

MENYESUAIKAN MASA DEPAN

ALIGNING THE FUTURE



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MENYESUAIKAN MASA DEPAN / ALIGNING THE FUTURE

PT Semen Indonesia (Persero), Tbk mendukung pencapaian Tujuan Pembangunan Berkelanjutan (SDGs) 2030 melalui peningkatan kapasitas produksi untuk memenuhi kebutuhan konsumen. Di samping itu, Persero terlibat langsung dalam proses pembangunan nasional dengan tetap memperhatikan dampak kegiatan operasi terhadap aspek ekonomi, sosial dan lingkungan. Kinerja ekonomi ditingkatkan melalui diversifikasi produk, pemasaran, dan transformasi biaya. Pengendalian dampak lingkungan dilakukan melampaui yang diprasyaratkan dan penciptaan nilai sosial diupayakan melalui pengembangan masyarakat secara berkesinambungan. Inilah peran dan kontribusi seluruh insan PT Semen Indonesia (Persero) yang menegaskan keberlanjutannya melalui: "Untuk Kualitas, Untuk Bumi, Untuk Indonesia".

PT Semen Indonesia (Persero), Tbk supports the efforts to achieve the Sustainable Development Goals (SDGs) 2030 by increasing production capacity to meet consumer needs. The company is also directly involved in the national development process while taking into account the impact of operations on economic, social and environmental aspects. Economic performance is enhanced through product diversification, marketing and cost transformation. Control of environmental impacts is carried out beyond the requirements and social value creation is pursued through sustainable community development. This is the role and contribution of all employees of PT Semen Indonesia (Persero) who redefine its sustainability with the theme: "For Quality, For Earth, For Indonesia".

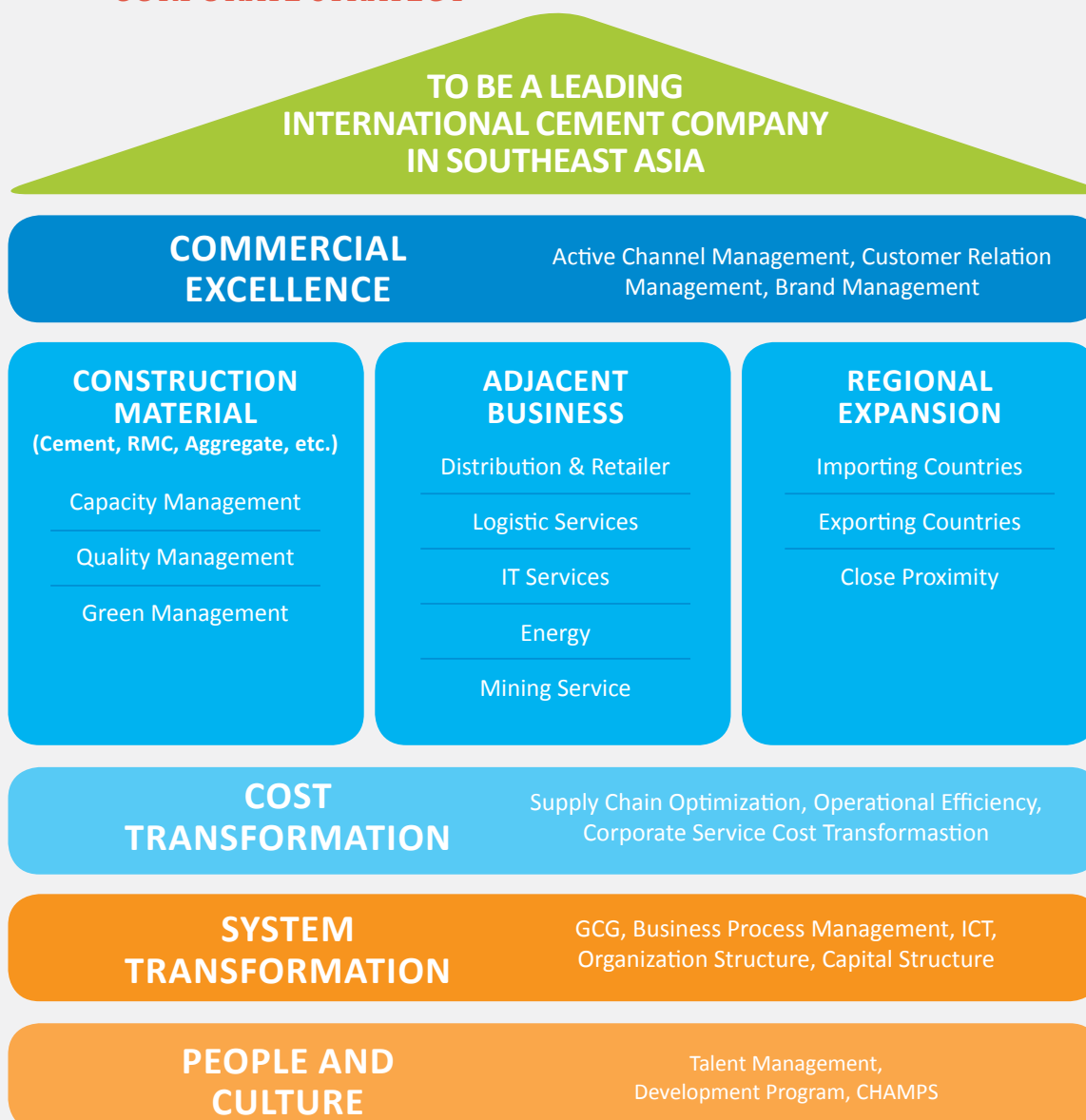


STRATEGI KEBERLANJUTAN / SUSTAINABILITY STRATEGY

Keberlanjutan Perseroan mencakup penerapan strategi korporasi jangka pendek maupun jangka panjang dalam mencapai visi Perseroan yang berkelanjutan. Strategi korporasi dirumuskan menjadi 3 pilar+1, yaitu *Construction Material, Adjacent Business, dan Regional Expansion*, ditambah dengan *Cost Transformation*. Pilar ini ditunjang *System and Structure, People and Culture* yang kuat untuk mencapai *Commercial Excellence*.

The Company's sustainability includes the implementation of short-term and long-term corporate strategies in achieving the Company's sustainability vision. The corporate strategy is formulated into 3 pillars + 1, namely Construction Material, Adjacent Business, and Regional Expansion, plus Cost Transformation. These pillars are supported by System and Structure, strong People and Culture to achieve Commercial Excellence.

STRATEGI KORPORASI CORPORATE STRATEGY



Sejalan dengan strategi korporasi, Perseroan konsisten melaksanakan cetak biru (*blue print*) CSR sejak tahun 2013 hingga sekarang untuk memastikan keberlanjutan. Cetak biru ini merupakan panduan melaksanakan inisiatif keberlanjutan dan pilar CSR dengan tema besar “Bersama Semen Indonesia Cerdaskan Negeri (Bersinergi)”.

