this Sustainability Report, including Identification, Prioritization, Validation, and Review.



Identification

We identify the sustainability context of each material topic based on stakeholder inclusiveness and the cement industry characteristics, which refer to the Sustainability Accounting Standards Board (SASB) - Construction Materials. Each material topic was assessed based on its impacts to relevant stakeholders.



Prioritization

We then prioritize the identified material topics through an internal Focus Group Discussion. This FGD was conducted on 1-2 October 2019 and joined by all related units and departments in SIG. All stakeholders' interests were discussed during the FGD, including the interests of the local communities, shareholders, investors, employees, business partners, customers, and local governments. The output of this FGD is SIG's materiality matrix, which is presented in the following section of this report.



Validation

The validation phase is based on the principle of completeness and approved by the Corporate Secretary.



Review

At this stage, review will be conducted on the previous year's report, which is done by taking into account suggestions from stakeholders, both internal and external.

Materiality [102-47] [102-49]

There are six material topics priorities predefined by the Company. The six priorities are:

- Economic Performance;
- Emission,
- Energy;
- Waste;
- Local Community;
- Occupational Health and Safety (OHS)

Materiality Matrix

Impacts on Stakeholders – Impacts on the Company's Sustainability

List of Material Topic Interests in 2019

1. Economic Performance;
2. Emission;
3. Energy;
4. Waste;
5. Local Community;
6. OHS;
7. Indirect Economic Impacts;
8. The Rights of Indigenous People;
9. Environmental Compliance;
10. Employment;
11. Biodiversity



Report Boundaries [102-47] [102-48]

This report covers all operational activities of SIG and our subsidiaries in Indonesia, including four subsidiaries and one business unit comprising of seven cement production facilities. All data and information presented in this report are consolidated data.

This report excludes our overseas operation, such as Thang Long Cement Company (TLCC) in Vietnam. This report also excludes our non-cement subsidiaries.

The scope and boundaries of the report in terms of operation are: [102-45]

1. Tuban Operational Business Unit in Tuban, East Java
2. PT Semen Gresik in Rembang, Central Java
3. PT Semen Padang in Padang, West Sumatra
4. PT Semen Tonasa in Pangkep, South Sulawesi

5. PT Solusi Bangun Indonesia Tbk in Lhoknga, Aceh; Cilacap, Central Java; Narogong, West Java; and Tuban, East Java

The consolidated financial data covering all subsidiaries of SIG. Environmental performance data does not include the performance of third-party contractors working in their respective operational areas of SIG. Performance data for OHS, particularly accident-level data, includes data from third-party contractors working in SIG's operational areas.

The Company does not report nor responsible for performance data of our third-party contractors working outside SIG's operational areas.

Stakeholders [102-42]

The Company seeks to create values for all stakeholders to achieve result that supports all parties. Therefore, the Company is establishing good communication with stakeholders based on topics that are most material for our business. Such communication is carried out through a series of bilateral meetings, joint meetings, and discussion

forums, in order to understand issues that are important to them as well as trends in the markets in which we operate. Feedback and information from stakeholders subsequently translated into action through implementing and monitoring the Company's Sustainability Policy.

Stakeholders Engagement [102-40, 102-43, 102-44]

Stakeholders	Engagement Methods	Meeting Frequency	Important Topics for The Stakeholders	Company Response
Shareholders	Annual and Extraordinary General Meeting of Shareholders	Min 1 per year	The Company's performance achievement, changes in corporate governance composition.	the Company performance Improve next year's performance Publish annual and sustainability reports
	Annual General Meeting of Shareholder	Min 1x per year	Cement demand growth and additional national installed cement capacity	Publish annual and sustainability report
	Investor Conference		The Company strategy to overcome the challenges in cement industry	the Company performance
	Public Expose		The Company initiative in managing environmental and social impact	
			The Company performance achievement	
			The Company financial position and capital adequacy	
Employees	Semen Indonesia Labor Union	Min 1x per year	Employee Welfare, Employment Agreements, Employee Performance, Business plan	Monitoring and Evaluation
	Leader Café	1x per month		Creating strategies and action plan
	Work Meetings	2x per year		Creating a training plan Salary adjustments

Min 1x per year	Engagement Methods	Meeting Frequency	Important Topics for The Stakeholders	Company Response
				Medical checkup is applied to the employess and their spouses (applicable to all subsidiaries)
Public	Monitoring and evaluation of the SOEs for the Nation (BUMN Hadir Untuk Negeri/ BHUN) Program, Community Development Program, Social and Environmental Responsibility (TJSL) Program and Partnership Program.	Min 1x per year	Positive and negative impacts of the programs that have been implemented	<p>Planning a more strategic program for the community</p> <hr/> <p>Facilitate various programs</p>
Customer	Customer Gathering	12x per year	Product communication, Disclose of the Company's achievement and future targets, Review their needs and complaints	Provide channel for complaints and customer feedback
	Loyalty celebration	Min 1x per year		Provide the necessary information for customers
Business partners	Coordination meetings	Min 1x per year	The needs of the Company within one year	Facilitate meetings with business partners
	Distributor Summit	2x per year		
	Supplier survey	1 x per year		
	Work negotiations	1 x per year		
Regional Government	Village Forum	1 x per 3 months	CSR and PKBL activities are carried out in accordance with the needs of the community	Accepting inputs from local government
	Sub-District Forum	1 x per 2 months		Planning a CSR program that meet the needs of the communities
	District Forum	1x per 3 months		Comply with local government regulations

Feedback for This Report [102-53]

We appreciate your comments and opinions. Should you want to provide feedback or ideas to help us perform better in the future, please send them to:

Vita Mahreyni

PT Semen Indonesia (Persero) Tbk
 Main Office:
 South Quarter Tower A Lt. 19
 Jl. RA Kartini Kav.8, Cilandak Barat, Jakarta Selatan
 Jakarta 12430

Tel. : +62-21 526 1174/5
 Fax. : +62-21 526 1176

Email : info@sig.id
 Website : www.SIG.id

Certification [102-12]

SIG and its subsidiaries and business units have been certified in various aspects, both nationally and internationally.

A list of certificates that have been received by SIG, Subsidiaries and Business Units can be seen below.:

Certificate	Description	Validity
PT Semen Indonesia (Persero) Tbk Business Unit Tuban		
ISO 9001:2015	Quality Management System	October 20, 2021
ISO 14001:2015	Environmental Management System	October 14, 2021
OHSAS 18001:2007	Occupational Health and Safety Management System	March 12, 2021
SMK3	OHS Management System	July 14, 2020
ISO/IEC 17025:2008	Laboratory Management System	March 24, 2019
PT Semen Gresik		
ISO 9001:2015	Laboratory Management System	March 24, 2019
SPPT SNI OPC	SNI Label User Product	November 3, 2016- November 2, 2020
SPPT SNI PPC	SNI Label User Product	November 3, 2016- November 2, 2020
SPPT SNI PPC	SNI Label User Product	March 16, 2018-March 15, 2022
PT Semen Padang		
ISO 9001:2015	Quality Management System	October 8, 2018 –October 7, 2021
ISO 14001:2015 S	Environmental Management System	October 8, 2018 –October 7, 2021
OHSAS 18001:2007	Occupational Health and Safety Management System	11 Agustus 2017 – 10 Agustus 2020
SMK3	OHS Management System	July 14, 2017 – July 13, 2020
ISO/IEC 17025:2008	OHS Management Laboratory	September 16, 2018 (Awaring the issuance of the latest accreditation certificate)
SPPT SNI	SNI Label User Product	September 13, 2017 - September 12, 2021

Certificate	Description	Validity
Certificate of Statement for Port Facility Safety	ISPS Code – Dumai Port	November 17, 2015 –November 16, 2020
Certificate of Conformity	Portland Cement DIN 1164-CEM I 32.5 R-NA	
Certificate of Conformity	Portland Cement DIN 1164-CEM I 42.5 R-NA	
Archive Certificate PT Semen Padang	Accreditation A	June 17, 2015 - June 16, 2020
Testing Laboratory Accreditation Certificate	ISO/IEC 17025/2005	2014-2018
Certificate API Monogram	Certificate API Monogram	August 30, 2018 – March 6, 2020
Certificate Tanda Sah Capaian TKDN 27		August 27, 2015 – August 26, 2018
Certificate Tanda Sah Capaian TKDN Semen OWC		2016-2019
PT Semen Tonasa		
Certificate SNI ISO 140001 :2015	Environmental Management System	May 17, 2018-May 16, 2021
Certificate Integration System	SNI ISO 9001:2015 SNI ISO 14001:2015 OHSAS 18001:2007	May 17, 2018-May 16, 2021
Certificate OHSAS 18001	Occupational Health and Safety Management System	May 17, 2018-May 16, 2021
Sertifikat SNI ISO 9001: 2015	Quality Management System	May 17, 2018-May 16, 2021
PT Solusi Bangun Indonesia Tbk		
Certificate Green Industry	Narogong, Cilacap, and Lhoknga Plant	December 16, 2019- December 16, 2020

Certificate	Description	Validity
SNI ISO 9001 :2015	Quality Management System in Narogong Plant, Cilacap Plant, Tuban Plant, Logistic Department (Narogong, Cilacap, Tuban), Head Office, Cement Terminal (Dumai, Pontianak, Belawan, Lampung, Batam and Lhokseumawe)	October 6, 2021
ISO 14001:2015	Environmental Management System in Narogong Plant, Cilacap Plant, Tuban Plant, Logistic Department (Narogong, Cilacap, Tuban), Head Office, Cement Terminal (Dumai, Pontianak, Belawan, Lampung, Batam and Lhokseumawe)	March 20, 2022
ISO 9001:2015	Quality Management System in Solusi Bangun Beton (ACM): <ul style="list-style-type: none"> Aggregate Mining (Maloko and Jeladri) 20 Concrete Plant Ready to Use 	November 30, 2022
ISO 14001:2015	Quality Management System in Solusi Bangun Beton (ACM): <ul style="list-style-type: none"> Aggregate Mining (Maloko and Jeladri) 20 Concrete Plant Ready to Use 	December 4, 2022

Certificate	Description	Validity
SNI ISO 9001:2015	Quality Management System in Solusi Bangun Andalas (Lhoknga Plant): Cement Plant, Including Docks and Power Plants	February 18, 2022
ISO 14001:2015	Environmental Management System in Solusi Bangun Andalas (Lhoknga Plant): Cement Plant, Including Docks and Power Plants	February 14, 2020
ISO 9001:2015	Quality Management System in PT PLP (Pendawa Lestari Perkasa): Pavement Construction Services (Head Office and Project Site)	February 11, 2022
ISO 14001:2015	Environmental Management System in PT PLP (Pendawa Lestari Perkasa): Project Site	February 19, 2022
ISO/IEC 17025:2017	Laboratory Management System in Cement Laboratory (Narogong and Cilacap)	December 18, 2022
ISO/IEC 17025:2005	Laboratory Management System in AFR Lab (Narogong)	August 28, 2022
OHSAS 18001:2007	Occupational Health and Safety Management System	March 11, 2021



Award and External Recognition



UPZ Optimal Company

SOE/Private Company Permit Holder of Forest Area Utilization

Date

January 17, 2019

Award Field

CSR

Institution (organizer)

Pemkab Tuban

Assessment Criteria

UPZ Optimal Company

Scale

Local

Date

April 23, 2019

Award Field

Mining

Institution (organizer)

Ministry of Environment and Forestry

Assessment Criteria

SIG is considered successful in reclaiming compensation land from KLHK. In addition to implementing a mining system that does not damage the environment, the company has also successfully 'transformed' ex-mining land into green forest. Also, in some part of the land where Bukit Daun Arboretum Park built is home to a number of rare plants. Arboretum Park is now a new tourist attraction for the people of Tuban and surrounding areas.

Scale

National

Top 5 Social Business Innovation Company 2019 Cement Category

Date

August 29, 2019

Award Field

Environment

Institution (organizer)

Warta Ekonomi

Assessment Criteria

Appreciation for the best companies in Indonesia that have succeeded in innovation in overcoming social and environmental problems through social responsibility programs in the period 2018-2019

Scale

Nasional

Best Practices in Sustainable Mineral Development (Non-metallic Mineral Mining)

Date

December 13, 2019

Award Field

Mining

Institution (organizer)

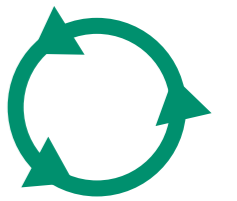
ASEAN Mineral Award

Assessment Criteria

CSR programs, mining environmental management, OHS (health and safety), and also innovation practices in the Company. The company is considered to have fulfilled the management aspects of the mining environment, biodiversity conservation and its contribution to the community development surrounding the mine.

Scale

Internasional



**Sustainability
Governance**

Governance Structure [102-18]

SIG fully supports the creation of a good sustainability governance culture. This is reflected in all business activities that we have been conducted. The Company has board of management that carries out appropriate supervisory function.

SIG fully supports the creation of a good sustainability governance culture. This is reflected in all business activities that we have been conducted. The Company has board of management that carries out appropriate supervisory function, and risk management has been effectively co-opted in every part of the organization. We are also committed to continue the creation of a transparent governance structure in accordance with the prevailing regulations.

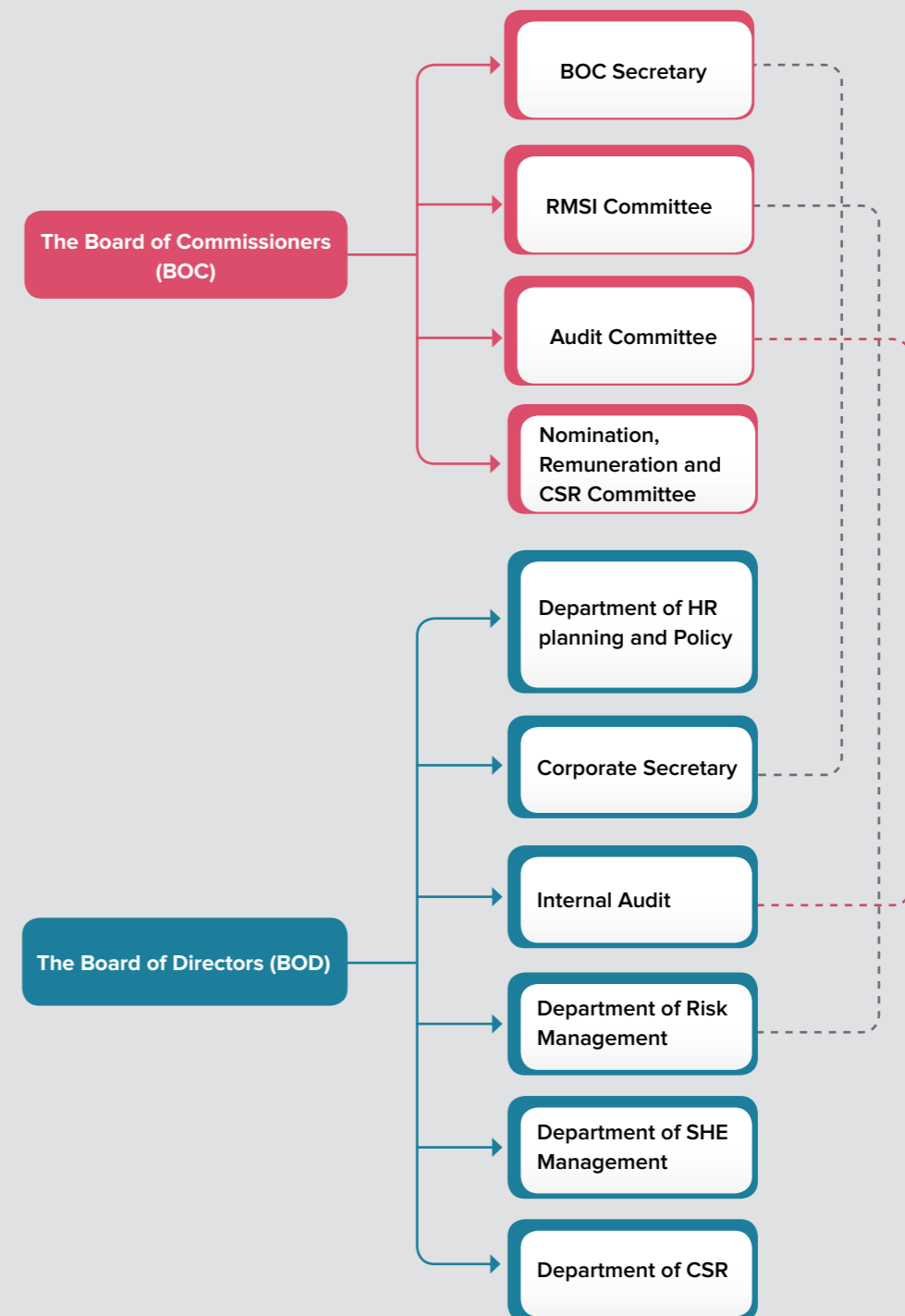
In reporting the Corporate Governance structure, the Company refers to Law No.19 of 2003 on State Owned Enterprises; Law No.40 of 2007 on Limited Liability Company; and OJK guidelines in the Indonesian Corporate Governance Manual (ICGM). The Company's governance consists of the General Meeting of Shareholders (AGM), the Board of Commissioners and the Board of Directors. While carrying out their duties and responsibilities, the Board of Commissioners is assisted by supporting committees, and the Board of Directors is assisted by working units associated with the governance mechanism.