In line with the corporate strategy, the Company has been consistently implementing the blue print of CSR since 2013 until now to ensure sustainability. This blueprint is a guide to implement sustainability initiatives and CSR pillars with a big theme “With Semen Indonesia Educating the Nation (dubbed as Bersinergi or Synergizing)”.

TEMA DAN PILAR CSR

CSR THEME AND PILLARS

BERSINERGI

BERSAMA SEMEN INDONESIA CERDASKAN NEGERI

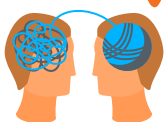
Untuk Keberlanjutan dengan Meningkatkan Sumber Daya Manusia (SDM)
dan Menjaga Sumber Daya Alam (SDA)

“BERSINERGI” (With Semen Indonesia Educating the Nation)

“For Sustainability by Improving Human Resources and Maintaining Natural Resources”

Program Pendidikan Education Program

SI CERDAS



- Mengutamakan pendidikan, pelatihan dan pendampingan kepada: karyawan bangunan, mitra bisnis lokal, dan calon tenaga kerja lokal melalui pendidikan kejuruan dan keterampilan.

- Pelibatan karyawan di berbagai bidang terkait untuk menjadi sukarelawan program CSR melalui kegiatan “employee volunteering/ social hour”

- Prioritizing education, training and assistance to: building employees, local business partners, and prospective local workers through vocational education and skill training.

- Involving employees in various related fields to volunteer for CSR programs through the activities of “employee volunteering/ social hour”

Program Produk dan Layanan Pelanggan Product and Customer Service Program

SI PRIMA



Meningkatkan kualitas pelayanan prima dan menjaga hubungan yang *win-win* dengan pelanggan, tukang bangunan, distributor, agen, kontraktor, supplier, dan pengembang.

Improving the quality of service excellence and maintain a win-win relationship with customers, construction workers, distributors, agents, contractors, suppliers, and developers.

Program Lingkungan Environmental Program

SI LESTARI



Melakukan inovasi, menggunakan teknologi terkini yang ramah lingkungan, serta berkontribusi dalam penggunaan energi alternatif terbarukan.

Creating innovations, using the latest environmentally friendly technology, and contributing to the use of renewable alternative energy.

Program Sosial Ekonomi Socio-Economic Program

SI PEDULI



Meningkatkan kualitas SDM masyarakat sesuai dengan kebutuhan secara wajar dan berimbang.

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

Pelaksanaan inisiatif keberlanjutan berfondasi pada praktik tata kelola yang baik (GCG) dan berorientasi pada Tujuan Pembangunan Berkelanjutan (SDGs) yang ditekankan pada lima aspek yang saling berhubungan dan terintegrasi, yaitu:

The implementation of sustainability initiatives is based on the good governance (GCG) practices and is oriented to the Sustainable Development Goals (SDGs) which focus on five interconnected and integrated aspects, namely:



Tantangan pelaksanaan strategi keberlanjutan secara menyeluruh adalah pengelolaan sinergi dengan pemangku kepentingan secara luas untuk mendukung perkuatan dan pengembangan bisnis. Perseroan telah mengantisipasinya melalui upaya pengelolaan dilakukan dengan berorientasi pada kemitraan yang berkelanjutan atas dasar adanya pertukaran nilai tambah yang saling menguatkan dan memberikan manfaat. Upaya yang dilakukan telah memberikan dampak positif berupa meningkatkan Daya Saing Perusahaan, Meningkatkan *Corporate Image* dan berdampak pada penguatan *Product Brand, Sustainability & Kelancaran Operasional Perusahaan*.

The challenge to implement a comprehensive sustainability strategy is to extensively manage synergy with stakeholders to support business consolidation and development. The Company has anticipated it through efforts in management with an orientation to sustainable partnerships based on exchange of value-added that mutually strengthening and beneficial. The efforts made have had a positive impact in increasing the Company's Competitiveness, Improving Corporate Image and having an impact on strengthening the Company's Product Brand, Sustainability & Seamless Operations.

Peningkatan kompetensi setiap insan Perseroan merupakan salah satu upaya menghadapi tantangan keberlanjutan yang dinamis. Perseroan telah mengantisipasinya melalui penyelenggaraan pendidikan dan pelatihan, baik di dalam maupun luar Perseroan. Pada 2018, sebanyak 82,5% karyawan mengikuti pendidikan dan pelatihan dari jumlah karyawan tetap 4.976 orang.

Increasing the competency of each of the Company's employee is one of the efforts to face dynamic sustainability challenges. The Company has anticipated this through education and training programs, both in-house and outside of the Company. In 2018, some 82.5% of 4,976 total permanent employees attended the education and training programs.

IKHTISAR KEBERLANJUTAN DAN KONTRIBUSI PADA SDGS

SUMMARY OF SUSTAINABILITY AND CONTRIBUTION TO SDGS

PROFIT

Goal 8

**Kuantitas Produk Terjual (Juta Ton)***Quantity of Product Sales (million tons)*

2018 : 30.58
2017 : 29.60
2016 : 27.60

Goal 9

**Pendapatan (Rp dalam Juta)***Revenue (in IDR million)*

2018 : 30,687,626
2017 : 27,813,664
2016 : 26,134,306

Goal 9

**Laba (Rp dalam Juta)***Profit (in IDR million)*

2018 : 3,079,866
2017 : 2,043,026
2016 : 4,535,036

PEACE & PARTNERSHIP

Goal 17

**Index Survei Kepuasan Pelanggan (Skala 0-100):***Customer Satisfaction Index (Scale 0-100):*

2018: Baru akan dilakukan Maret 2019
will be held in March 2019
2017: 90.6
2016: 89

Goal 17

**Pengaduan terselesaikan:***Complaints Resolved:*

2018: 7
2017: 2
2016: 3

Jumlah Mitra Binaan (mitra):*Number of SME Partners:*

2018: 39,575
2017: 37,612
2016: 35,321

Jumlah Denda atau Sanksi Karena Pelanggaran Regulasi*total violation/incident related to violation of regulations:*

2018: 0
2017: 0
2016: 0

PLANET

Goal 7

**Penggunaan Energi (GJ)***Energy Use (GJ)*

2018 : 109,921,492
2017 : 107,085,695
2016 : 97,114,328

Goal 13

**Pengurangan Emisi (Ton CO₂ eq)***Reduced emission (Ton CO₂ eq)*

2018 : 271,934
2017 : 200,230
2016 : 133,050

Goal 13

**Pemakaian Air (m³)***Water use (m³)*

2018 : 6,094,185
2017 : 7,277,816
2016 : 6,486,751

Goal 14 & 15

**Volume Limbah B3 Dimanfaatkan (Ton)***Volume of B3 Waste Utilization (ton)*

2018 : 25,779.65
2017 : 27,006.11
2016 : 29,839.14

Goal 15

**Luas Kawasan yang Dipulihkan***Restored Area*

2018 : 413.94 Ha
2017 : 667.39 Ha
2016 : 315.52 Ha

PEOPLE

Goal 1,3,4,6,8

**Investasi Pengembangan Masyarakat (Rp dalam Juta)***Investment on Community Development (million rupiah)*

2018 : 116,861
2017 : 192,854
2016 : 186,815

Goal 3

**Tingkat Kecelakaan Kerja Fatal (orang)***Fatal Work Accident Rate (People)*

2018 : 0
2017 : 1
2016 : 0

Goal 8

**Jumlah Tenaga Kerja (orang)***Total Employee (people)*

2018 : 4,976
2017 : 5,356
2016 : 5,902

DIREKTUR UTAMA MENYAPA

Greetings from President Director [102-14]

**Para Pemangku Kepentingan yang kami hormati,
Dear respected stakeholders,**

Kondisi perekonomian global yang belum cukup kuat masih menjadi tantangan kinerja perekonomian nasional. Pertumbuhan ekonomi global pada tahun 2018 mencapai 3,9% (yoy) sedikit naik dibandingkan tahun sebelumnya 3,7%. Adapun perekonomian Indonesia cukup stabil berada pada kisaran 5,07% hingga 5,27%, dari tahun sebelumnya. Sementara itu, Pertumbuhan Produk Domestik Bruto (PDB) juga tumbuh sekitar 9,43% dari tahun sebelumnya. Kondisi perekonomian ini berpengaruh terhadap masih lemahnya daya beli masyarakat, termasuk permintaan komoditas semen di sektor retail.

Pada saat bersamaan, pertumbuhan permintaan semen pada tahun 2018 masih terbatas karena kapasitas produksi bertambah, sehingga memberikan tekanan terhadap harga jual. Saat ini, terdapat 15 perusahaan semen di Indonesia dengan kapasitas terpasang sekitar 107,4 juta ton per-tahun, dan sebanyak 63% dari kapasitas (*capacity share*) tersebut dikuasai oleh pihak swasta dan pemain asing (global). Sementara, permintaan semen hanya berkisar 66,5 juta ton atau terdapat kelebihan pasok sebesar 40,9 juta ton.

Dalam lingkup pasar domestik, kami berhadapan dengan kompetitor yang merupakan perpanjangan tangan perusahaan semen global. Mereka menerapkan strategi *low pricing* dengan dukungan mesin lebih baru dan biaya modal yang lebih sedikit, sehingga biaya per ton produk bisa ditekan lebih rendah.

Di tengah kompetisi yang semakin ketat, kami mampu mempertahankan posisi sebagai pemimpin pasar domestik dengan *market share* lebih dari 40%.

Global economic conditions that have not yet strong remains a challenge to the national economy performance. Global economic growth in 2018 reached 3.9% (yoy), a slight increase from the previous year of 3.7%. The Indonesian economy grew relatively stable between 5.07% and 5.27%, from the previous year. Meanwhile, the Gross Domestic Product (GDP) also grew around 9.43% from the previous year. This economic condition affected people's purchasing power that remained weak, including demand for cement commodities in the retail sector.

At the same time, cement demand growth in 2018 was still limited as a result from increased production capacity, which put pressure on selling prices. Currently, there are 15 cement companies in Indonesia with installed capacity of around 107.4 million tons per year, and 63% of the capacity (capacity share) is controlled by the private sector and global players. Meanwhile, cement demand is only around 66.5 million tons, which means there is oversupply of 40.9 million tons.

In the domestic market, we have been dealing with competitors who are the arm of global cement companies. They apply low pricing strategies and support of newer machineries as well as lower costs of capital, that are able to cut costs per ton of product.

Amidst increasingly tight competition, we managed to maintain our position as domestic market leader with a market share of more than 40%.



Kami memiliki sejumlah catatan penting terkait tantangan Perseroan dalam mempertahankan posisi sebagai pemimpin pasar dan peluang mewujudkan visi: “Menjadi Perusahaan Penyedia Solusi Bahan Bangunan Terbesar di Regional.”

We have a number of important notes regarding the challenges faced by the Company in maintaining its position as a market leader and the opportunity to realize its vision: “To Be the Largest Building Material Solution Provider in the Region.”

HENDI PRIO SANTOSO
 D I R E K T U R
 D I R E K T O R
 P R E S I D E N T

MENYESUAIKAN MASA DEPAN

Keunggulan kompetitif kami optimalkan melalui inisiatif strategis untuk menjaga pertumbuhan yang berkelanjutan dengan menggunakan *Corporate Strategy Priority* yaitu: *Growth Strategy (Refresh)*, *Supply Chain Optimization*, *Centralized Marketing*, *Centralized Procurement*, dan *Cost Transformation & Enable Corporate Growth*.

Salah satu prioritas kami pada tahun 2018, yaitu perbaikan layanan dengan berupaya memenuhi kebutuhan konsumen dari hulu hingga hilir melalui diversifikasi produk. Saat ini, kami tidak hanya menawarkan beragam jenis semen, melainkan menyediakan juga produk solusi bahan bangunan seperti *precast*, *readymix concrete*, *porous concrete*, dan *flash concrete*. Kami juga menyediakan jasa-jasa yang terkait dengan pengelolaan industri semen dan hingga akhir 2018 kami telah memiliki 10 jenis semen dan 11 produk/jasa pendukung.

Pelayanan kami tingkatkan dengan memperluas pemasaran dari domestik ke regional. Strategi ini sekaligus menjadi upaya untuk memaksimalkan utilisasi kapasitas produksi, sehingga harga per unit produk tetap bersaing. Upaya ini juga mengurangi ketergantungan Perseroan pada kondisi demand dan supply semen di pasar Indonesia. Dari total produksi 30,8 juta ton, sebanyak 4,1 juta ton di ekspor ke sejumlah negara.

Perluasan pasar tersebut didukung dengan penyesuaian paradigma penjualan, dari fokus produksi menjadi fokus pelanggan. Kami membangun interaksi langsung ke pelanggan (*direct to customer*), baik pelanggan retail maupun pelanggan korporasi dengan melibatkan Unit Corporate Marketing yang bertugas memasarkan produk dalam partai besar.

Selain perbaikan layanan, kami juga meningkatkan program transformasi biaya untuk mempertahankan kinerja keuangan agar tetap positif pada saat biaya operasi meningkat, mengingat peningkatan harga

ALIGNING THE FUTURE

We have been optimizing our competitive advantage through strategic initiatives to maintain sustainable growth by using Corporate Strategy Priority, namely: Growth Strategy (Refresh), Supply Chain Optimization, Centralized Marketing, Centralized Procurement, and Cost Transformation & Enable Corporate Growth.

One of our priorities in 2018 was service improvement by meeting consumer needs from upstream to downstream through product diversification. Currently, we not only offer various types of cement, but also provide solutions for building materials such as precast, ready-mix concrete, porous concrete and flash concrete. We also provide services related to the cement industry management and by the end of 2018 we have had 10 types of cement and 11 supporting products/services.