A harmonious relationship exists among working units that manage the Company's GCG which are Corporate Secretary whose responsible to the Board Governance (in terms of communication and coordination with the Board of Directors, the Board of Commissioners, and the Committees under the Board of Commissioners), Corporate Social Responsibility Department, and Internal Audit.

The Company also has an impressive array within the Corporate Social Responsibility Department, including a working unit of the Bureau of Partnership and Community Development Program and the Bureau of CSR Planning and Evaluation. Both of them are responsible to plan, carry out, and evaluate every aspect of sustainability initiative related to economy, social, and environment, which has been and will be implemented by every subsidiary and Business Unit of the Company.

The Company's governance work structure was created to provide and build sustainable values for our stakeholders. Fundamental relationship between members of the Board, committees, and management, are shown in the following table.

Governance Structure



Anti-Corruption Prevention

One of the efforts to eradicate corruption in the Company is by conducting gratification control program. This effort is part of the Company's commitment signed by the President Director and witnessed by Vice Chairman of the Corruption Eradication Commission (KPK) on 3 December 2013.



Any violation can be reported through the channels provided:

Phone, Email, and Address

Phone. +62-21-5261174-5 ext. 3126
 Email : semenindonesiabersih@sig.id
 Letter : PT Semen Indonesia (Persero) Tbk
 South Quarter, Tower A 9th Floor Jl. RA Kartini Kav.8, Cilandak Barat Jakarta Selatan 12430

In order to implement such commitment, the Company has set guideline for Gratification Control. It contains procedure and guidelines for receiving, giving, refusing, and reporting gratification within the Company's environment within the Company. In addition, the Company also conducts dissemination, training, and submit State Administration Wealth Report (LHKPN) in order to carry out gratification control.

The Company conducted dissemination through several internal and external activities. As for the internal activities that have been implemented are GCG internalization, banner and Guideline for Gratification Control printing, and dissemination through the Company's intranet and internal media (newspapers and magazines). Externally, the

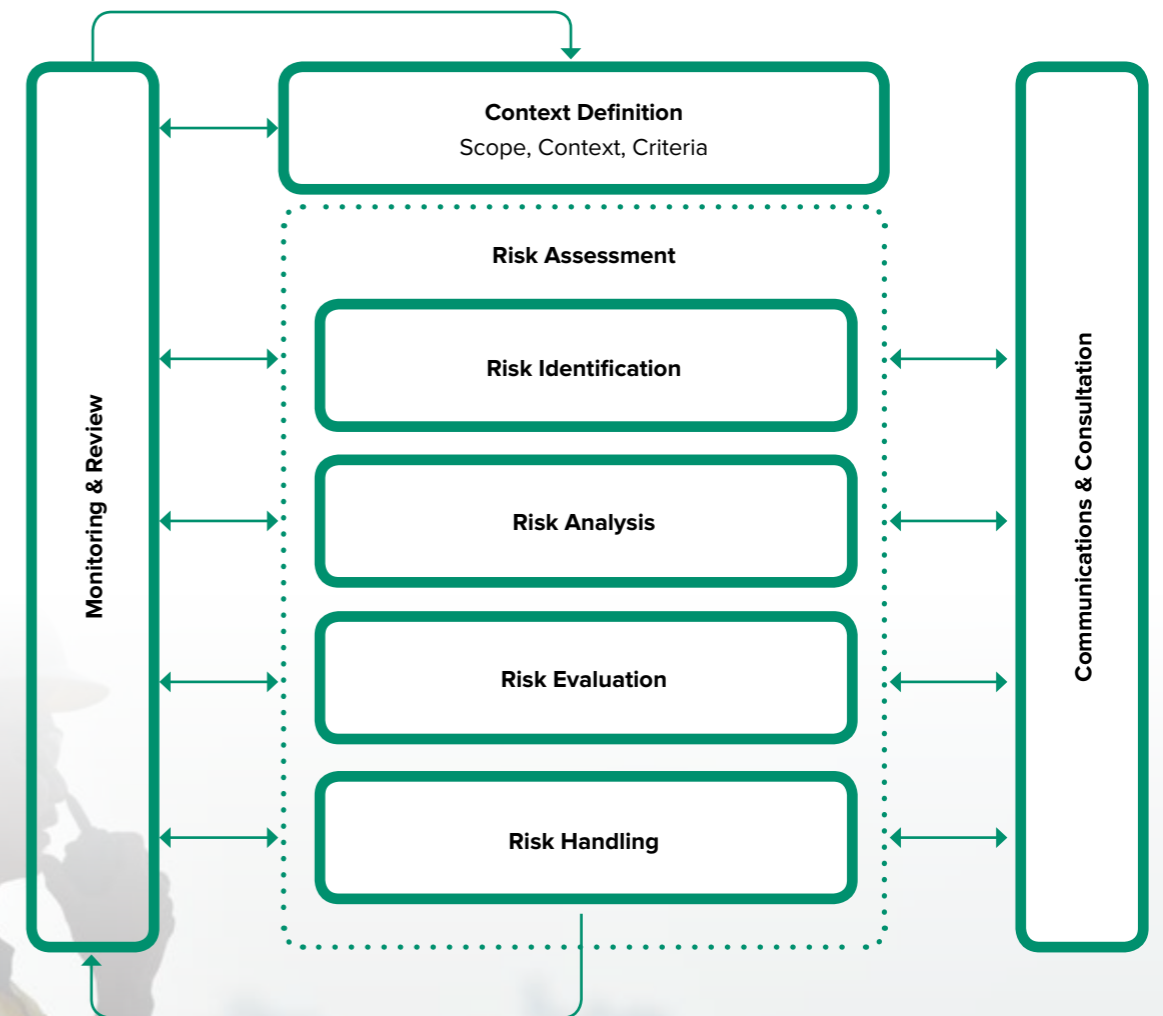
Company conducted dissemination via national printed media. In addition to Gratification Control, the Company conducted anti-corruption workshops.

The Company also has a Whistleblowing System (WBS) for internal or external parties wishing to submit critics, complaints and reports, if there are known violations related to economic and corruption crimes within the Company and its Subsidiaries. The implementation of whistleblowing system is fully under the responsibility of the Board of Directors. While supervision of whistleblowing system implementation is the responsibility of the Board of Commissioners.

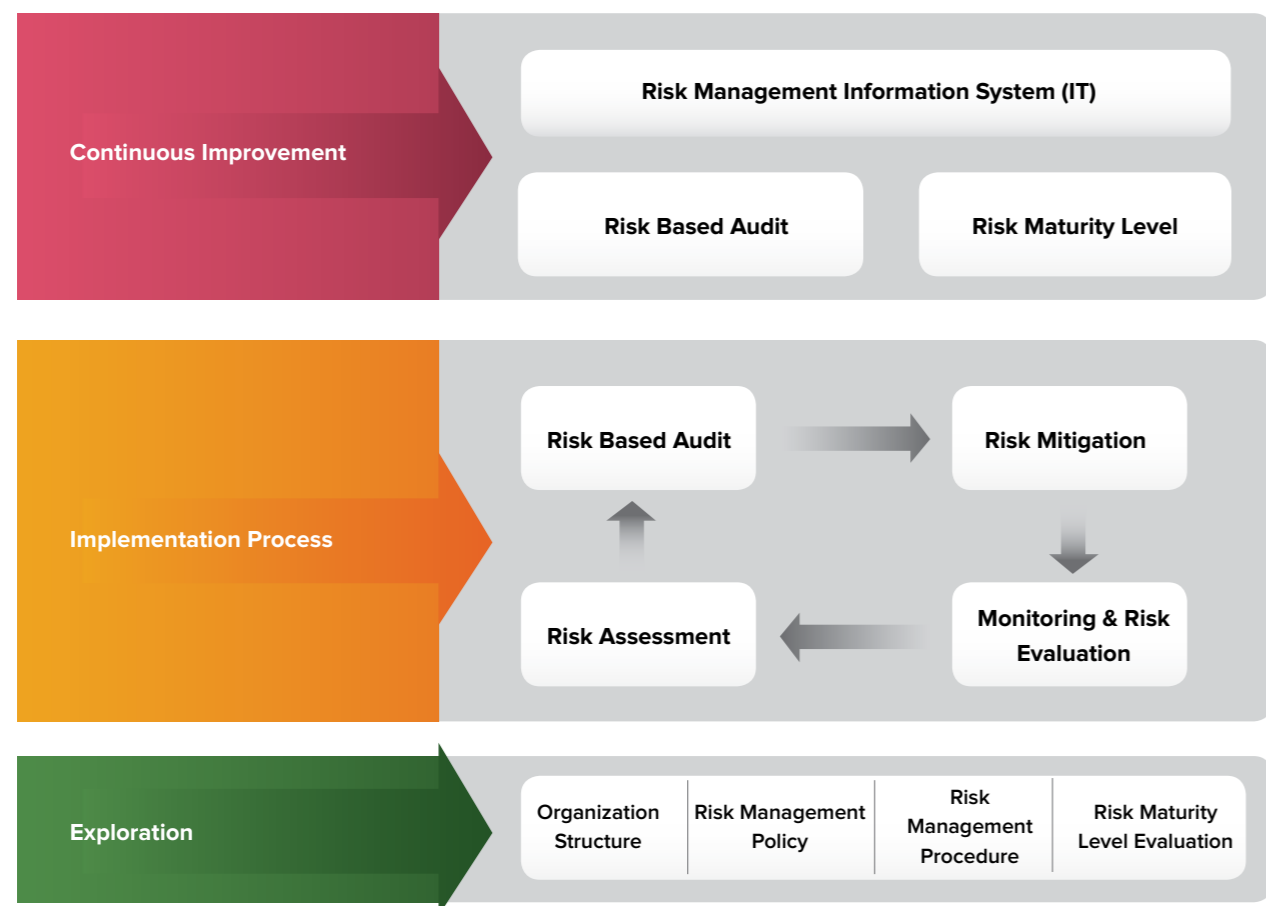
Risk Management

In implementing risk management system, the Company refers to the ISO 31000 and the "House of Risk of Semen Indonesia" (HORSI). ISO 31000 is used as a guideline for risk management implementation, while HORSI is used to manage the entire risk management infrastructure harmoniously in order to support the Company's performance.

ISO 31000 Framework



SIG House of Risk Management



The Company's risk management is also implemented through the Enterprise Wide Risk Management (EWRM) which connected to the entire enterprise management system, particularly for strategic and operational decision making. Each year, implementation of risk management system is evaluated through document examination, questionnaire assessment, and interviews with relevant parties. Evaluation of risk management has a range of assessment results from a score of 1 to 5, which starts from the initial (level 1), to repeatable (level 2), defined (level 3), managed (level 4), and optimized (level 5).

Compliance Management and Precautionary Principles [102-11]

Compliance management and precautionary principles is the Company's responsibility to prevent negative impacts in economy, environment, and social. The Company's compliance is adjusted in accordance with relevant regulations and standards of operations of cement industry. Compliance management consists of the following scope:

- Internal standards and control over financial reporting/ICOFR (Internal Control over Financial Reporting) using a tiered certification system (Control Self-Assessment);
- The adopted standards, such as ISO/IEC, ISO, OHSAS;
- Prevailing regulations, both inside and outside the country;
- Development of the Company's list of liabilities as well as documentation of various regulations, legal liabilities and standardization results.

For impact precautions toward the environment, the Company has a policy based on the following provisions: Law No. 32 of 2009 on Environmental Protection and Management; Government Regulation No. 27 of 2012 on Environmental Permit; and Environmental Management System (EMS) of ISO 14001: 2004.

The Company also applies the EMS of ISO 14001: 2004, which is integrated in the Management

System of Semen Indonesia (SMSI). The certification covers the entire cement production activities, from crusher to packer, including Associated Cement Packing activities along with its supporting facilities such as mining and port.

Additionally, the Company also ensures important permits or materials related to its business activities. Business activities are conducted with reference to a number of documents, such as the Environmental Impact Assessment (EIA), Environment Management Efforts (UKL) and Environment Monitoring Efforts (UPL).

Throughout 2019, the Company is committed to zero violation or incident related to environmental damage which may result in penalties or sanctions with significant monetary values, or materially and adversely affecting our business activities, operation results, and financial position.

By the time this report is published, the Company has no record of incomplete permit for our business activities nor involvement in an administrative lawsuit or charges formally filed by a third party to judicial or government or any agency listed in the list of related issuances of the environmental permit court. The Company also has no environment-related cases filed by other parties to the dispute settlement mechanism.



MRT Jakarta is one of big projects that used SIG products.



**Economic Growth for
the Future**

Managing economic performance, especially with respect to resources, is one of the important aspects carried out by the Company management. This continues to be done so that each resource will be able to adapt with challenging business dynamics, therefore the value of benefits generated for all stakeholders will not be reduced and even expected to increase. Successful management of economic performance will positively increase investor confidence, so the Company will be able to increase its investment, provide dividend that benefits our shareholders as well as better income for our business partners and improve employee welfare as well as sustainable benefit for the community. Without a positive economic performance (in terms of profit), the Company will find it difficult to maintain its sustainability.

Management Approach ^[103-1] ^[103-2]

The responsibility in managing the Company economic and/or financial performance carried out by Group Head of Finance under Director of Finance. This unit is expected to encourage all functions in the Company to conduct efficiency, product diversification, marketing, and cost transformation to all units, so that the Company's performance may continue to generate positive contribution.

As a sustainable company, SIG began to focus not only as a manufacturing company, but more on providing

building material solution, which include cement, other building material products, and related services, which carried out by the Company as a group.

Another strategy undertaken by the Company is to expand market coverage abroad, including Australia, Bangladesh, China, Sri Lanka, Timor Leste, and so on. The Company also continues to conduct assessment for opportunity to expand in other countries by participating in trade mission activities.

Management Approach Evaluation ^[103-2]

^[103-3]

In managing economic performance, the Management is monitored by internal and external auditors. From the evaluation result, the achievement of the Company's economic performance

during 2019 was also supported by the application of new technologies, such as Waste Heat Recovery Power Generation (WHRPG), which help reduce the cost of electricity.

Economic Performance ^[201-1]

The improvement of economic performance in 2019 was reflected in the increase of Company's revenue and profitability margins. Such

improvement was the result of the strategy initiatives carried out during 2019, which are integrated operations, cost leadership, product development,

Proactive Stakeholder Management, and Culture Transformation toward One Firm Mentality. Economic performance become one of SIG focus as a company in the extractive industry to ensure the resources used optimally and in turn would result in added value to the stakeholders.

Positive economic performance has an impact on the distribution of the value of benefits to society, employee welfare, income for partners, increasing dividends for shareholders, and investor confidence in increasing investment.

The Company's ability is reflected in economic performance in 2019 which was recorded with revenue of Rp 40.4 trillion, 32% growth from previous year, net profit after tax of Rp2.3 trillion, down 24% from the previous year, EBITDA of Rp8.7 trillion or 32.3% increase from last year, Operating income of Rp6.2 trillion which was 26.7% higher than 2018 figure. Net income attributable to owners of the parent company was recorded down by 22.3% in 2019 from the same period in 2018 due to increased in financial cost during SBI's acquisition process. The Company has taken various steps to improve financial cost efficiency, including by making payments or repaying loans of Rp1.4 trillion during 2019 and refinanced its loans in 2019, so as to obtain more competitive interest rate. Those steps are expected to reduce the financial burden for the coming years.

Direct Economic Value Generated and Distributed ^[201-1]

Category	Reporting Period and Monetary Values (Million IDR)		
	2019	2018	2017
Direct Economic Value Generated			
Operating Revenue	40,368,107	30,687,626	27,813,664
Additions (-)			
Interest income from Bank Interests	217,823	181,973	168,673
Share of result of associate and joint venture.	(1,793)	1,606	-9,637
Other Operating Income (Sales of Assets, Fines and Claims, Profit/Loss from Foreign Exchange and Others)	91,964	107,373	218,067
Direct Economic Value Generated	40,676,101	30,978,578	28,190,767
Economic Value Distributed			
Cost of Revenue, Sales, General and Other Administration	27,654,124	21,357,096	19,854,065

Category	Reporting Period and Monetary Values (Million IDR)		
	2019	2018	2017
Cost of Employment	4,166,177	2,578,312	2,866,810
Cost of Finance from Short and Long Term Loans	3,205,298	959,259	756,448
Dividend to Government	1,231,646	922,586	805,680
Spending on Community	153,280	174,650	270,479
Economic Value Distributed	36,410,525	25,965,375	24,553,482
Economic Value Retained	4,265,576	4,986,675	3,637,285

Customer Service and Protection

Customers are one of the most important Stakeholders of the Company. Therefore, the level of service to customers, from distributors to end users, has always been the Company's priority. As a form of initiative toward customer responsibility, the Company seeks to achieve the following annual targets:

- To ensure an adequate availability of products in the market by increasing production volume and built new production facility in Padang and Rembang. As to deepen customer engagement, the Company conducted corporate actions to consolidate PT Solusi Bangun Indonesia Tbk on February 2019. Such corporate action has increased the Company's distribution through Packing Plant of PT Solusi Bangun Indonesia Tbk in Lhokseumawe, Belawan, Batam, Dumai, Lampung and Pontianak.
- To meet consumer demands through research

and development, strict quality control, and thorough settlement of customer complaints.

- To meet all the cement supply contracts in a timely manner and maintain the quality through Corporate Sales establishment, Corporate Relationship Manager provision, cement distribution chain development and cement distributor role revitalization.
- To mitigate risks related to customer health and safety through appropriate ergonomic packaging of cement product of 40 kilograms and 50 kilograms, so that it will be easily lifted by a man without equipment. The Company also provides information related to cement specification such as symbol or logo of the corporate entity manufacturer, product name, SNI code number, net weight of the package, cement type, application instructions, and customer service contact for reporting complaints.

Sales Volume and Served Market

Marketing	Sales Volume (tons)	Served Market (%)	Sales Volume (ton)	Served Market (%)	Sales Volume (tons)	Served Market (%)
	2019		2018		2017	
Domestic	37,245,580	53.4%	27,421,500	39.45%	27,091,728	40.80%
Overseas	4,194,000	66.48%	3,170,126	55.5%	1,870,861	63.9%
Total	41,439,580	54.47%	30,591,626	40.7%	28,962,590	41.8%

The Company is also evaluating customer service through channels such as annual survey to observe customer satisfaction level. The results of the survey are displayed in the Customer Satisfaction Index (CSI)

for all distribution channels and customers. Customer Satisfaction Index survey for 2019 will be held in March 2020.

Product Innovation and Sustainability

Amidst the increasingly competitive business, SIG continues to innovate to create high quality products. These products have been researched and developed, and examined through testing based on the national standards. The Company wishes to provide innovative product that can meet the needs of our customers while contributing to the national development.

Flash Concrete / Speed Crete

Flash Concrete is a quick solution to road construction projects in order to maintain the quality of the application. Flash Concrete can solidify in a short time, so that roads can be used immediately after being repaired. The material has high fluidity to help the concrete flows and solidified easily.

Gress Board

This fibered and flat cement board is an eco-friendly product made from 100% non-asbestos material, and can be used as a substitute for flat wooden board or partition for ceilings and walls. Gress Board has several product variants: Gressboard 4.0, Super 3.5 Gressboard and 1x1 Gressboard.

Porous Concrete / Thru Crete

Porous Concrete is an innovation from SIG in order to respond to the phenomena of narrowed water catchment areas that may lead to floods. Porous Concrete serves as sidewalks and water reserve to help absorb the water into the ground and help the soil to store the surface water and improve the hydrological cycle. This product is an eco-friendly product designed as solution for flood prevention and additional water catchment areas.

Ground Granulated Blas Furnace Slag (GGBFS)

GGBFS is an eco-friendly product used to build a solid and durable concrete after being combined with Ordinary Portland Cement (OPC) and/or pozolan material. Other advantages of this product, including as stabilizer for concrete and mortar chemicals, to increase the pressure strength, smoothen the surface of finished product, and brighten the product color. This product is suitable for infrastructure projects such as ports, bridges, roads, and high-rise buildings.

Product Safety and Responsibility

The Company ensures that customer protection will always in accordance with the prevailing regulations and standards relevant to the cement industry, including the Law 8 of 1999 on Customer Protection. This compliance is part of general criteria and commitment toward the health impact assessment process and customer safety throughout the product's life cycle.

In addition, the Company also provides quality assurance and product safety guarantee through the obtainment of the Indonesian National Standard (SNI) certificate for each type of product. This initiative resulted in zero legal violation and product withdraw in 2019.



Stevedoring activity at the port of Teluk Bayur, West Sumatra



**Environmental
Management and
Preservation**

The mining industry is known as an extractive industry that provides changes to the landscape of an area. However, the mining industry especially the cement industry beside possess risks to the environment also brings benefits to human survival if properly managed. SIG has always emphasized the importance of environmental management to achieve energy efficiency, emissions control, and waste reduction or utilization.

Management Approaches [103-1][103-2]

As a company engaged in the cement industry, energy is the largest component in the company's operations. The use of renewable energy is one of the efforts to secure energy supplies and energy cost efficiency solutions. Since 2019, SIG has also implemented ISO 50001 on energy management.

Not only energy efficiency, the Company is also committed to controlling emissions which is managed through the latest technology to reduce the pollution potential, especially GHG emissions and air pollutants (NOx and SOx) that have the potential to cause health problems for employees and surrounding communities.

Similar to waste, where the Company also seeks to control waste generated from operations to prevent negative impacts of environmental pollution by recycling and reuse.

Management Approaches Evaluation [103-2][103-3]

Environmental management and conservation performance is evaluated regularly every year by internal and external parties. The internal team monitors the environmental performance to ensure what has been done by the operations are in accordance with the parameters or standards of the legislation, recognize the achievement of the targets set, and to the steps of continuous improvement that need to be taken. Whereas the evaluation through external parties involves professionals to conduct monitoring as well as to assess environmental performance to be more objective. During the 2019 reporting period, it is certain that no SIG sanctions were received due to non-compliance with the environment.

[307-1]

In 2019, the SIG participated the Corporate Environmental Performance Rating Program (PROPER) organized by the Ministry of Environment and Forestry (KLHK). PT Semen Tonasa and the Tuban Business Unit managed to win a Green PROPER, while PT Solusi Bangun Indonesia (Tbk), PT Semen Padang and PT Semen Gresik won Blue.

Environmental Management Policy

The Company's sustainability strategy is not just an operational or business strategy of the company, but is a reflection of the Company's hopes, duties and main responsibilities in ensuring that what we manage today can provide sustainable benefits for all Indonesians and our stakeholders, both today and in the future.

As a manifestation and commitment of the Company in realizing sustainable environmental management, the Company has made various efforts ranging from the establishment of policies and regulations to the monitoring and management of operational activities that have an impact on the environment both within and in the areas around the Company. Various strategic initiatives have been carried out

in resource conservation including the concept of environmentally friendly mining, the creation of a greenbelt area around the mine, the utilization of other industrial waste as an alternative raw materials, the efficient use of water by optimizing the utilization of ex-mine surface water, increasing the use of alternative fuels by using biomass and B3 waste, implementation of energy management systems, reduction of CO2 gas emissions, reclamation and revegetation of post-mining land, conservation of biodiversity by conserving rare flora and fauna in post-mining areas and post-mining land use for agricultural irrigation, aquaculture and educational facilities.

Energy Environmental Management Performance

ENERGY

Energy is one aspect that gets Company's attention. As part of the extractive industry, SIG has great dependency on energy supply. However, SIG seeks to implement energy efficiency as a form of good operational governance and energy conservation's efforts because energy is one of the eight aspects included in the Green PROPER assessment.

The company plans to implement an ISO 50001-Energy Management System in each subsidiary as

a tool to improve efficiency of energy management. Energy management has a strategic objective to improve energy cost efficiency, save energy usage, and secure energy supply and electricity. This is in accordance with the Company's policy related to energy efficiency which refers to Government Regulation No.70 of 2009 concerning Energy Conservation.

Energy Efficiency Strategy

Since 2005, the Company has established a "Manage Energy Security" strategy for energy efficiency. This strategy is implemented through three initiatives:

Use of Biomass Energy

The use of biomass energy in the skeleton of the Clean Development Mechanism (CDM) program for coal substitution.

- The Tuban plant uses biomass which consists of 76% rice husk, 23% cocopeat, and the remaining with tobacco waste.
- The Padang Indarung plant uses rice husk and sawdust
- The Pangkep South Sulawesi factory uses rice husk, sawdust and organic waste

Use of Clean Energy

The use of clean energy from the Waste Heat Recovery Power Generation (WHRPG) unit. WHRPG capacity at Semen Padang Indarung V plant is 8MW while WHRPG at Tuban I-IV plant has a capacity of 30.6MW which has been operating since March 2018.

Use of Alternative Fuels

SIG uses alternative fuels from the utilization of Refused Derived Fuel (RDF) which is focused on managing municipal solid waste in Gresik Regency with a capacity of 240 tons per day. RDF is expected to reduce the use of coal to 2%.

The target of energy efficiency initiatives is to reduce the index of electricity and heat energy use. Energy management is the responsibility of all departments under the Directorate of Operations. Internal energy audit is conducted annually and by an external third party every three year. In 2019, the Company was audited by PT Institut Semen & Beton Indonesia (ISBI). Recommendations from this audit were:

- Installation of VSD (Inverter) to adjust motor speed and torque
- Reduce insufficient loading and avoid the use of over-sized motor
- Increase the power consumption contract for electricity with PLN
- Correction of Power Factors by installing Capacitors
- Design a Coal Pre-Dryer to improve coal quality
- Replacing Feeder Coal with higher accuracy
- Create stability in the quality of raw mill
- Add a Temperature Sensor at the end of the Cooler before the Hammer

- False Air (Leak) Reduction Program
- Increased Use of Alternative Fuels

Total energy consumption within the company in 2019 reached 125,903,072 GJ, an increase of 22% from 2018. This calculation includes energy from both self-produced and purchased for the production process. The increase in energy consumption occurred in 2019 due to a consolidation with PT Solusi Bangun Indonesia Tbk in 2019 and an increase in slag production in the Tuban Business Unit and PT Semen Gresik which in the middle of 2017 just started operating so the energy calculation only started from 2018.

In the energy calculation, heat energy is calculated based on the amount of fuel used times the calorie value (NHV) of each fuel then totaled sum for all types of hot fuel. As for electricity, based on the electricity index multiplied by the amount of cement production then converted from kWh to GJ.



UTILIZATION OF FLUE GAS AS A GENERATOR THROUGH WHRPG

For energy efficiency and GHG emission control, SIG has implemented the Waste Heat Recovery Power Generation (WHRPG) technology from flue gas as a power plant. The application of this technology is able to utilize the exhaust gas heat from the combustion process as electricity generation energy. WHRPG construction at the Tuban plant for 28.6MW power generator will reduce PLN electricity use by 152 million KWh per year and save electricity costs by up to Rp120 billion per year and reduce CO₂ emissions by 122,000 tons per year. Whereas WHRPG at Padang's Indarung V plant was able to reduce CO₂ emissions by 43,000 tons per year.

Total Energy Consumption [302-1]

Business Unit	Unit	Year		
		2017	2018	2019
Total Energy Consumption	GJ	94,591,473	98,186,913	125,903,072

Note:
Tuban Business Unit's 2019 calculation was based on coal net heating value. The calculation of the previous year was based on coal gross heating value.

Energy Consumption Based on Heat Energy Sources [302-1]

Energy Source	Source: Renewable / Non-renewable	Unit	The Amount of Energy		
			2017	2018	2019
Coal	Non-renewable	GJ	83,704,099	87,384,475	81,223,517*
Industrial Diesel Oil	Non-renewable	GJ	313,310	384,087	772,195
Alternative Fuels (Biomass)	Renewable	GJ	928,950	743,983	1,514,170
Other Alternative Fuels	Renewable	GJ	770	5,500	1,681,000
Total			84,947,129	88,518,045	112,548,498

Note:
*Tuban Business Unit's 2019 calculation was based on coal net heating value. The calculation of the previous year was based on coal gross heating value.

Energy Consumption Based on Energy Source [302-1]

Consumption	Unit	The Amount of Energy		
		2017	2018	2019
Electricity Consumption	kWh	2,678,837,185	2,672,046,39	3,709,603,884
Heat Consumption	GJ	84,947,659	88,567,546	112,548,498
Energy intensity per cement product	GJ	94,591,473	98,186,912	125,903,072

Note:
 • Reporting on the use of energy of PT Semen Gresik starts in 2018 (one year after the factory starts operating in 2017)
 • Reporting of PT Solusi Bangun Indonesia Tbk began in 2019 (consolidated with SIG in 2019).
 • Tuban Business Unit's 2019 calculation was based on coal net heating value. The calculation of the previous year was based on coal gross heating value.

Energy Intensity Per Cement Product [302-3]

	Unit	Year		
		2017	2018	2019
Total Energy Intensity	GJ/ton cement	3.56	3.54	3.13

Reduction of Energy Consumption [302-4]

Initiative	2018	2019
<ul style="list-style-type: none"> Utilization of alternative fuels Utilization of exhaust gas as electricity generation (waste heat recovery power generator) Decreased slag factor False air closure Thermal energy efficiency and electrical energy efficiency Operation optimization Declining production Optimized operations and increased production realization 	4,009,844	6,948,911

Note:
 • Absolute energy consumption calculation's baseline is 2017 data
 • The reduction of energy consumption in 2019 from 2018 is calculated based on gross heat value

GREENHOUSE GAS (GHG) EMISSION CONTROL ^[103-1] ^[103-2]

One focus of environmental management conducted by SIG is emission control. In the cement industry, we use high temperature combustion in our production process. This combustion process resulting to emission. To that end, the Company is committed to manage and control the impacts from emissions towards the environment as well as towards the community.