We improve our services by expanding marketing from domestic to regional. This strategy also serves as an effort to maximize utilization of production capacity, to maintain the price per product unit remains competitive. This effort also managed to reduce the Company's reliance on conditions of cement demand and supply in the Indonesian market. With total production of 30.8 million tons, some 4.1 million tons have been exported to a number of countries.

The market expansion has been supported by adjusting the sales paradigm, from production focus to customer focus. We build direct to customers interactions, both retail and corporate customers by involving Corporate Marketing Unit in charge of marketing products in large quantities.

In addition to service improvements, we also increased the cost transformation program to maintain financial performance to remain positive when operating costs increase, given the rising commodity prices on the

komoditas di pasar internasional. Program transformasi biaya merujuk pada dua komponen biaya utama yang mempengaruhi daya saing bisnis semen, yaitu biaya distribusi dan biaya energi (bahan bakar dan biaya listrik). Kami menekan biaya distribusi dengan memperkuat saluran distribusi (*distribution channel*) untuk memperluas jaringan dan penetrasi pasar, melalui penerapan *Supply-Chain Management* (SCM) dan *Customer Relationship Management* (CRM) yang terintegrasi.

Untuk menekan biaya operasi, kami melakukan penghematan biaya energi, salah satunya melalui pengoperasian *Waste Heat Recovery Power Generation* (WHRPG). Pengoperasian WHRPG di Pabrik Indarung V Semen Padang sejak 2014 hingga sekarang dapat menghemat biaya energi Rp 33 miliar per tahun, efisiensi daya listrik 8 MW dan mengurangi emisi 43 ribu ton CO₂ per tahun. Sementara pengoperasian WHRPG di pabrik Tuban secara penuh dimulai pada Maret 2018 yang dapat menghemat belanja listrik hingga Rp120 miliar per tahun, efisiensi daya listrik 30 MW, dan mengurangi emisi 122 ton CO₂ per tahun.

Di sisi lain, kemampuan WHRPG mengurangi emisi CO₂ telah dipresentasikan di hadapan tim United Nations Framework Convention on Climate Change (UNFCCC) dan akan diverifikasi oleh tim independen untuk mendapatkan *Certified Emission Reduction* (CER). Perolehan CER dapat memberikan keuntungan finansial bagi Perseroan, seperti pada pelaksanaan proyek CDM di Pabrik Tuban. Proyek ini menghasilkan CER 213.717 ton CO₂eq dan sebagian telah dibeli oleh negara Swedia dengan harga 3,75 EURO per CER dengan perjanjian jual-beli yang berlaku hingga tahun 2019.

international market. The cost transformation program refers to the two main cost components that affect the competitiveness of the cement business, namely distribution costs and energy costs (fuel and electricity costs). We reduce distribution costs by strengthening distribution channels to expand networks and market penetration, through the implementation of integrated Supply Chain Management (SCM) and Customer Relationship Management (CRM).

To reduce operating costs, we applied efficiency on energy costs, including through the operation of Waste Heat Recovery Power Generation (WHRPG). The operation of WHRPG at Semen Padang Indarung V Plant since 2014 has managed to save energy costs of Rp33 billion per year, electricity efficiency of 8 MW and reduced emissions of 43,000 tons of CO₂ per year. Meanwhile, WHRPG at Tuban Plant that began full operation in March 2018, managed to save electricity spending up to Rp120 billion per year, electricity efficiency of 30 MW, and reduced emissions of 122 tons of CO₂ per year.

On the other hand, the ability of WHRPG to reduce CO₂ emissions has been presented before the United Nations Framework Convention on Climate Change (UNFCCC) team and will be verified by an independent team to obtain Certified Emission Reduction (CER). The CER may provide financial benefits for the Company, such as the implementation of CDM projects at Tuban Plant. The project produced CER of 213,717 ton CO₂eq and some have been purchased by Sweden at a price of 3.75 EURO per CER with a sale-purchase agreement that is valid until 2019.



PENGELOLAAN LINGKUNGAN DAN SOSIAL

Selain memberikan keuntungan finansial, pengurangan emisi melalui proyek CDM dan WHRPG merupakan wujud dari komitmen pengendalian dampak lingkungan hidup dari kegiatan operasi. Kinerja pengelolaan lingkungan hidup dievaluasi secara berkala oleh pihak internal maupun eksternal untuk memastikan telah memenuhi parameter peraturan dan standar yang berlaku. Kami juga mengikuti inisiatif lingkungan hidup yang diselenggarakan pemerintah secara rutin untuk mengetahui pencapaian kinerja yang lebih objektif. Business Unit Tuban, PT Semen Padang dan PT Tonasa meraih penghargaan Industri Hijau Level 5 (tertinggi) sejak tahun 2014 hingga tahun 2018 dari Kementerian Perindustrian atas upaya efisiensi dan efektifitas penggunaan sumber daya secara berkelanjutan pada proses produksinya.

Dalam Program Penilaian Peringkat Kinerja Lingkungan Hidup Perusahaan (PROPER) yang diselenggarakan Kementerian Lingkungan Hidup dan Kehutanan, Business Unit Tuban mendapatkan penghargaan PROPER Hijau pada tahun 2018. Pencapaian ini menunjukkan perusahaan telah memenuhi kriteria penilaian atas komitmen pengelolaan lingkungan sesuai dengan yang dipersyaratkan dan upaya pengembangan masyarakat secara berkesinambungan. Untuk mencapai kinerja PROPER yang lebih tinggi dari saat ini yang diperoleh yaitu HIJAU, kami masih harus mengatasi adanya isu negatif terkait permasalahan sosial di suatu daerah, walaupun sebenarnya tidak terkait langsung dengan perseroan.

Pada dasarnya setiap potensi permasalahan sosial di suatu daerah telah kami antisipasi melalui pelaksanaan program pengembangan masyarakat, Program Kemitraan dan Bina Lingkungan (PKBL), termasuk pembangunan infrastruktur, berbasis hasil studi pemetaan sosial (*social mapping*) di masing-masing area Anak Perusahaan dan Business Unit Semen Indonesia. Kami melibatkan forum komunikasi multi-pemangku kepentingan (*multistakeholder*) dalam proses perencanaan, pelaksanaan, pemantauan hingga evaluasi program agar dapat memberikan dampak positif, di antaranya dapat menyelesaikan masalah-masalah

ENVIRONMENTAL AND SOCIAL MANAGEMENT

In addition to providing financial benefits, emissions reduction through the CDM and WHRPG projects is a manifestation of a commitment to control environmental impacts from operations. Environmental management performance is regularly evaluated by internal and external parties to ensure that it meets the parameters of applicable regulations and standards. We also regularly participated in environmental initiatives organized by the government to find out more objective performance achievements. Business Unit Tuban, PT Semen Padang and PT Tonasa have won the Green Industry award Level 5 (highest) since 2014 to 2018 from the Ministry of Industry for their efforts of efficient and effective use resources in their production process.