The Company calculates GHG emissions based on WBCSD CSI Version 3 once a year. Currently, the Company provides the latest information on GHG emissions for both scope 1 and scope 2 because both emissions can still be monitored. The scope 3 calculation has not been carried out due to limitations in measuring energy usage sourced from fuel for transportation needs outside the SIG. The main strategies of the SIG in reducing carbon emissions are as follows:

Carbon Emission Reduction Initiatives

Increase Energy Efficiency	Switch to Low Carbon Fuels	Reducing the Clinker-Cement Ratio	Improving Technology Processes and Innovations
<ul style="list-style-type: none"> False air reduction program (ensuring there are no leaks in the production process) Optimize raw mix design Installation of VSD (Variable Speed Drive) to reduce electricity Increase cos phi to improve the quality of electricity 	<ul style="list-style-type: none"> WHRPG Indarung plant and Tuban plant which are able to reduce total emissions by 165 thousand CO₂ Solar power installations for lighting in the Tonasa, Tuban and Rembang plant Biomass Non-biomass alternative fuel 	<ul style="list-style-type: none"> Lower clinker-cement ratio for composite cement OPC removal Composite cement for special products 	<ul style="list-style-type: none"> Vertical mill High efficiency Motor Drive LEDs for lighting isolated mining areas Smart plant

MAXSTRENGTH CEMENT, TECHNOLOGY PRODUCTS WITH LOW CLINKER FACTOR

SIG is committed to controlling sources of emissions from the use of clinkers without having to reduce the capacity of cement products. To realize this commitment, the Company develop technology to produce cement with a low clinker factor, such as the results of the green innovation of the portland slag (MaxSTRENGTH Cement) product which was first produced in Indonesia. The technology can reduce CO₂ emissions per unit of product.

REDUCING EMISSIONS THROUGH ALTERNATIVE FUELS IN CDM PROJECTS

The use of alternative fuels in the implementation of the Clean Development Mechanism (CDM) project is capable in reducing emissions up to 150,000 tons of CO₂ per year. The company is still running the CDM project to date although the Kyoto Protocol was terminated in 2012. The CDM project has resulted in Certified Emission Reduction (CER) of 213,717 tons of CO₂e from the United Nations Framework Convention on Climate Change (UNFCCC) in 2016. Most CERs have been purchased by Sweden at a price of 3.5 euros per CER with a sale-purchase agreement valid until 2019.

The Company has set a target to reduce the intensity of greenhouse gas (GHG) scope 1 emissions to reach 595 kg CO₂e/ton cement equivalent, equivalent to a decrease of 16% in 2024 compared to the 2010

baseline. The commitment of this Company is to reduce emissions in all of the Company's operations in Indonesia.

Total GHG Emission and Emission Intensity ^[305-1] ^[305-4]

GHG Emission	Unit	2017	2018	2019
Total GHG Emission Scope 1	ton CO ₂	20,654,528	21,589,455	27,959,111
Total GHG Emission Scope 2	ton CO ₂	2,539,845	2,611,944	2,601,828
Total GHG Emission Scope 1 and 2	ton CO ₂	23,194,372	24,201,399	30,560,939
GHG Emission Intensity Scope 1	kg CO ₂ /ton cement equivalent	696	667	634
GHG Emissions Intensity Scope 1 and 2	kg CO ₂ /ton cement equivalent	781	748	693
GHG Emissions Intensity Scope 1	kg CO ₂ /ton cementitious material	705	689	640
GHG Emissions Intensity Scope 1 and 2	kg CO ₂ /ton cementitious material	791	773	700

Increased production through expansion of the Company's business such that the operation commencement of PT Semen Gresik in 2018 and the consolidation of PT Solusi Bangun Indonesia Tbk in 2019 are contributing to the increase in the Company's absolute GHG emissions from year to year. The Company's efforts to control the amount of

GHG emissions with various initiatives have resulted in a reduction in the intensity of GHG emissions each year. In 2019, the Company has succeeded in reducing the intensity of CO₂ scope 1 emissions to 634 kg CO₂e/ton cement equivalent, which represents a reduction of 10% from the 2010 baseline. ^[103-3]

1. Clinker Substitution

Clinker Factor

2017

81%

2018

78%

2019

72%

The clinker production process, which is the main material in the cement industry, produces the largest emissions in the Company's overall operations. This is due to chemical reactions where raw materials of cement (limestone) calcinate into clinkers in the kiln. This decarbonization process has become the main source of CO₂ emissions in our mill reaching up to 88%.

Waste and by-products produced by other industrial sectors can be an alternative source of material to replace non-renewable materials or as a clinker substitution in the cement production

process. Alternative materials used by the Company as clinker substitution include fly ash, synthetic gypsum, dust from electrostatic precipitators, and blast furnace slag.

In 2019, the Company's products used 1,680,291 tons of alternative materials as a substitute for clinker. The Company has succeeded in reducing the clinker factor from year to year and ambitiously keeps reducing the clinker factor through various initiatives in order to increase the use of alternative materials.

2. Alternative Fuels

Changing the use of non-renewable fossil fuels such as coal into alternative fuels can be one way to reduce carbon emissions within the Company. Alternative fuels used in the Company cement production process are rice husks, cocopeat, sawdust, spent earth, aval tobacco, resin, and sludge. By substituting traditional fuels for alternative fuels, the Company has contributed to conserving natural resources, reducing carbon emissions, and supporting the circular economy.

At present the Company has used 232,904 tons of alternative fuels in the production process which represents 3% of the total heat energy needed in the cement production process. The Company continues to look for ways to apply alternative fuel usage in continuing to increase the potential in reducing the use of non-renewable natural resources. The Company's target is to achieve 15% Thermal Substitution Rate by 2024.

WASTE HEAT RECOVERY POWER GENERATION

Waste Heat Recovery Power Generation (WHRPG) functions to convert the heat generated from the cement production process into electricity so that it can reduce the cement mill's dependence on external power supply of electricity. The Company has 2 WHRPG units operating in the Tuban and Padang mills, which generate 40,932 MWh and 35,871 MWh electricity respectively in 2019. The WHRPG Unit can also help reduce the consumption of fossil fuels which therefore reducing the Company's GHG emissions. Semen Padang emission reduction amounted to 43,117 tons per year.

SIGNIFICANT AIR POLLUTION

SIG is aware that reducing air emissions has an effect on reducing the negative impacts on climate change and has a positive impact on maintaining the health and safety of workers and communities around the Company's work area. Therefore, the Association is committed to adhere to quality standards according to Minister of LHK Regulation No. 19 of 2007 concerning Quality Standards for the Cement Industry Business and/or Activities, and is committed to continuing to work on air emissions produced by all of the Company's factories.

The Company regularly measures air pollutant emissions (dust/particulates, NO_x, SO_x) continuously with the Continuous Emission Monitoring System (CEMS). In addition to taking measurements continuously, the Company also measures significant

air emissions every three months in an accredited laboratories (test house). The company measure air pollutants at several points which includes the chimney, clinker cooler, coal processing chimney and cement processing chimney.

In addition to periodic monitoring and measurement, the Company has several strategies to reduce air pollutant emissions, namely:

- Manage coal quality standards and certain raw materials and measure air pollutant emissions regularly
- Install electrostatic precipitators, cyclones, conditioning towers and bag filters in our factories to manage dust emissions

1. Bag Filter Modification

Dust fall is generated at several transport points at the mill or cement mill which then leads to a dust collector unit consisting of a chute hopper, rotary sluice, and ducting outlet. In operation, there is an anomaly in the moisture of the material, so the dust collector tends not to work optimally

in capturing particulates. PT Semen Tonasa has taken the initiative to reposition the hopper dust collector into a direct bunker dust bag filter that goes directly to the conveyor belt for processing at the mill or cement mill. This program has been verified by an external party (PT GE ITB) and has

been implemented since 2017. The positive environmental impact of this program is in the form of an absolute reduction in particulate emissions of 65 tons per year at PT Semen Tonasa,

which is equivalent to savings from equipment efficiency of Rp2.5 billion per year.

2. Redesign of the Supporting Rod in the Electrostatic Precipitator System

The Company's factory in Tuban already has an Electrostatic Precipitator (EP) system that functions to capture dust particulates. However, there are deficiencies in this system, namely the frequency of damage to the supporting rod which causes the transformer to malfunction. When the transformer turns off and the EP system does not function, emissions will increase and

dust particles are released into the air through the chimney. Redesigning the supporting rod with the addition of hanger and bolts at the Tuban Plant, had a large impact in reducing particulate emissions by 83.65 tons and financial savings from preventing loss production due to non-functioning kilns of Rp3.5 billion.

These initiatives have succeeded in reducing total dust/particulate emissions annually. In 2019, there was a significant increase in SOx and NOx values from previous years due to the consolidation of PT Solusi Bangun Indonesia Tbk. The increase in SOx is partly because the use of limestone which contain quite high Pyritic sulfur. The Company continues to reduce NOx and SOx emissions to achieve the Company's target in 2024.

Total Significant Air Emission [305-7]

Air Emission	Unit	2017	2018	2019
Dust/particulate	ton	2,475.08	3,006.62	3,206.97
NOx emission	ton	14,707.77	17,137.37	22,914.64
NOx emission	ton	2,426.65	2,388.02	6,194.08

WASTE MANAGEMENT AND UTILIZATION [103-2][103-3]

The Company continues to strive to reduce waste through appropriate management and use it to create efficiency and added value. The Company is committed to continuing to reduce the internal waste generated and continue to innovate to utilize external waste, i.e. hazardous and toxic waste and non-hazardous and toxic waste One of the efforts made by the Company to positively impact the

environment is through the absorption of external waste generated by other industries to be used as an alternative raw material in the production process (recycling), as well as reused as an alternative fuel or energy recovery. This management is a form of the Company's concern to help prevent environmental pollution from hazardous and toxic waste from other industries.

Types of Waste Utilized by the Company

Waste Management Method	Hazardous and Toxic Waste	Non-hazardous and Toxic Waste
Waste for Reuse		Palette from overhaul activities
Recycled waste as an alternative raw material	<ul style="list-style-type: none"> Fly Ash Bottom Ash Copper Slag Crude Oil Contaminated Soil (COCS) Drilling Cutting Cement (DCC) Spent Bleaching Earth Paper Sludge Used refractory (used oil filters, fire-resistant stones) 	Materials or products that are rejected, dust return
Waste for compost production (composting)		Dry leaves from the garden and plant forest.
Waste for energy recovery as an alternative fuel	<ul style="list-style-type: none"> Sludge oil Sludge IPAL Spent Bleaching Earth Used lubricating oils Used rags Used filter bags 	<ul style="list-style-type: none"> Biomass Kraft paper (reject packaging due to broken bags, kraft waste from customers). Domestic office waste (paper and plastic) Dry leaves from the garden and plant forest.
Waste discharged to landfills		Material slag or frelime products from the cooler unit

Total Weight of Internal Waste Generated [306-2]

Internal Waste Management Method	Unit	Hazardous and Toxic Waste			Non-hazardous and Toxic Waste		
		2017	2018	2019	2017	2018	2019
Reuse	ton	8	-	1	2,449	4,632	4,598
Recycling	ton	42,844	25,646	23,845	112,162	92,453	84,676
Composting	ton	-	-	-	405	319	405
Energy Recovery	ton	226	196	1,649	67	65	1,792
Landfill	ton	-	-	-	38,194	48,011	79,475
Total Internal Waste	ton	43,078	25,843	25,495	153,278	145,480	170,946

Total Weight of Internal Waste Reused and Recycled by the Company [306-2]

External Waste Management Method	Unit	Hazardous and Toxic Waste			Non-hazardous and Toxic Waste		
		2017	2018	2019	2017	2018	2019
Recycled Materials as Alternative Raw Materials	ton	320,326	368,981	1,659,627	-	-	-
Energy Recovery Used as Alternative Fuel	ton	17	1,301	94,557	73,808	73,508	138,347
Total External Waste	ton	320,343	370,282	1,754,184	73,808	73,508	138,347

The increase in the number of external wastes that the Company processes annually shows an increase in the Company's ability to absorb and utilize waste from other industries.

Co-processing

Co-processing method is a method where the waste recycling process through controlled incineration inside a kiln and the process of recovery energy occur at the same or simultaneously. Through this method, the Company absorbs and utilizes external hazardous and toxic waste generated by other industries as alternative raw materials and alternative fuels. With this method, the Company assists in boosting the waste added value in the form of energy recovery, as well as the use of materials as raw materials in the production process and materials. The total hazardous and toxic waste absorbed and utilized in 2019 is 1,754,184 tons.

INNOVATION ON CITY WASTE UTILIZATION BY PT SOLUSI BANGUN INDONESIA Tbk (SBI)

At the Cilacap mill, SBI has succeeded in creating innovations to help the government manage waste and reduce the burden of landfills by utilizing waste as an alternative fuel. This will also reduce the use of fossil fuels and reduce CO₂ emissions in the process of making cement.

SBI Cilacap pioneered the program for processing and utilizing municipal solid waste into Refused Derived Fuel (RDF), in collaboration with the Cilacap Regency Government, the Danish Government, Central Java Provincial Government, Ministry of PUPR and KLHK. The trial of the RDF usage has been carried out since mid-2019 which amounted to 50 tons.



CONSTRUCTION OF SEDIMENT FACILITIES IN THE WOBBLER FEEDER TO REDUCE SECONDHAND OIL SPILL

The 232fe1 wobbler feeder is one of the Company's machines or work tools that require special maintenance. Before the innovation, the Company had to replace the wobbler feeder lubricant oil in the Tuban plant every month. This is because the oil tends to mix with lime dust and resulting the oil performance to decline, and the distribution of oil to the bearing wobbler to the line is disrupted. 36 units of wobbler feeder at Tuban plant had been damaged due to blockage of the line by dust carried by dirty oil. To overcome this problem, the Company had been innovating to install a dust/dirt trap, namely a sediment tank, before oil enters the main tank. Since the implementation of the innovation in 2018 and up until June 2019, the Company has succeeded in reducing the generation of B3 waste in the form of used oil by 1.24 tons.

GLYCEROL-BASED CHEMICAL WASTE REDUCTION THERE IS A FREE LIME TEST WITH THE WET ANALYSIS METHOD

One of the mandatory laboratory tests in the final stages of cement production is the free lime test using the wet analysis method. In general, the test uses a glycerol-based chemical that is disposable, cannot be regenerated again, and ultimately ends up as B3 waste. The Company, through PT Semen Tonasa, had made an innovation to reduce the use of the chemicals by as much as 50% for the same analytical methods and samples, the results of which have been validated and verified by external parties (PT GE ITB). Since the implementation of this innovation in 2018 and up until mid-2019, PT Semen Tonasa has reduced the total absolute yield of hazardous and toxic waste by 0.11 ton.

WATER MANAGEMENT

Water is one of the natural resources that is quite important for the Company in operational activities and supporting needs. SIG has always been committed to have better water management and trying to minimize the environmental impacts. In

general, the SIG uses surface water sources to meet the needs of both production and domestic activities. We have implemented several water efficiency programs to reduce water usage.

Water Use Volume Based on Source and Destination Flow

Water Source	Destination	Volume (m ³)		
		2017	2018	2019
Ground Water	Water Treatment Unit	490,970	674,682	1,200,310
Rain Water	Water Treatment Unit	1,684,208	1,130,538	542,026
Surface Water	Cooling Machine	3,268,841	2,613,768	3,470,916
Surface Water	Production Process	1,771,033	1,588,992	1,726,032
Rain Water	Production Process	62,764	86,205	108,674
Rain Water	River	1,345,400	1,899,351	1,678,576
Rain Water	River	696,575	371,110	425,544
Total		9,319,791	8,364,646	9,152,078

Cement production process with a dry system has the potential to not produce used water. However, the Company utilizes domestic wastewater that has been processed in water treatment as sanitary water and cooling plant equipment with a closed circulation

mechanism. The quality of domestic water from Water Treatment is definitely below the applicable quality standards. The measuring of used water quality is carried out by an independent laboratory with a standard calculation from SNI 3554-2015.

BIODIVERSITY

The Company committed in the efforts to preserve biodiversity. For us, maintaining biodiversity is not only important for the balance of the ecosystem and the success of restoration activities in the SIG area, but more than that. Well maintained Biodiversity is also able to provide benefits to the surrounding community, even become a great legacy for future generations.

In the post-mining sector, SIG is also committed to conducting rehabilitation. Several rehabilitation programs have been carried out and provide added value to the surrounding community. The Company also strives prevention by natural means by planting trees in the green belt area or around raw material areas, green barriers in and around the factory and providing a buffer zone.

POST-MINING REFORESTATION AND RECLAMATION PROGRAM

The Tuban Business Unit is committed to develop an area that have been mined to be managed responsibly through reclamation, revegetation and post-mining activities. The Company carries out this mandate in accordance with laws and regulations and includes stakeholders in its implementation. To support the Rehabilitation Program, the Tuban Business Unit has a 2-hectare nursery facility that has been operating since 2010. The nursery can produce as many as 50,000 seedlings and rehabilitate 30 hectares of post-mining land each year.

The 230.91 hectare post-mining reclamation conducted by the Company proves that environmental damage can be minimized, perhaps with even better results. Formerly, the initial hue before being mined was arid, rocky dry land and was only covered with grass and reeds, but now it is a forest area.

The seriousness of SIG in managing post mining environment has resulted in Gold medal/Aditama in a national level award from the Ministry of Energy and Mineral Resources because it is considered to have succeeded in reclaiming and revegetating ex-mining lands. Other awards include the Inspirator Award from the Ministry of Environment and Forestry for being considered to have succeeded in reclaiming forests in the post-mining area, and the 1st Winner in Best Practice category for International Non-Metallic Mining at the 2nd ASEAN Mineral Awards (AMA) in Bangkok, Thailand for being considered the best at the ASEAN Level in the management of the mining environment, biodiversity conservation and contribution to the development of communities around the mine.



Aditama Award - KESDM

1st Winner of the ASEAN Mineral Award

Total Number of Protected Species Listed in the Union for Conservation of Nature (IUCN) List That Are Found in Areas Adjacent With The Company's Operational Areas ^[304-4]

No	Name of Local and Scientific Fauna	Status According to IUCN	Protection Status According to Regulation No.5/1990 dan PP No.7/1999
1	Black Eagle/Ictinaetus Malayensis	Least Concern	Protected
2	Crest Serpent Eagle/Spilornis Cheela	Least Concern	Protected
3	Collared Kingfisher/Halcyon Chloris	Least Concern	Protected
4	Blue-eared Kingfisher/Alcedo Meninting	Least Concern	Protected
5	Glossy Swiftlet/Collocalia Esculenta	Least Concern	Protected
6	Pacific Reef Heron/Egretta Sacra	Least Concern	Protected
7	Plain Sunbird/Anthreptes Simplex	Least Concern	Protected
8	Olive-backed Sunbird/Cinnyris Jugularis	Least Concern	Protected
9	Black Sunbird/Nectarinia Aspasia	Least Concern	Endemic, Protected
10	Falcon/Accipiter Sp.	Least Concern	Endemic, Protected
11	Little Egret/Egretta Garzetta	Least Concern	Protected
12	Collared Kingfisher//Halcyon Cholris	Least Concern	Protected
13	Whimbrel/Numenius Phaeopus	Least Concern	Protected
14	Lesser Crested Tern/Sterna Bengalensis	Least Concern	Protected
15	Pacific Golden Flover/Pluvialis Fulva	Least Concern	Protected
16	Black Sunbird/Nectarinia Aspasia	Least Concern	Protected
17	Javan Deer/Cervus Timorensis	Vulnerable	Not Protected
18	Javan Plover/Charadrius Javanicus	Near Threatened	Endemic, Protected
19	Cerulean Kingfisher/Alcedo Coerulescens	Least Concern	Endemic, Protected
20	Collared Kingfisher/Todirhamphus Chloris	Least Concern	Not Protected
21	Cattle Egret/Bubulcus Ibis	Near Threatened	Endemic, Protected
22	Javan Kingfisher/Halcyon Cyanovenris	Least Concern	Endemic, Protected
23	Australian Kingfisher/Todiramphus Sanctus	Near Threatened	Protected
24	Javan-pond Heron/Ardeola Speciosa	Least Concern	Protected
25	Malaysian Pied/Rhipidura Javanica	Least Concern	Protected
26	Whiskered Tern/Chlidonias Hybrid	Least Concern	Protected
27	Little Tern/Sterna Albifrons	Least Concern	Protected
28	Great Egret/Ardea Alba	Least Concern	Protected
29	Whimbrel/ Numenius Phaeopus	Least Concern	Protected
30	Javan Spotted Leopard/Panthera Pardus Melas	Vulnerable	

No	Name of Local and Scientific Fauna	Status According to IUCN	Protection Status According to Regulation No.5/1990 dan PP No.7/1999
31	Javan Hawk Eagle/Nisaetus Bartelsi	Near Threatened	
32	Milky Stork/Mycteria Cinerea	Near Threatened	
33	Lar Gibbon/Hylobates Lar	Near Threatened	
34	Javan Lutung/Trachypithecus Auratus	Least Concern	
35	Lesser Adjutant/Leptotilos Javanicus	Least Concern	
36	Thomas Langur/Presbytis Thomasi	Least Concern	

SPOTTED DEER BREEDING

In order to preserve biodiversity, SIG, through PT Semen Padang, conducted a spotted deer breeding which was imported directly from Bogor Palace. This spotted deer breeding activity is the only activity done by the company in West Sumatra. This breeding has produced four deer calves, which bring a total of 9 deers at the moment.



**BUKIT DAUN ARBORETUM
“BIODIVERSITY MANAGEMENT FOOTPRINTS IN THE MINING AREA”**

The company’s environmental commitment which is framed in the motto “One Earth, One Hope, One Future” signifies the company’s seriousness to maintain a sustainable earth with a hope for a better future for future generations.

The real effort has been done (specifically) in the Limestone Quarry/Mine which is to provide a conservation area for the Bukit Daun Arboretum - Bukit Herbal. Bukit Daun Arboretum is located on an area of 1,980 m2 in the Limestone Quarry. Named Bukit Daun Arboretum because of its unique design resembling leaves. 10 species of rare plants from various families that are difficult to find has been planted in the arboretum around the limestone quarries in order to preserve these plants.

Arboretum is a garden collection of trees with a certain area containing various types of trees that are planted following their natural habitat as much as possible and is intended as an area of biodiversity conservation therefore in any case it can improve or maintain the surrounding climate conditions.



Tuban Plant, East Java



**Social
Responsibility**

Management Approach ^[103-2]

We see surrounding communities as an integral part of the Company, as well as an important stakeholder. The Company strives to achieve a synergy of all our operation with the interest of the local community in order to reach sustainable development. ^[103-1]

Management of the local community is the responsibility of the Department of Corporate Social Responsibility (CSR) under SVP Corporate Communication. The Company's implementation of CSR programs is in accordance with the Company's policy that was made on the basis of:

1. Law No.19 of 2003 concerning State-Owned Enterprises (SOEs)
2. Law No.40 of 2007 concerning Public Company
3. Government Regulation No. 47 Year 2012 concerning the Social and Environmental Responsibility of a Public Company
4. Regulation of the Minister of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program of SOEs
5. Regulation of the Ministry of SOEs No. PER-03/MBU/12/2016 concerning Amendments to the Regulation of the Ministry of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program of SOEs
6. Regulation of the Ministry of SOEs No. PER-02/MBU/07/2017 concerning the Second Amendment on the Regulation of the Ministry of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program
7. ISO 26000 SR: 2010 Guidance on Social Responsibility dengan Core-Subjects Community Development and Involvement.

The ISO 26000 becomes our main reference in implementing the CSR activities. SIG is committed to carry out the seven categories of ISO 26000 such as community engagement and development, customers, healthy institutional practices, environment, employment, human rights, and governance organization. The CSR Department is functioning as an executor for community engagement and development category through an Integrated Development, sustainability, community development, philanthropy and social environment management, as well as to ensure that the programs in all categories carry out by other departments are well executed.



Vision

To be a CSR manager that focuses on sustainable environmental conservation and social responsibility, thus providing added values for stakeholders



Mission

- Carrying out the CSR programs based on the harmony of the triple bottom line principle (Profit, Planet, People) and SDGs Concept
- Realizing a CSR management towards a Good Corporate Citizen



Strategic Objectives

- To reach a level of an ethical & responsible company
- To contribute significantly to prosperous society and high environmental awareness
- To gain support from the stakeholders and environment for the smooth operations of the company (Social License to Operate)



Management Approach Evaluation [103-3]

Monitoring and evaluation the Company's management towards the local communities is annually carries out to determine the suitability of the program realization with the initial objective of the program. The evaluation result for the 2019 CSR program recommended that the sustainability initiatives should be directed towards value creation, mainly to support the market and future revenues.

CSR Pillars [103-3]

SIG's CSR pillars are the focus for CSR activities that we do.

SYNERGY (Educating the Nation Together with SIG)

For Sustainability through Human Resources (HR) Improvement and Natural Resources (SDA) Conservation



Education Program *SI Cerdas*

Providing to education, training, and assistance for construction workers, local business partners, and prospective local labors through vocational and skills education.



Health Program *SI Sehat*

Improving the quality of excellent service and maintaining relationship that upholds a win-win solution with the customers, construction workers, distributors, agents, contractors, suppliers, and developers.



Environmental Program *SI Lestari*

Carrying out innovation using the latest technologies that are environmentally friendly and contributing to the utilization of renewable alternative energy.



Empowerment Program *SI Mandiri*

Improving the welfare and standard of living to the surrounding community through economic activities such as agriculture, animal husbandry, agriculture, fisheries, trade, SMEs, and other activities.



Socio-Economic Program *SI Peduli*

Improving human resources quality of the surrounding community in accordance with the needs in a fair and balanced manner.

Scope of CSR Management [413-1][203-2]

SIG's responsibility towards a prosperous society is realized through CSR activities. The Company's CSR activities into four scope of CSR management: BUMN Hadir Untuk Negeri (BHUN), Community Development Program, Corporate Social Responsibility Program (TJSL), and Partnership Program. The Community Development, TJSL, and Partnership programs are also referred as non-BHUN program.

BUMN Hadir Untuk Negeri (BHUN)

BHUN is a program initiated by the Ministry of SOEs of the Republic of Indonesia, along with other 143 SOEs as a commitment to cultivate and foster a sense of national pride towards Indonesia to the people throughout the country. As a holding company for SOEs in the cement industry, SIG is involved in several BHUN main programs.

In 2019, SIG was appointed by the Ministry of SOEs for BHUN implementation in Selayar Islands, South Sulawesi, together with other PICs from PT Industri Kapal Indonesia (Persero) and PT Perkebunan Nusantara XIV (Persero). Other than Selayar Islands, BHUN program was also carried out in our respective operational areas.

Testimonials:



Divia Aulia Zhiqkyah
SMN Participant from South Sulawesi

"I am very grateful to be able to join this program. When dispatched to Papua and upon our arrival, we were greeted by a nice and friendly local government and the Jayapura student council forum. I participated in all activities with grateful and honored feeling."



Stenli Reinold Bouway
SMN Participant from Papua

"The event introduced us to new things we obviously have never encountered in our previous place, such as State Defense education, cultural awareness, traditional foods, and South Sulawesi dance. As Papua representative, I thank you for organizing this event."

Siswa Mengenal Nusantara (SMN)

- 24 senior high/vocational school students
- 3 students with disability
- 2 Model Teachers
- 1 Representative from the Education Office

SOEs Present at Certified Universities & Internships

Ramadhan Safari

- Donation to 1,000 orphans,
- Provision of 1,000 Quran books,
- Donation of a 50-meters of praying mat,
- Scholarship for 221 students

Free Homecoming Program

- Land route: 28 Buses and 1,271 Passengers
- Sea route: 7 Ships and 4,303 Passengers
- Total of 5,574 Participants

Independence Day Celebration

- Independence Day Ceremonial
- Healthy Walk and Clean Environment
- House Renovation
- Provision of Community's Basic Needs
- Cheap Market

Balkondes & Homestay

BHUN activities in Selayar Island

- Household Electrification for 50 households
- 50 Public Toilet Facilities
- 2 Units of Clean Water Installations
- House Renovation Program
- Cheap Market Program of 2,000 basic food packages

Total Funding
Rp 6.60 billion

Community Development Program

SIG consistently implements the Community Development program in accordance with the Regulation of the Minister of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program of SOEs, Regulation of the Ministry of SOEs No. PER-03/MBU/12/2016 concerning Amendments to the Regulation of the Ministry of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program of SOEs, as well as Regulation of the Ministry of SOEs No. PER-02/MBU/07/2017 concerning the Second Amendment on the Regulation of the Ministry of SOEs No. PER-09/MBU/07/2015 concerning the Partnership Program and Community Development Program. Through this Community Program, we aim to improve the community's welfare as well as the surrounding environmental our operational areas. To maximize the program, SIG always work together with stakeholders such as community leaders, religious leaders, youth leaders, local government, and community groups of beneficiaries to achieve the Sustainable Development Goals.

P4T PROGRAM AT SEMEN GRESIK REMBANG

As an expression of SIG's concerns towards the surrounding community of Rembang Plant, SIG carried out the environmental conservation as well as the P4T Empowerment Program (Integrated Plantation, Agriculture, Fisheries and Livestock). We build, for instance, a rainwater conserver pond managed by the Village-Owned Enterprises (VOEs) in an area of 1 hectare with a water volume of 15,000 m³; a 4 hectares of horticultural farm area for durian, sweetsop, crystal guava, and longan fruits; Edupark & Biogas System managed by the VOEs on a 1.6 hectare of land as a place to learn about integrated agriculture and livestock; as well as a 31 hectares of agricultural area, also managed by the VOEs, involving farmers around the Company's operational area.



ECOPARK AND EDUPARK AREA DEVELOPMENT IN TUBAN PLANT

At the Tuban Plant area, SIG has developed the Kambangsemi Ecopark to be an icon for community empowerment and reclamation. With total an area of 179,002 m², the Company will optimize the green belt land and post-clay mining area of IUP Tlogowaru, by the construction of productive reclamation area to support nature conservation, develop its potential as educational area and tourism destination, build a center for research, training, and P4T development, as well as facilities for community empowerment and welfare improvement for the surrounding communities through partnerships with the VOEs.



For Edupark development, SIG owns a conservation area of 1.3 hectares for seven Cervus Timorensis deer or timor deer, which are protected fauna. This Edupark provides green open space to minimize plant's emission and dust, provides area for interaction, education, and welfare of the community surrounding the Company. The Company hopes that this Edupark can function as a new institution that engages the local community, raises awareness and knowledge about timor deer conservation, provides new economic space from educational and culinary activities, minimizes the impact of dust and emission from to plant operations, and creates new ecosystem that supports the diversity of flora and fauna.