In the Corporate Environmental Management Performance Rating Program (PROPER) organized by the Ministry of Environment and Forestry, Tuban Business Unit received Green PROPER award in 2018. This achievement shows the company has met the assessment criteria on environmental management commitment in accordance with the requirements and continuous community development efforts. To earn PROPER performance rating that is higher than current GREEN rating, we still have to overcome the negative issues related to social problems in an area, even though they are not directly related to the company.

Essentially, we anticipate every potential social problem in an area through the implementation of community development program, Partnership and Community Development Program (PKBL), including infrastructure development, based on the results of social mapping studies in each area of Semen Indonesia Subsidiaries and Business Units. We involve multi-stakeholder communication forums in the process of planning, implementation, monitoring and evaluation of the programs to give positive

sosial yang terjadi di masyarakat, mencegah munculnya konflik sosial, serta memenuhi kebutuhan masyarakat.

Terkait penciptaan peluang kerja bagi masyarakat umum, Perseroan telah mempekerjakan 4.987 orang karyawan pada tahun 2018. Karyawan merupakan elemen penting bagi Perseroan dalam rangka mencapai keberlanjutan di masa depan. Kami memprioritaskan investasi peningkatan kompetensi karyawan di setiap jenjang dan fungsi yang sejalan dengan strategi bisnis. Kebijakan ini juga diberlakukan untuk perumusan formulasi inisiatif remunerasi dan manfaat bagi karyawan berbasis ketentuan perundangan yang berlaku. Komitmen kami untuk menciptakan kinerja Kesehatan dan Keselamatan Kerja (K3) juga menjadi prioritas dengan tercapainya *zero fatality accident*.

impact, including solving social problems that occur in the community, preventing social conflicts, and meeting community needs.

Regarding job creation for the general public, the Company has hired 4,987 employees in 2018. Employees are an important element for the Company to achieve sustainability in the future. We prioritize investments to improve employee competency at every level and function in line with business strategy. This policy also applies to the formulation of remuneration initiatives and benefits for employees based on the provisions of applicable laws. Our commitment to improve Occupational Health and Safety (OHS) performance is also our priority through achievement of zero fatality accidents.

PENUTUP

Seluruh pencapaian tahun 2018 menjadi fondasi yang kokoh bagi kami untuk terus melangkah memanfaatkan momentum pertumbuhan dalam mencapai target kinerja keberlanjutan yang berorientasi pada Tujuan Pembangunan Berkelanjutan (SDGs). Kami bertekad untuk bersinergi dengan seluruh pemangku kepentingan, terutama karyawan, untuk selalu menyesuaikan perubahan di masa depan: “Untuk Kualitas, Untuk Bumi, Untuk Indonesia”. Kami juga akan selalu beradaptasi dan tetap berkomitmen meneruskan keberlanjutan yang sudah kami tanamkan sejak Perusahaan ini berdiri.

Akhirnya, kami menyampaikan terima kasih dan penghargaan setinggi-tingginya kepada jajaran manajemen dan seluruh karyawan yang telah berdedikasi dan terus beradaptasi dengan perubahan masa depan.

CLOSING

All of our achievements in 2018 have become a solid foundation for us to continue seizing the momentum of growth in meeting sustainability performance targets with orientation to the Sustainable Development Goals (SDGs). We are determined to create synergy with all stakeholders, especially employees, to always adapt to future changes: “For Quality, For the Earth, For Indonesia”. We will continue to adapt and to carry on with the sustainability commitment that we have embedded since the Company was founded.

We would like to express our highest gratitude and appreciation to the management and all employees for their dedication and continue to adapt to future changes.

Jakarta, 28 Februari 2019
Jakarta, 28 February 2019

Hendi Prio Santoso
Direktur Utama
President Director

PROFIL PERSEROAN

Company Profile

[102-1]

PT Semen Indonesia (Persero) Tbk, yang sebelumnya bernama PT Semen Gresik (Persero) Tbk bergerak di bidang industri persemenan.

PT Semen Indonesia (Persero) Tbk, formerly known as PT Semen Gresik (Persero) Tbk, is engaged in the cement industry.



2013

Pada tahun 2013, Semen Gresik Group berubah menjadi PT Semen Indonesia (Persero) Tbk atau Semen Indonesia Group sebagai *strategic holding company* yang menaungi PT Semen Gresik, PT Semen Padang, PT Semen Tonasa, dan Thang Long Cement JSC. Saat ini Perseroan memiliki beberapa lini usaha yang memproduksi dan mendistribusikan produk semen serta produk hilir semen dalam satu kesatuan yang terintegrasi.

In 2013, Semen Gresik Group changed into PT Semen Indonesia (Persero) Tbk or Semen Indonesia Group as a strategic holding company overseeing PT Semen Gresik, PT Semen Padang, PT Semen Tonasa, and Thang Long Cement JSC. At present the Company has several business lines that produce and distribute cement products and cement downstream products in an integrated unit.

1995

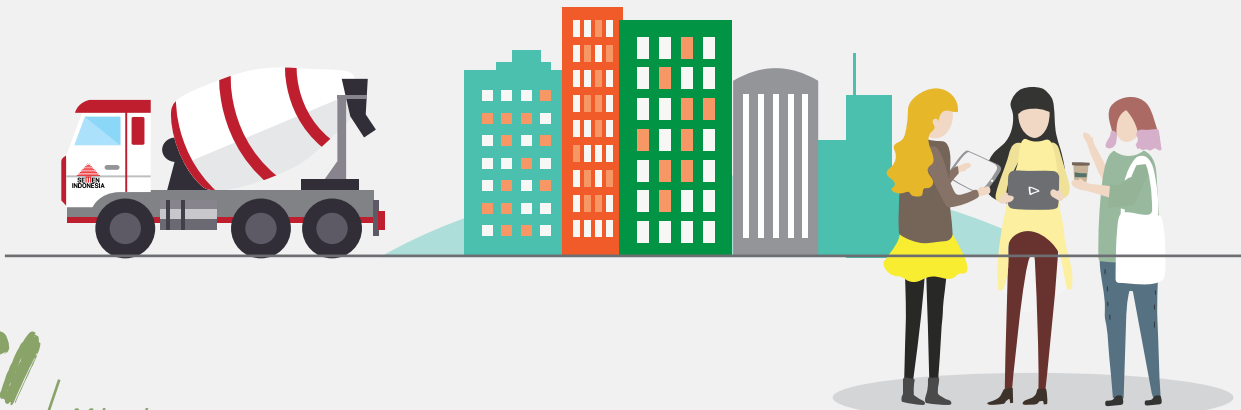
Pada tahun 1995, Semen Indonesia melakukan konsolidasi dengan PT Semen Padang dan PT Semen Tonasa yang kemudian dikenal dengan nama Semen Gresik Group.