THE GREEN BELT FARMERS EMPOWERMENT

In 2019, the Company started the Green Belt Farmer Empowerment Program in collaboration with the Agricultural Office of Tuban Regency Government in utilizing an area of 74 hectares and involving 370 farmers from 21 groups of Green Belt Farmers from 7 villages. The program provides benefits for farmers as they can carry out perennial intercropping on a reclamation land, utilizing the ex-mining area as a water reservoir used for agricultural purposes throughout the season, and create a fish farm tilapia and carp fishes with floating net technique.

Moreover, the empowerment program helps farmers to have access to arable land, minimize the excessive cropping of the Green Belt plants, increase the farmers' productivity to 2 production per crop cycle and boost their income up to 6-fold.



INTEGRATED FARMING PROGRAM DEVELOPMENT

SIG initiated the Integrated Farming Program in 2017 in collaboration with cattle farmer groups in Sekardadi and Jenggolo Villages. The cattle farming program, conducted through an integrated farming method, resulted in increased revenue for farmers and empowers them. The merino sheep farm, for example, both fettering and breeding, increased to three times a year in terms of production and able to produce up to five lambs. Farmers can also benefit from the agricultural waste of tubers, sugar cane, and corn scrapper to be processed into nutrient-rich concentrated feed.



KEHATI GARDEN & GEOPARK DEVELOPMENT PROGRAMS

Through its subsidiary, Semen Tonasa, SIG created a Biodiversity Protection Areas on post-clay mining area in the Bontoa Sub-District, Minasa Te'ne District, Pangkajene Regency of South Sulawesi Province. This community-based program was created to meet the needs of the community whose lacking of natural ecosystem for their agricultural activities.

Kehati Garden program aims to conserve endemic, local, and rare plants. Thus, this garden can be used as agricultural area as well as educational forest. In addition, Kehati Garden also functions as archaeological site conservation to protect the local community's cultural heritage and to build a synergy with social institutions and government agencies. In this post-clay mining area of Bontoa, SIG work together with the surrounding community to create community empowerment programs to support the community's economic independence.



CONSERVATION OF THE BILIH FISH OF WEST SUMATRAN ENDEMIC FOR THE LIVELIHOOD OF THE LOCAL COMMUNITY

Through its subsidiary, Semen Padang, SIG carries out the bilih fish conservation program by utilizing an post-cement mining area, post. This is our effort to save the bilih fish, the local endemic in West Sumatra, in order to ensure the sustainability of the fish for the livelihood of the local communities. Bilih fish population is currently declining due to high level consumption and the community's lack of knowledge on a sustainable eco-friendly fishing method. On the other side, bilih fish contains nutritional and protein values beneficial for children growth and stunting prevention. The program is expected to provide positive benefits for the community's business, ranging from processing, trading, and local fishermen.



EMPOWERMENT OF SIKAYAN BALUMUIK FOREST COMMUNITY GROUP

Through its subsidiary, Semen Padang, SIG carries out an empowerment program for the Sikayan Balumuik forest community group to utilize the forest into productive land. The program is expected to boost the community's economy and social welfare as well as environmental protection. Collaborated with the Forestry Office of the West Sumatra Provincial Government and Andalas University, SIG conducted several empowerment programs such as agri-forestry, catfish and chicken farming, agri-tourism, as well as natural resources conservation. With a total area of 300 hectares, our programs involved 67 household, 41,000 forest tree planting, 30,000 coffee seedlings, and road concreting up to 3.5 km.



ENTERPRISE-BASED VOCATIONAL EDUCATION (EVE)

Through its subsidiary, PT Solusi Bangun Indonesia Tbk (SBI), SIG carries out the Enterprise-based Vocational Education (EVE) program to improve the livelihood of the communities around SBI's operational area through vocational education. The program starts with dissemination phase, followed by assessment of talented candidates to meet our criteria, towards selection and acceptance.



Corporate Social Responsibility (CSR)

SIG implements the CSR program in accordance with Article 74 of Law No.40 of 2007 on Public Company as well as the Government Regulation No. 47 on the Social and Environmental Responsibility of the Public Company. In contrast to the Community Development, SIG's CSR programs provide direct donation such as assistance as well as financial aid. The CSR programs also adhere to SIG's CSR pillars.

SIG's CSR Programs [203-1]

Unit	SI CERDAS	SI SEHAT	SI MANDIRI	SI LESTARI	SI PEDULI
Holding	Building Gresik Young entrepreneur	A healthy walk in Selayar Island, South Sulawesi	SMEs empowerment (OPOP Exhibition)	Green Belt farmers empowerment	Natural disaster aid
	Provision of school necessities	Development of basic sanitation in Selayar	Training for social, political, cultural and sport clubs	Development of Ecopark and Edupark areas	Road enlargement at the Temandon Village, Tuban
	Teacher for Civilization Development (Anti Corruption Program)				Ramadhan Safari
PT Semen Gresik	Scholarship for elementary, junior, and high school students	Blood donors with surrounding community	Forum of civilized (<i>madani</i>) community	Plantation horticulture program	Roadwork in the surrounding areas
	AKSI Rembang Scholarship	Food provision and assistance for toddlers' additional nutrition	Partnership and empowerment program for ROEs	Edupark program for integrated farming	Construction of religious facilities
	Organizing TPQ in the Company's surroundings	Village Midwife Program	Village Discussion (<i>Rembug</i>) Forum	Construction of reservoir dam for land irrigation for agriculture in the Company's surroundings	Public toilet construction
	Capacity Building community organization in the Company's surroundings	Healthy Car Program	<i>Sahabat Ternak</i> Program of Semen Gresik	Clean Water Supply Program	Construction of ready-to-use houses
PT Semen Padang	Aid for Bustanul Ulum Elementary School	Sports trainings	<i>Nagari</i> Forum	Community Development Compensation	Religious education
	Donation for teacher			Clean water installation aid	Animal donation for religious event
	Educational foundation				Donation for Jabal Rahmah Mosque

Unit	SI CERDAS	SI SEHAT	SI MANDIRI	SI LESTARI	SI PEDULI
	Scholarship Program				Mosque construction in Bukit Putus Islamic Center construction in Mentawai
PT Semen Tonasa	Donation for teachers of the Kesejahteraan Foundation	Clean and healthy living campaigns	Social and religious organizational training	Clean water and pipeline facilities	Mass circumcision Natural disaster aid
	Diploma scholarship program		Youth development and sports facilities		Construction of police integrated public service office
	Scholarship for the surrounding community of the Packing Plant		Community trainings and education in collaboration with BLKI		Social service
	Teachers' competence improvement				House renovation
	Vocational School program				Ramadhan Safari
Book donation					
PT Solusi Bangun Indonesia Tbk	English course and Quranic reading (<i>Tahfiz</i>) course	Health nutrition for babies and toddlers through 45 integrated health service posts (Posyandu) in 5 villages		Clean water installation construction	House renovation for underprivileged community
	Educational savings for underprivilege & talented students	Health seminar Free medical treatment		Optimization of community-based waste management facility of the 3R Integrated Landfill (TPST)	Basic food package donation for underprivileged community in the Company's surroundings Animal donation for religious event Village road development
Scholarships for underprivileged children (GOTA, Semen Andalas Scholarship, Polytechnic-EVE Scholarship)	Collaboration with organizers of public health programs (Posyandu assistance, free medical treatment, health cadres)	MSME development (BUMDES, POSDAYA, production management, Dapoer Sampireun business development, online marketing, Posdaya program development, online automotive, processed marine product development of Sari Laut, DeLONTAR Ecoprint product development, salt mining, pallet craft, rattan craft, organic farming, development of new MSMEs, welding business development, fostering coastal merchants)	Green School development (<i>Adiwiyata School, Sadar Lingkungan School</i>)		Festive Holidays (basic food for led ul Fitr, animal donation, the Prophet Muhammad commemoration, <i>Tarhib</i> Ramadhan, Tarawih Pray Circular Gathering, fastbreaking gathering)

Unit	SI CERDAS	SI SEHAT	SI MANDIRI	SI LESTARI	SI PEDULI
	Tutoring and community study groups (English for Fun, Inspiration Class, Safety dissemination, PAUD Tutorial Assistance, Kejar Paket C, Nature School)		Women's Empowerment (PEKKA, Setia Bakti Wanita Cooperation)	Community-based waste management (Waste Bank, cooking oil waste for RDF, plastic waste usage for RDF, plastic waste craft, used cement bag craft)	Indonesian National Day (Independence Day, POLRI Day, Earth Day, TNI Day)
	Outstanding Young People development	Fostering a healthy lifestyle and regular exercise (gymnastics with Ring 1 residents, Mukim Lhoknga youth sports activities, health seminars, Soccer School development)	Strengthening livestock & farmers group (integrated farming, dissemination of nutrition for livestock, non-rice farming)	Green environment (in the red zone of Central Java, mangrove planting, tree planting in the Batching Plant)	Local Celebrations (Tuban Anniversary, Cilacap Anniversary, Bogor Anniversary, Banda Aceh Anniversary, Central Java Anniversary, Aceh Besar annual event)
	Anti-violence campaign and Human Rights Day celebration	Healthy and habitable house program (house improvement, clean water wells, sanitation, plastering and toilet development in Central Java)	Tourism Village Development (Damar Jati Culinary, Mliwang Tourism Village, Kutawaru Tourism Village, Red Zone Villages Eradication in Central Java)		Local culture (tsunami commemoration, village festival, sea festival)
	Skills training (Welding)		Fishermen groups enhancement (Fish Apartments, salt mining, small business development of the fishermen communities, fish flour management, fish farming)		Arts & Culture (local cultural festivals)
	School infrastructure (Solusi Academy of SMK Purwakarta, PAUD construction, school construction, school's nameplate replacement, improvement of computer facilities)				

Partnerships Program

Aligned with the Community Development Program, the partnership Program is one of SIG's efforts as a SOE to improve the economic welfare of the society through small business development, regardless of its relevance to the Company's business. Fund distribution for the partnerships and small business fostering is focusing on the aspects of equality, independence, professionalism, and ethics.

In 2019, the Partnership Program distribution is carried out through grant distribution program of Rp5 billion through the appointed SOEs by the Ministry of SOEs, the PT Permodalan Nasional Madani (Persero) (PNM). The Partnership Program activities are focusing on receivables withdrawal and trainings for fostered partners and included them in exhibitions or other marketing activities. During 2019, the receivables withdrawal from fostered partners was realized at Rp56 billion from the target of Rp58.5 billion.

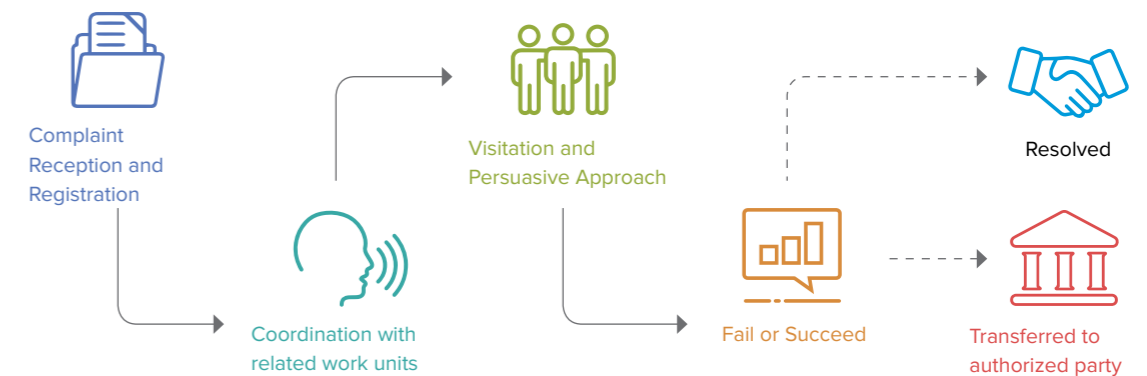
On the other side, SIG remains to manage partnership with our previous fostered partners.

Partnership Program Realization

Company	Total of Fostered Partners			Budget Realization for Fostered Partners (Rp)		
	2017	2018	2019	2017	2018	2019
Holding	19,277	20,409	20,409	55,512,530,000	54,809,390,000	-
PT Semen Padang	6,799	7,090	7,091	9,148,184,000	9,485,443,325	20,000,000
PT Semen Tonasa	11,536	12,076	12,078	12,965,067,000	13,239,000,000	60,000,000
Total	37,612	39,575	39,578	77,625,781,000	77,533,833,325	80,000,000

Social and Environmental Complaints

SIG understands that every business process has the potential to received complaints from the surrounding communities, both on the social and environmental issues. Therefore, the Company opens communication channels for the public to report their complaints related to social and environmental issues in the surrounding operational areas. Each complaint will be followed up by the PR function in accordance with the Standard Operating Procedure (SOP) mechanism for conflict resolution. During 2019, SIG received 9 complaints of which all complaints were successfully resolved.



Status of Social and Environmental Complaint Settlement

Company	Complaints Received	Complaints Resolved
Business Unit Tuban	1	1
PT Semen Padang	2	2
PT Semen Tonasa	0	0
PT Semen Gresik	6	6
PT Solusi Bangun Indonesia Tbk	0	0
Total	9	9

Community Satisfaction Index

In order to evaluate SIG's CSR program performance, we conduct a routine survey for Community Satisfaction Index in all operational areas. We continue to put our effort for improvement in order to achieve a high index of satisfaction so as to provide maximum positive benefits.



**Our HR
Management**



SIG recognizes the importance of managing competent human resources to support the achievement of corporate business strategies. We ensure that our human resources are managed and developed to achieve maximum capability and have a balanced quantity. We always appreciate the performance of our employees because without them, the Company will not be able to maintain sustainability.

Management Approach

[103-1] [103-2]

Human Resources (HR) management is divided into 3 departments, namely the HR Planning & Policy Department, the Operational HR Department, and the Development and Training Department. SIG HR Policy ensures the HR capability and quantity are balanced. The company must have employees who are competent in doing their job. Starting with good employee performance and good motivation, the employee can become a team player or be able to work in teams. After achieving good capabilities, a good company capabilities will also be formed.

Besides capabilities, the Company oversees if the quantity of the number of HR needed in one department or division is really sufficient, neither more nor less. In the recruitment process, SIG has the 'manpower planning' that oversees the needs of departments or divisions so that HR management in the Company can run well.