In 1995, Semen Indonesia consolidated with PT Semen Padang and PT Semen Tonasa which later became known as Semen Gresik Group.

VISI / Vision [102-16]

Menjadi Perusahaan Persemenan Internasional yang Terkemuka di Asia Tenggara.

To Be A Leading International Cement Company In Southeast Asia.



MISI / Mission

Mengembangkan usaha persemenan dan industri terkait yang berorientasikan kepuasan konsumen.

Developing cement business and related industries oriented in customer satisfaction.

Mewujudkan perusahaan berstandar internasional dengan keunggulan daya saing dan sinergi untuk meningkatkan nilai tambah secara berkesinambungan.

Realizing international standard company with competitive advantages and synergies to increase added value continuously.

Mewujudkan tanggung jawab sosial serta ramah lingkungan.

Realizing social responsibility and environmentally friendly.

Memberikan nilai terbaik kepada para pemangku kepentingan (stakeholders).

Giving the best value to the stakeholders.

Membangun kompetensi melalui pengembangan sumber daya manusia.

Building competencies through human resources development.

BUDAYA PERUSAHAAN

/ Corporate Culture

C H A M P S

**Compete
With a Clear
& Synergized
Vision**

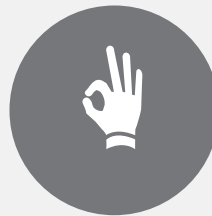
**Perform Ethically
with High
Integrity**

**Act with
High
Accountability**

**Meet
Customer
Expectation**

**Have a High
Spirit for
Continuous
Learning**

**Strengthening
Teamwork**



PRODUK DAN SERTIFIKASI

Products and Certification [102-2]

Perseroan memiliki empat merek produk semen dan 11 produk pendukung. Semen utama yang diproduksi adalah semen Portland Tipe II-V (Non-OPC), dan berbagai tipe khusus serta semen campur (*special blended cement*) untuk penggunaan terbatas. Keseluruhan proses produksi menerapkan standar operasional tinggi untuk menghasilkan jenis produk berstandar nasional maupun internasional.

The company has four brands of cement products and 11 supporting products. The main cement produced is Portland cement Type II-V (Non-OPC), and various special types and special blended cement for limited use. The entire production process applies high operational standards to produce national and international standard products.

INFORMASI PRODUK

PRODUCT INFORMATION



Semen Gresik



Semen Padang



Semen Tonasa



Thang Long Cement

Jenis Produk / Type of Product

- Ordinary Portland Cement Tipe I
- Portland Cement Tipe II
- Ordinary Portland Cement Tipe III
- Ordinary Portland Cement Tipe V
- Portland Pozzoland Cement (PPC)
- Portland Composite Cement (PCC)
- Super Masonary Cement (SMC)
- Oil Well Cement, Class G-HSR (High Sulfate Resistance)
- Special Blended Cement (SBC)
- Max Strength
- Portland Cement Blender (PCB40)
- Portland Cement (PC50)



PRODUK PENDUKUNG

SUPPORTING PRODUCTS

- | | | | |
|------------------------------------|-----------------------------|---------------------------------------|--|
| 1. Logistik | 2. Perdagangan | 3. Pertambangan & sewa alat berat | 8. Mansonry & Other Concrete product |
| - Logistik terintegrasi | - International trading | 4. Kawasan Industri | 9. Ground Granulated Blast Furnace Slag (BGGBFS) |
| - Transportasi darat | - Perdagangan umum industri | 5. Ready mix concrete | 10. Kemasan industri |
| - Transportasi laut | - Perdagangan umum tambang | 6. Precast concrete | 11. Jasa dan konsultasi |
| - International freight forwarder | | 7. Aggregate product | |
| 1. Logistics | 2. Trade | 3. Mining & rental of heavy equipment | 8. Mansonry & Other Concrete products |
| - Integrated logistics | - International trading | 4. Industrial Estate | 9. Ground Granulated Blast Furnace Slag (BGGBFS) |
| - Land transportation | - General industrial trade | 5. Ready mix concrete | 10. Industrial packaging |
| - Sea transportation | - General mining trade | 6. Precast concrete | 11. Services and consultation |
| - International freight forwarders | | 7. Aggregate product | |

SERTIFIKASI / Certification [102-12]

Semen Indonesia beserta Anak Perusahaan dan *Business Unit* telah tersertifikasi dalam berbagai aspek, baik dalam lingkup nasional maupun internasional. Daftar sertifikat yang sudah didapatkan oleh Semen Indonesia, Anak Perusahaan dan *Business Unit* dapat dilihat pada lampiran 1 laporan ini.

Semen Indonesia 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 Semen Indonesia, Subsidiaries and Business Units can be seen in appendix 1 of this report.



PENGHARGAAN / Awards

PT Semen Indonesia (Persero) Tbk dan Anak Perusahaan, serta *Business Unit* memperoleh penghargaan atas kinerja yang telah dilakukan selama tahun 2018. Penjelasan lebih rinci terkait penghargaan yang diperoleh Perseroan dapat dibaca pada lampiran 2 laporan ini.

PT Semen Indonesia (Persero) Tbk and Subsidiaries, as well as Business Units received awards for the performance carried out during 2018. More detailed explanations regarding the awards received by the Company can be found in appendix 2 of this report.

KAPASITAS PRODUKSI DAN SKALA PERSEROAN

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

Perseroan memiliki 14 *Integrated Cement Plant* yang berada di Indarung (Sumatera Barat), Tuban (Jawa Timur), Pangkep (Sulawesi Selatan) dan Rembang. Saat ini total kapasitas produksi terpasang sebesar 32.304 juta Ton semen per tahun.

The Company has 14 *Integrated Cement Plants* located in Indarung (West Sumatra), Tuban (East Java), Pangkep (South Sulawesi) and Rembang (Central Java). At present the total installed production capacity is 32,304 million tons of cement per year.

SKALA PERSEROAN

SCALE OF THE COMPANY [102-7]

Uraian Description	Satuan Unit	Periode Pelaporan Reporting Period		
		2018	2017	2016
Jumlah Karyawan Tetap Number of Employee	Orang People	4,976	5,356	5,902
Total Pendapatan Total Revenue	Rp juta Million IDR	30,687,626	27,813,664	26,134,306
Total Kapitalisasi Total Capitalization	Rp juta Million IDR	18,419,594	19,022,618*	13,652,504
• Utang / Debt • Ekuitas / Equity		32,736,296	30,046,033*	30,574,391
Kuantitas Produk Terjual Quantity of Product Sold	Juta Metrik Ton Million Metric Ton	30.58	29.60	27.60
Total Aset Total Assets	Rp juta Million IDR	51,155,890	49,068,650*	44,226,895

* Terdapat restatement nilai kapitalisasi dan total aset tahun 2017 disebabkan adanya perbedaan metode perhitungan

* There were restatements of total capitalization and total assets in 2017 & 2016 due to different calculation methods

BENTUK BADAN HUKUM DAN KEPEMILIKAN

Legal Entity Form and Ownership [102-5]

Perseroan merupakan Badan Usaha Milik Negara (BUMN) yang berbentuk Perusahaan Terbatas (PT). Saham Perseroan telah tercatat di Bursa Efek Jakarta, melalui *Initial Public Offering* (IPO) yang dilaksanakan pada 8 Juli 1991. Saat ini persentase kepemilikan saham Perseroan terdiri dari 51,01% pemerintah dan 48,99% publik. Saham dengan kode SMGR tercatat dalam daftar indeks *Sustainable and Responsible Investment* (SRI) Keanekaragaman Hayati Indonesia (KEHATI).