After the recruitment process, the Company will manage and develop its HR well. Our strategies are conducted through training, career development, work-mutation or rolling, and ensuring that employees get benefits and a competitive compensation in the industry. [103-3]

The Management Approach Evaluation

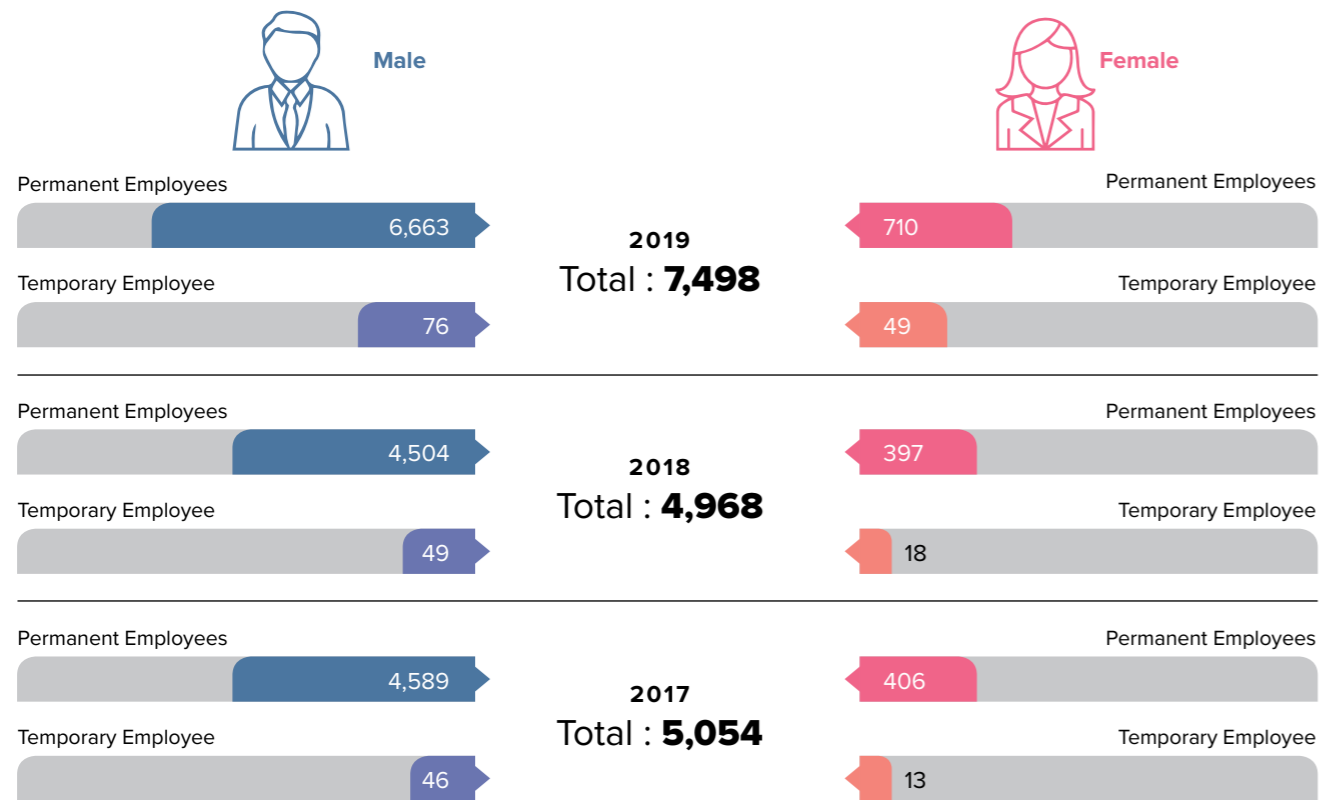
[103-3]

The Performance Management Function is divided into 2 namely the Strategic Planning Department for corporate performance and the Operational HR Department for employee performance. With employee turnover increase of 2.3% in 2019 due to a decreasing cement industry's performance as a whole, resulting employees were trying out new challenges.

Employee Composition

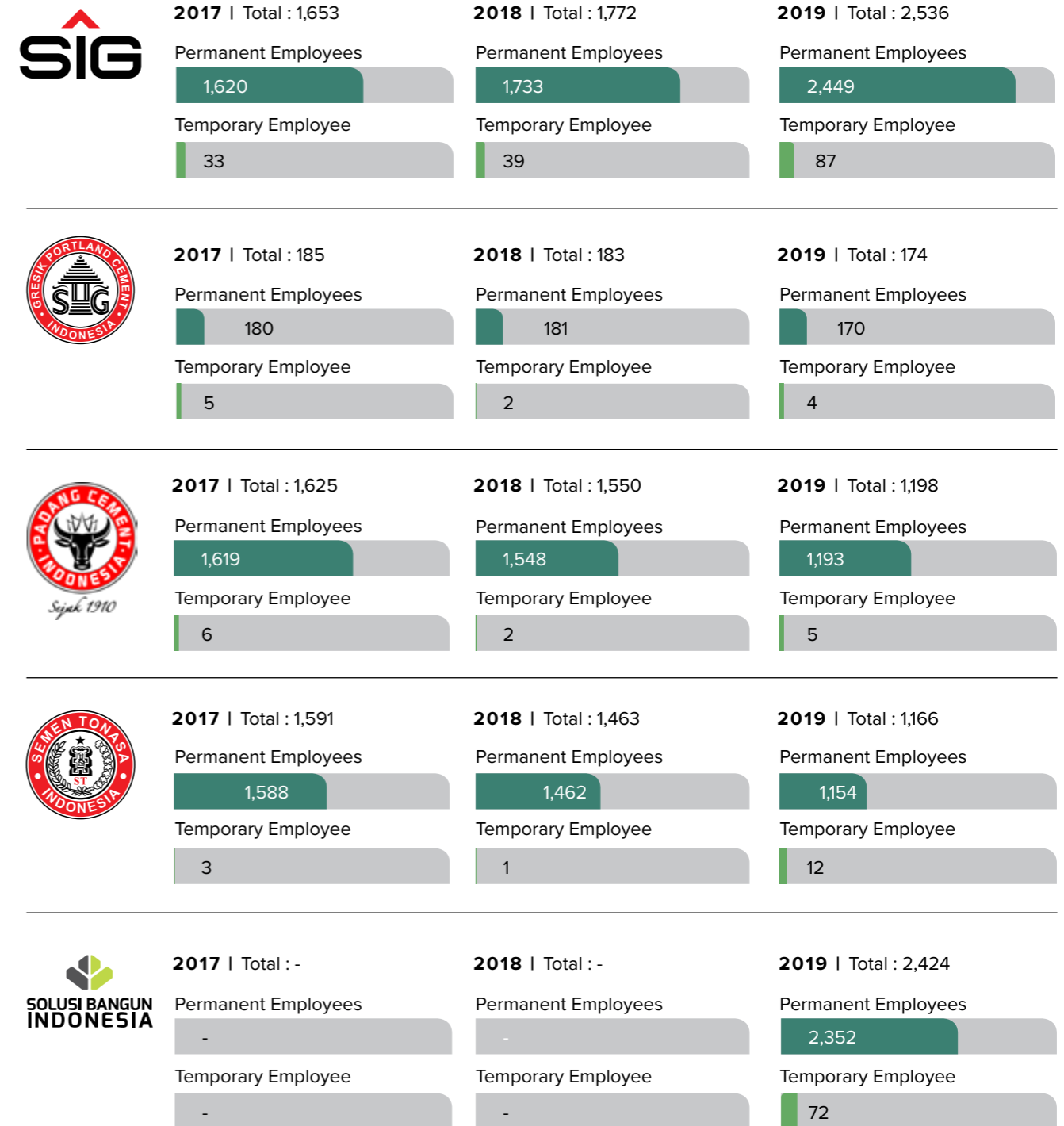
As of 31 December 2019, the number of employees of PT Semen Indonesia (Persero) Tbk. is 7,769 employees. Throughout the year, we did not get any reports related to discrimination at work and all or 100% of employees have been bound by the Collective Labor Agreement (PKB) which is a reference in carrying out industrial relations. In compiling this composition of employees, we extract data from SIG and subsidiary data centers located in Indonesia territory at the end of the reporting period. [102-41] [102-8]

Number Of Employee by Status and Gender [102-8]



Notes: Does not include TLCC

Number of Employee By Status and Region



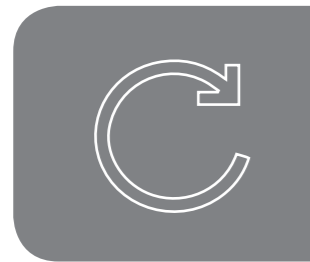
Note: PT Solusi Indonesia Tbk has just joined SIG so this reporting only reported SBI in 2019.

Number of Employee by Position 2019



Management Level	Total	Percentage
Department Head	75	1%
Bureau Head	377	4.49%
Section Head	1,010	13.47%
Team Head	3,372	44.97%
Executive Staff	2,704	36.06%
Total	7,498	100%

Number of Employee by Age 2019



Age	Total	Percentage
> 51	875	11.67%
46 - 50	1,579	21.06%
41 - 45	1,409	18.79%
36 - 40	850	11.34%
31 - 35	1,432	19.10%
26 - 30	1,214	16.19%
< 25	139	1.85%
Total	7,498	100%

Number of Employee by Education 2019



Education Level	Total	Percentage
Post-graduate	242	3.23%
Graduate	2,498	33.32%
Diploma	1,061	14.15%
High School and others	3,697	49.31%
Total	7,498	100%

Number of Employee by Gender 2019



Gender	Total	Percentage
Male	6,739	89.88%
Female	759	10.12%
Total	7,498	100%

SRIKANDI AT THE CEMENT FACTORY

SIG supports all employees; both men and women have the same opportunities in developing their careers. This was proven by several women who hold important positions in SIG, such as the position of Head of the Department and some even served as Directors of several Subsidiaries of the SIG. Related to the field of their works, some female workers become the backbone in production which is more often identified as the world of male work.

In addition there are also many female employees involved in several innovations that are contested both within the scope of the SIG and nationwide such as Oktoría Masniari, ST., Amelia Djafaar, ST. (Semen Indonesia), Resti Setianingrum, ST., Rezkianyanti Tri Utami, Lihang, Kurniasari, and Andini Umiati, S.Sc. (Semen Tonasa).

“

Even though I work in a male-majority environment, I feel good and comfortable. So far, my colleagues are very supportive and helpful that's what I feel when working in the field. In fact, we also work well together in solving every problem that occurs in the field.

Amalia Djaafar, ST.

Unit Departement of Product Management Process Evaluation Officer PT Semen Indonesia Tbk, who has worked for 5 years.



Fair and Transparent Recruitment ^[405-1]

In recruiting employees, SIG always provide opportunities for the best candidates in accordance with their position and needs. The Company also provide the opportunities as wide as possible for applicants with a variety of educational backgrounds, personalities, and skills that suit the Company needs.

SIG with open and transparency provide information on the desired requirements so that the scope

of the tasks and jobs offered can be understood which resulted in finding suitable candidates for the positions and assignments offered. Recruitment announcements are carried out using online or offline channels, such as through recruitment activities at universities.

Number of New Employee and Turnover ^[401-1]

Description	Number of Employees Out	Turnover (%)	Number of Employees In	Hire (%)
Age				
< 25	3	0.94%	70	50.36%
25 – 30	35	11.01%	29	20.86%
31 – 35	29	9.12%	12	8.63%
36 – 40	15	4.72%	9	6.47%
41 – 45	25	7.86%	1	0.72%
46 – 50	45	14.15%	3	2.16%
≥ 51	166	52.20%	15	10.79%
Gender				
Male	281	88.36%	97	69.78%
Female	37	11.64%	42	30.22%
Business Operational Location				
Holding, PT Semen Gresik, PT Semen Padang, PT Semen Tonasa	165	51.89%	37	26.62%
PT Solusi Bangun Indonesia Tbk	133	41.82%	85	61.15%
Total	318	100%	139	100%

DISABLED EMPLOYEES RECRUITMENT, PROUD TO WORK AT SIG

In 2019, SIG implemented a Joint Recruitment Program (PPB) from the Ministry of SOEs, i.e. the recruitment of persons with disabilities. This program is carried out in all units including Holding, where the Company successfully recruited eight employees with disabilities. This program is a form of SIG commitment to recruit the best talents in Indonesia regardless of any physical limitations.

Feriez Prama Gunawan is a disability employee who works at SIG. This SLB Bandung graduate works in the SIG Accounting Unit in Gresik, East Java. As a deaf person, Feriez is grateful and proud to be part of the SIG family.

“ As a new employee, I learn from coworkers and superiors to complete tasks well. Alhamdulillah, all of them are very helpful and acting like my own families.



Employee Competency Training and Development

All employees of SIG are given the same opportunity to improve their competency through various training and development activities. Employee training and development is divided into three types, namely the development of technical competencies, soft competencies such as interpersonal skills, team works, leadership, etc., and other competencies for echelon 1 and echelon 2 employees to attend global

standard competency. All employees or 100% of our employees, male or female, and all management levels receive regular reviews of performance and career development during the reporting period. The following details the training carried out by each group:

Education and Training 2019 [404-1]

Training Topic	Total Participants	Hours of training	Average of Training Hours/ Employee
PT Semen Indonesia (Persero) Tbk (Holding)			
Core (Personal Mastery)	116	2,000	17.24
Functional (Business Mastery)	1,517	28,968.48	19.10
Leadership Mastery	149	2,008	13.48
Others	64	720	11.25
Total	1,846	33,696.48	61.06
Business Unit Tuban			
Core (Personal Mastery)	11	192	17.45
Functional (Business Mastery)	600	11,027.5	18.38
Leadership Mastery	46	467	10.15
Others	-	-	-
Total	657	11,686.5	45.99
PT Semen Padang			
Core (Personal Mastery)	288	2,928	10.17
Functional (Business Mastery)	1,917	31,315.5	16.34
Leadership Mastery	327	5,490	16.79
Others	16	277.5	17.34
Total	2,548	40,011	60.64

Training Topic	Total Participants	Hours of training	Average of Training Hours/ Employee
PT Semen Tonasa			
Core (Personal Mastery)	30	408	13.60
Functional (Business Mastery)	1,989	33,359.5	16.77
Leadership Mastery	216	5,523	25.57
Others	-	-	-
Total	2,235	39,290.5	55.94
PT Solusi Bangun Indonesia Tbk			
Core (Personal Mastery)	801	10,546	13.17
Functional (Business Mastery)	914	22,688	24.82
Leadership Mastery	825	9,457	11.46
Others	328	3,747	11.42
Total	2,868	46,438	16.19



Industrial Relations

SIG fully supports the freedom of employees to assemble, associate, and have an opinion in establishing industrial relations through labor unions. This labor union is a communication forum for SIG

Group employees in communicating with fellow employees. Most of SIG employees joined the labor union named *Serikat Karyawan Semen Indonesia* (SKSI) or as much as 98.9%.

COLLECTIVE LABOR AGREEMENTS STANDARDIZATION IN ALL SUBSIDIARIES

In 2019, the Company completed the standardization of Perjanjian Kerja Bersama (PKB) or Collective Labor Agreements in all its subsidiaries. This program is part of the integration carried out by SIG as a Holding in the field of Human Resources. Following the PKB standardization, the company is currently conducting a standardization of policies related to Human Capital in order to integrate the entire HR management system of SIG.



Employees Benefit

SIG also upholds the principle of diversity and inclusiveness in each of the Company's business activities. This principle is realized by opening up to all employees from various backgrounds so that they

have the same opportunity to join the family of SIG without discriminating their gender, race, religion, ethnicity, or even languages.

Facilities Received Are Based on Employee Status ^[401-2]

Type of Facility	Employees Status	
	Permanent Employees	Contract Employees
Basic Salary	Given	Given
Health Allowance	Given	Given
Life Assurance	Not Given	Not Given
Work Accident Allowance	Given	Given
Maternity Allowance	Not Given	Not Given
Give of Retirement	Given	Not Given
Retirement Guarantee of BPJS of Employment	Given	Given
Tax Allowance	Given	Given
Social Religion Allowance (Baznas)	Not Given	Not Given
Death Allowance	Given	Not Given
Parental leave	Not Given	Not Given

Pension Program

SIG provides a program for every employee aged 50-55 years who soon enters retirement age or five years before retirement age. **The pension preparation program is in the form of Retirement/Entrepreneurship Preparation Training and Dissemination of Pension Rights.** [404-2]



SIG employees who are entering retirement period need to have good preparation mentally, with a mindset and well plans so their retirement remain a pleasant, productive period and is not discouraged to keep on living productively. Retirement/Entrepreneurship Preparation Training is attended by soon to be retired employees in less than 5 (five) years, accompany by companions as a form of company attentiveness and appreciation toward the employees with the aim of preparing the employees optimally in facing retirement which includes psychological aspects, health aspects, financial aspects, motivation for creativity and business visits so that the employees can maintain their best performance in spending their remaining tenure until the end of retirement.