The Company 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, through an *Initial Public Offering* (IPO) held on July 8, 1991. At present the percentage of the Company's shareholding consists of 51.01% owned by the government and 48.99% by the public. The Company's shares with ticker code SMGR are listed on the *Sustainable and Responsible Investment* (SRI) index list of Keanekaragaman Hayati Indonesia (KEHATI) or Indonesian Biodiversity.

KEANGGOTAAN ASOSIASI

/ Association Membership [102-13]

Keanggotaan Perseroan dalam Asosiasi Semen Indonesia (ASI) hingga saat ini memberikan manfaat strategis dalam pengembangan industri semen nasional terkait produksi, kualitas, pemasaran, penelitian dan pengembangan. Perseroan juga tercatat sebagai anggota Kamar Dagang dan Industri (KADIN) yang memberikan manfaat strategis turut menciptakan iklim perdagangan semen yang sehat di Indonesia. Sebagai anggota kedua asosiasi tersebut, Perseroan tidak memberikan kontribusi finansial, serta tidak berpartisipasi dalam proyek atau komite yang dibentuk asosiasi.

The Company's membership in the Indonesian Cement Association up until now has provided strategic benefits in the development of the national cement industry related to production, quality, marketing, research and development. The company is also registered as a member of the Chamber of Commerce and Industry (KADIN), which provides strategic benefits in creating a healthy climate for cement trade in Indonesia. As a member of both associations, the Company does not make financial contributions, and does not participate in projects or committees formed by the association.

PANGSA PASAR

/ Market Share [102-6]

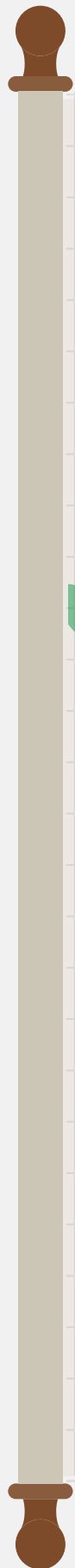
Perseroan menawarkan produk dan jasa di dalam dan luar negeri dengan menekankan strategi *direct to customer*, yakni memaksimalkan keunggulan utama Perseroan untuk melakukan konsolidasi di pasar domestik. Sektor yang dilayani, antara lain industri semen dengan penerima manfaat masyarakat umum, pemerintah, dan korporat. Pangsa pasar domestik Perseroan berada di kisaran 39% di tahun 2018 yang sebelumnya 40,8% di tahun 2017.

The Company offers products and services at home and abroad by emphasizing direct to customer strategies, namely maximizing the Company's main advantages to consolidate in the domestic market. The sectors served, among others, are the cement industries with consumers comprise general public, government and corporations. The Company's domestic market share is in the range of 39% in 2018 which was previously 40.8% in 2017.

VOLUME PENJUALAN DAN PASAR TERLAYANI

SALES VOLUME AND MARKET SERVED

Pemasaran Marketing	Volume Penjualan (ton) Sales Volume (ton)	Pasar Terlayani (%) Market Share (%)	Volume Penjualan (ton) Sales Volume (ton)	Pasar Terlayani (%) Market Share (%)	Volume Penjualan (ton) Sales Volume (ton)	Pasar Terlayani (%) Market Share (%)
	2018		2017		2016	
Dalam Negeri Domestic	27,421,500	39,45%	27,091,728	40.80%	25,810,791	41.70%
Luar Negeri Overseas	3,170,126	55.5%	1,870,861	63.9%	632,456	39.4%
Total	30,591,626	40.7%	28,962,590	41.8%	26,314,599	41.6%