The Entrepreneurship Program includes:

1. Financial material in entrepreneurship includes: planning, managing, building entrepreneurial competencies, setting up a business master plan
2. Financial Planning material covers the management of source of income, expenditure and investment
3. Have the right mindset, attitude and reality about retirement

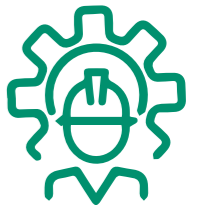
4. Building self motivation and creativity
5. Maintain health and fitness in entering retirement period
6. Business visit

In addition to the entrepreneurship program, the Employee Pension Rights Socialization Program also aims to provide information about the obtained rights when retire and provide mental and financial knowledge retirement preparation, both in terms of psychology and health.

The program includes:

1. Explanation of Pension Rights by the HR Department
2. Define the benefit of Pension Program by Semen Gresik Pension Fund
3. Tax Treatment for Pensioners & Individuals by the Taxation Unit
4. Wredatama Semen Gresik Circle by PWSG
5. Retirement Mental Preparation by Psychologists
6. Financial Arrangements by Financial Experts
Spiritual & Health by Health Experts





OHS Management

For the Company, employees and business partners are not only important stakeholders, but also partners in developing the Company's business and the industry. Therefore, it is the Company's responsibility to ensure the safety and comfort of employees and business partners and avoid any accident while performing operational activities within the Company's surroundings.

The Occupational Health and Safety (OHS) management is the Company's commitment for employees and business partners in order to prevent illness and accidents resulting from operational activities. A good and measured OHS management will ensure healthy, safe, and comfortable corporate activities. Such positive environment will bring significant impact on occupational guarantee for employees and business partners. [103-1]

Management Approach [103-1][103-2]

OHS management approach is the responsibility of the Safety Health and Environment (SHE) Department, which directly responding to the Director of Production. OHS Management Policy straightly refers to CLA clauses, Government Regulations, Occupational Health & Safety Management System (OHSMS), and OHSAS 18001:2007. [103-2]

During the OHS program implementation, monitoring program is carried out by a supervisor, which is the OHS Committee (P2K3). The OHS implementation includes periodic trainings and implementation of workplace accident prevention programs. In 2019, the OHS programs that were successfully implemented included:

- Ringkas, Rapi Resik, Rawat, dan Rajin (5R) Programs;
- Internal audit program by certified internal and external auditors annual;
- Weekly Safety Talk Program in each work unit;
- Increasing work unit's P2K3 activities by appointing OHS Ambassadors;
- Increasing employees' knowledge/competency through disseminations and trainings.

Our OHS management target is to create a Zero Accident working environment through various initiatives, such as creating an OHS culture that complies with the OHS Law and its supporting regulations, carrying out routine identification of hazards within the Company's surrounding environment, and disseminating information to the Company's employees and guests through Safety Talk, Safety Induction, and OHS trainings.

Management Approach Evaluation [103-3]

In the 2019 evaluation, the 2019 OHS performance showed an increase, as there was no fatal accident occurred in 2019 which caused the loss of life of our employees.

OHS Performance and Implementation

The implementation and monitoring of the OHS programs are responsibilities of management and employee representatives in P2K3, consisting of representatives of subsidiaries who represent 100% of employees in submitting input, suggestion, and criticism towards the OHS program implementation.

In 2019, the Company has 191 people who are members of the mining safety committee in the business unit, or as many as 2.48% of the total employees in all operational units. [403-1]

OHS topic is one of the main topics in the CLA, particularly between employees represented by the Semen Indonesia Workers Union (SKSI) and the Company. The subject of discussion includes the rights and obligations of each party, the SKSI and the Company, in terms of clauses for health treatment and facilities, as well as occupational health and safety. There are 7 articles related to the OHS topic out of 66 articles in the CLA. [403-4]

OHS Topics	CLA Articles
Health Treatment and Facilities	
Medical Treatment	Article 26
Outpatient treatment	Article 27
Inpatient treatment	Article 28
Cost of Pregnancy, Maternity and Immunization	Article 29
Special Assistance	Article 30
Periodic Health Facilities	Article 31
Occupational Health and Safety	Article 45

The Company sets a zero fatality target every year in all of the Company's operations. In 2019, the Company successfully achieved our Zero Fatality target and reduced the Lost Time Injury Frequency Rate (LTIFR) by 9% compared to 2018. To continue on improving our OHS performance, the Company has set an LTIFR target of under 0.90 for the year 2024. The Company is committed to continue on prioritizing employees' safety and paying attention to the safety of the contractors.

OHS performance [403-2]

The Company's OHS Performance	Unit	2017	2018	2019
A. Employees				
Total fatality	incident	1	0	0
Lost Time Injury Frequency Rate (LTIFR)	rate	1.60	1.28	1.16
B. Contractors				
Total fatality	insiden	-	-	0
Lost Time Injury Frequency Rate (LTIFR)	rate	-	-	0.70

Note: In 2017 and 2018, we have yet to record incidents towards contractors.

In order to increase awareness of the Company's occupational accident towards contractors, since 2019 the Company began to record and measure occupational accidents towards contractors. LTIFR is a work accident rate per one million work hours calculated using the following method:

$$LTIFR = \frac{\text{Total number of LTI cases}}{\text{Total number of work hours}} \times 1.000.000$$

LTI (Lost Time Injury) is the case of accidents that caused patient unable to work for at least 24 hours after the accident occurred. LTIFR calculation refers to the GCCA Sustainability Guidelines on November 2018 for the monitoring and reporting of safety in cement manufacturing.

The cement industry is a high-risk industry in terms of occupational hazards, which potentially cause injury to employees. The occupational hazards include working at certain heights, working with rotating machinery, working with high-temperature materials, and working with heavy equipment. Thus, the Company undertake various initiatives to achieve the Zero Fatality target to ensure that occupational safety is a top priority for employees. [403-4]

Building Occupational Health and Safety Culture

SIG understands that the involvement of the Company's top management in communicating Occupational Health and Safety is very important for building OHS culture in the Company. The Company's leaders are responsible for creating an excellent safety culture in each of the Company's operational areas. The Company also emphasizes the role of managers and supervisors to be the role models in providing examples of safety behavior and leading the creation of a safety culture within the Company through various steps to improve safety leadership. Additionally, all components of the Company are also guided by the OHS Policy, which is strictly implemented in all of the Company's operations.

The Company continues to invest in various initiatives to improve health practices, reduce the risk of accidents, and strengthen the OHS culture within the Company. The Company's OHS organizational structure is interconnected with each other in an effort to work consistently and coordinatively to achieve the Zero Fatality target. The Company has an occupational health and safety committee, namely the Occupational Health and Safety Committee (P2K3), which has existed since 1987. This Committee works closely with management and

is responsible in finding work accident risks, developing a hazard control system, and conducting performance evaluation. The Committee is led by top management and consists of employee representatives. All OHS-related policies and regulations stipulated by P2K3 are conveyed to all subsidiaries through corporate policies and implementation guidelines in the field.

Every year, P2K3 conducts management reviews related to the performance of each subsidiary. This meeting discussed OHS performance, program realization, policy making, audit findings, and determine the following year's programs. In addition, OHS inspection is also conducted regularly by P2K3, which is every 3 months, including inspections of the area, fire extinguisher, and evacuation routes. The purpose of this inspections is to identify sources of potential hazards that exist in the workplace. Then, the findings are evaluated in terms of the level of risk for employees.

In January 2019, the Company created the SHE Department as a centralized SHE function to integrate SHE management of all subsidiaries. Through this centralization, the management of SHE starting from policy to operations of all subsidiaries can be more manageable and integrated. Additionally, technical matters related to SHE management within SIG can be more easily and quickly implemented.

Audit Kinerja K3

In improving the Company's ongoing commitment to safety, every year the Company conduct a comprehensive internal audit to review the performance of OHS in all subsidiaries. Findings obtained from the annual audit process will be part of the annual management review by the P2K3 in order to create action plan for improvement. In addition, the Company also evaluates OHS performance through surveillance audits by accredited external auditors, which is held every year towards all subsidiaries. An external audit aims to ensure that the OHS implementation by the Company has been implemented in accordance with the Company's OHS standards.

OHS Management System

The Company implements the OHS Management System for deploying important occupational safety within the Company's operations. The Company's OHS Management System applies to all task carried out within the Company's operational areas. The Company's OHS Management System refers to the OHSAS 18001:2007, which is renewed every 3 years. OHS management is the responsibility of the SHE Department under the Director of Operations. The Company has also been preparing for ISO 45001 certification as a substitute for OHSAS 18001 The ISO 45001 Certification emphasizes hazardous risk handling with potential occurrence within the Company's operational areas.

OHS Training

OHS training is the Company's way in achieving the Zero Fatality target. The Company expects the OHS training will help all employees in obtaining appropriate knowledge, skills and experience to be able to make decisions and do their job safely. The Company has developed a holistic approach using specialized training techniques and technological platform.

SEMEN GRESIK'S SAFETY CHALLENGE

PT Semen Gresik held various activities to enliven the Occupational Health and Safety (OHS) Month in 2020. These various activities were aimed to increase employees awareness of and concern with OHS in their working environment. One of the activities held was the Safety Challenge. This event was attended by 15 teams of cross-unit employees, where each team consisted of five employees from Holding, subsidiaries, and business partners. There were five games being contested: Personal Protective Equipment (PPE), Unsafe Condition, fire extinguisher, First Aid on Casualty (P3K) and cheerleading competition. This was the Company's way of communication towards employees and business partners to be more compliant towards procedures and more aware of the importance of occupational safety in their working environment.

RAMP BEARING IMPLEMENTATION PROJECT

Through operational unit of PT Solusi Bangun Indonesia Tbk, SIG implements ramp bearing project in the Company's operational activities. Ramp bearing serves as a tool to reduce the ramp and additional padding on low-bed trucks, which is expected to minimize the risk of accidents.

Ramp bearing is used to process ramp going down to minimize bumps of the edge of the ramp with asphalt surface, so now the human labor is no longer required. Additionally, the project also saves cost and time for low-bed truck maintenance, which optimizes the fleet availability.



ADVANTAGES myACTS

More detail features in observation section for work (VPC).

The SOT, TO, and LSA has their own features in accordance with the form used.

- ✓ Simplifying reporting of direct field observations.
- ✓ In the process of creating a mobile application for iOS and Android.
- ✓ Very quick in creating a valid data as a basis for OHS performance improvement, in order to realize the "Zero Accident" target.

Health Maintenance and Services

To improve the performance of employees, the Company set up special facilities to improve employees' health and physical fitness. The Company provides sports facilities, a wide variety of sport competitions and other facilities used for particular sports activities.

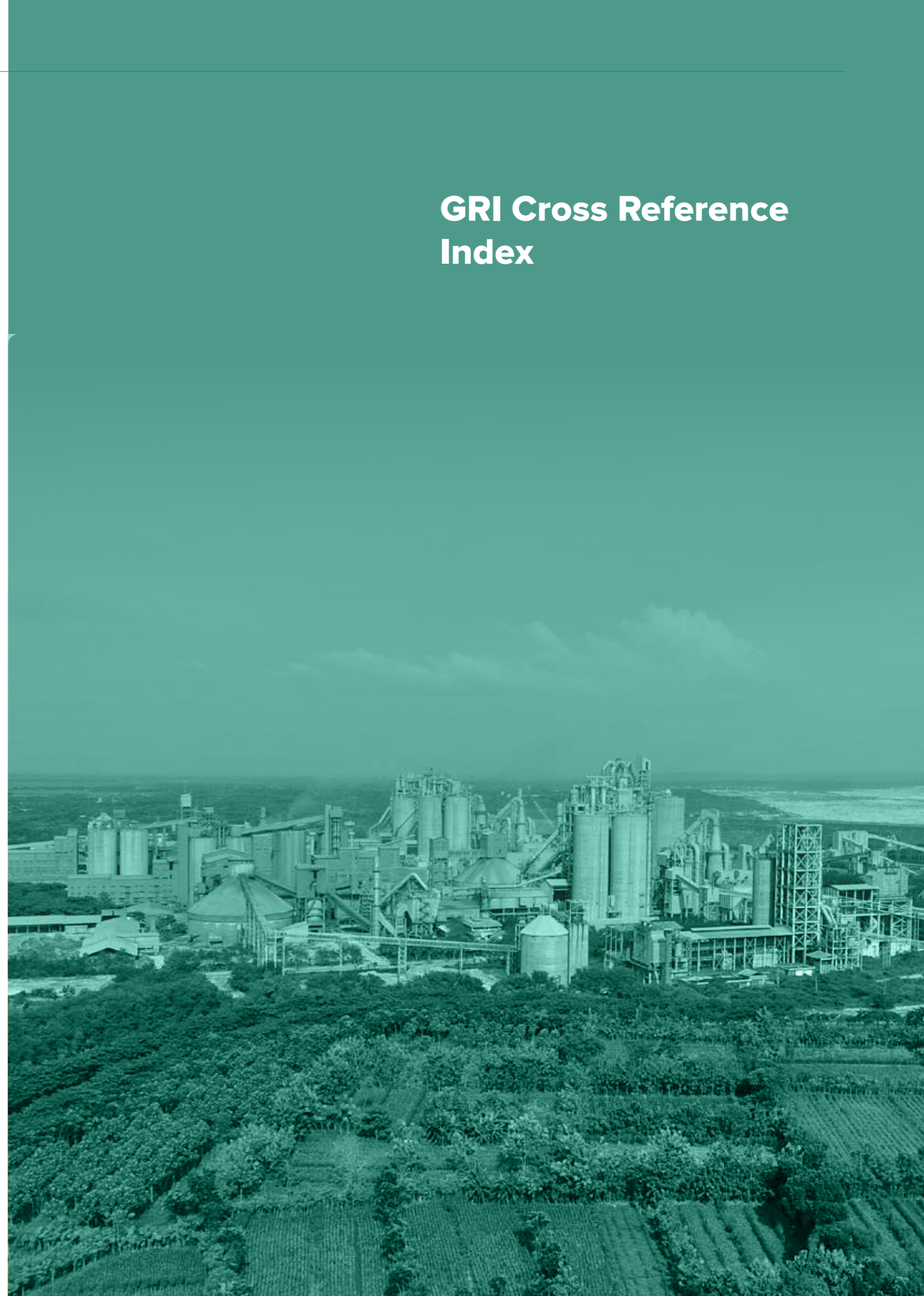
The Company also provides thorough healthcare service through medical check-up (MCU) program for all employees, aims to detect early diseases potentially suffered by employees. These activities take place at least once a year. The medical examination includes a physical examination, physical fitness, laboratory, ECG, spirometry, audiometry, X-Ray, as well as dental and eye examinations. Employees's MCU results will

be emailed directly to each employee. If there is any bad indication on the MCU result, the Company will call the employee for doctor consultation and take medical action if necessary.

In addition, the Company also provides medical facilities in each subsidiary. The Health Clinic aims to treat employees who are sick due to their work. If the healthcare treatment is not enough, the Clinic will refer to the nearby hospitals. For instance, like Cement Padang Clinic will refer to Semen Padang Hospital, Semen Tonasa to RSUD Pangkep and Makassar City Hospital, Semen Gresik to RSUD Blora, and Tuban Business Unit to Semen Hospital.



GRI Cross Reference Index



Sustainability Report 2019 GRI Standard Reference Index CORE (102-55)

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