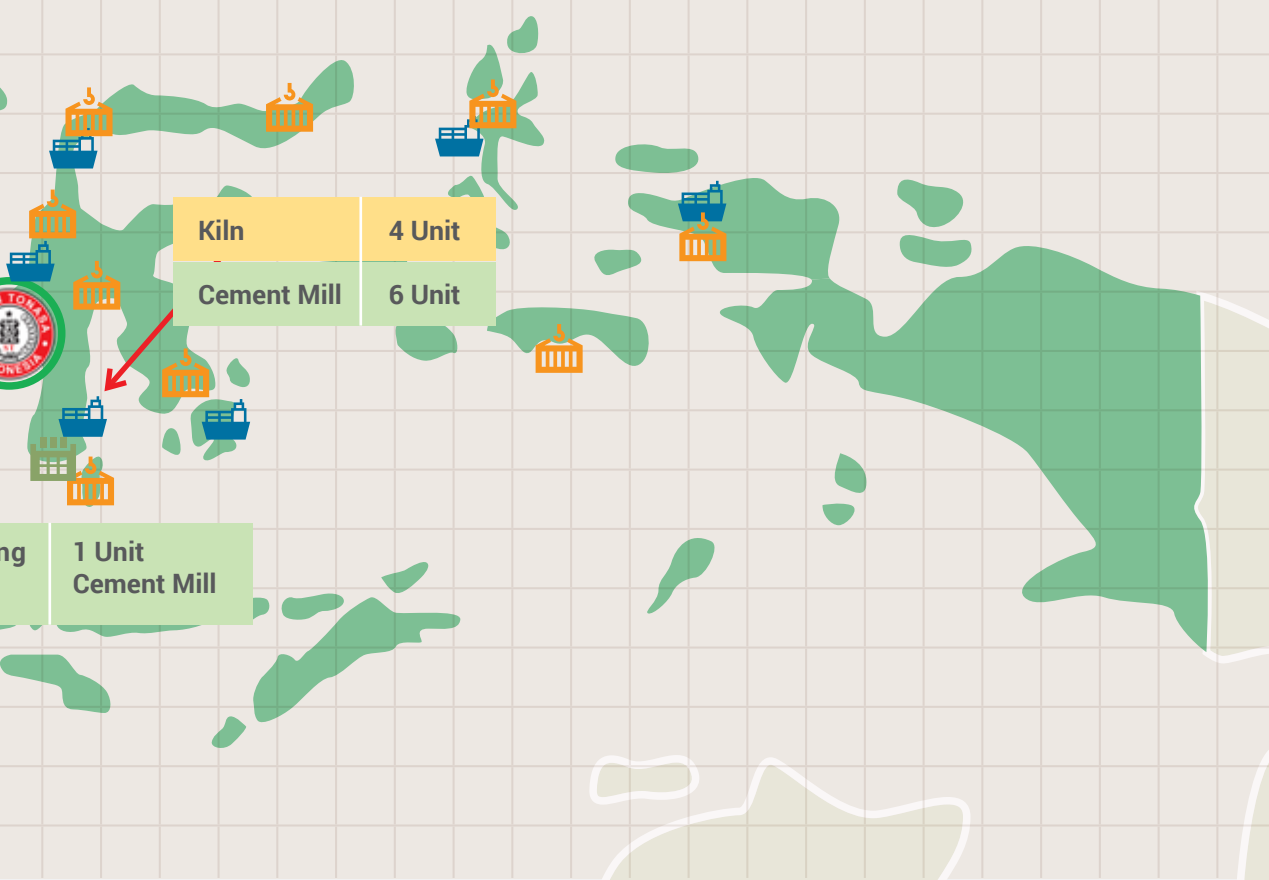
WILAYAH OPERASI DAN DISTRIBUSI

Areas of Operation
and Distribution [102-4]

Jumlah Fasilitas Operasi Semen Indonesia Grup

Number of Operating Facilities of Semen Indonesia Group 2018

	Integrated Cement Plant	4 lokasi 4 Locations
	• Kiln	15 Units
	• Cement Mill	26 Units
	Grinding Plant	3 Lokasi 3 Locations
	• Cement Mill	7 Units
	Gudang Warehouse	13 Lokasi 13 Locations
	Packing Plant	25 Lokasi 25 Locations
	Pelabuhan Port	19 Lokasi 19 Locations



MANAJEMEN RANTAI PASOK / Supply Chain Management [102-9]

Perseroan menerapkan manajemen rantai pasok (*supply chain management/SCM*) dengan strategi lebih dekat dengan pelanggan (*move closer to-customer*). Aliran barang, informasi, dan finansial diintegrasikan mulai dari hulu sampai hilir untuk menciptakan nilai tambah bagi pelanggan. Penerapan strategi ini juga mencakup pengelolaan hubungan dengan pihak eksternal, seperti *supplier*, transportir/ekspediter, distributor, dan mitra strategis lainnya yang telah lolos dari proses seleksi dengan kriteria keberlanjutan yang ditetapkan Perseroan. Kriteria tersebut meliputi kemampuan transporter dalam pengelolaan armada baik darat maupun laut, memiliki pakta integritas yang terkait dengan *supply chain channel*, memiliki pengelolaan distribusi yang terintegrasikan, serta menggunakan pola distribusi menggunakan pendekatan *center of gravity*.

The Company applies Supply Chain Management (SCM) with a strategy 'move closer to customer'. The flow of goods, information and finance are integrated from upstream to downstream to create added value for customers. The implementation of this strategy also includes managing relationships with external parties, such as suppliers, transporters/expeditors, distributors, and other strategic partners who have passed the selection process with the sustainability criteria set by the Company. The criteria include the ability of transporters in managing both their land and sea fleet, having integrity pact regarding supply chain channel, having integrated distribution management, and using distribution patterns with center of gravity approach.

JUMLAH PEMASOK SEMEN INDONESIA DAN NILAI KONTRAK PEKERJAAN

NUMBER OF SEMEN INDONESIA'S SUPPLIERS AND CONTRACT VALUE

Tahun Years	Pengadaan Barang Goods Procurement		Pengadaan Jasa Services Procurement	
	Jumlah Pemasok Number of Suppliers	Nilai Kontrak (Rp Juta) Working Contract Values (Million IDR)	Jumlah Pemasok Number of Suppliers	Nilai Kontrak (Rp Juta) Working Contract Values (Million IDR)
2018	323	7,510,353.28	236	2,482,826.15
2017	278	3,333,985.73	203	1,872,746.34
2016	320	2,902,742.32	249	1,867,284.99

AKUISISI HOLCIM INDONESIA / Acquisition of Holcim Indonesia [102-10]

Pada 12 November 2018, Perseroan mengakuisisi 80,6% kepemilikan saham LafargeHolcim di PT Holcim Indonesia Tbk melalui Perjanjian Pengikatan Jual Beli Bersyarat (*Conditional Sales & Purchase Agreement*). Holcim Indonesia memiliki empat pabrik semen berkapasitas 14,8 juta ton per tahun dan 30 fasilitas *ready-mix*. Lokasinya berada di Lhok Nga (Aceh),

On November 12, 2018, the Company acquired 80.6% of LafargeHolcim shares in PT Holcim Indonesia Tbk through a Conditional Sales & Purchase Agreement. Holcim Indonesia has four cement plants with a capacity of 14.8 million tons per year and 30 ready-mix facilities. The locations are in Lhok Nga (Aceh), Cibinong (West Java), Cilacap (Central Java),



Cibinong (Jawa Barat), Cilacap (Jawa Tengah), dan Tuban (Jawa Timur), serta dilengkapi dengan terminal distribusi di Sumatera dan Kalimantan.

Akuisisi Holcim menjadikan total produksi Perseroan menjadi sekitar 50 juta ton pertahun dengan pangsa pasar 55 % di Indonesia. Perubahan skala perusahaan ini juga mengukuhkan posisi Perseroan menjadi salah satu perusahaan 10 besar industri semen di dunia. Selama satu tahun pertama, Perseroan masih akan menggunakan *brand* Holcim sebagai masa peralihan.

and Tuban (East Java), which are equipped with distribution terminals in Sumatra and Kalimantan.

Holcim's acquisition has increased the Company's total production to around 50 million tons per year with a market share of 55% in Indonesia. The change of scale also solidified the Company's position as one of the top 10 cement industries in the world. During the first year, the Company will still use the Holcim brand as a transition period.



KOMPOSISI KARYAWAN

EMPLOYEE COMPOSITION

Komposisi karyawan Perseroan di tahun 2018 terdiri dari 4.976 karyawan tetap, 51 karyawan tidak tetap, dan tidak ada karyawan musiman maupun paruh waktu. Karyawan yang berakhir masa kerjanya berjumlah 161 orang. Dari sisi *turn over rate*, sebesar 3,23%, lebih rendah/tinggi dibandingkan tahun 2017 yang mencapai 4,98%.

Dari total 4.976 karyawan, seluruh atau 100% karyawan terikat Perjanjian Kerja Bersama (PKB) yang menjadi rujukan dalam melaksanakan hubungan industrial. Dalam PKB diatur mengenai hubungan kerja, waktu kerja dan cuti, dispensasi, remunerasi, fasilitas dan kesejahteraan, termasuk larangan pekerja anak (usia di bawah 18 tahun), dan kerja paksa.

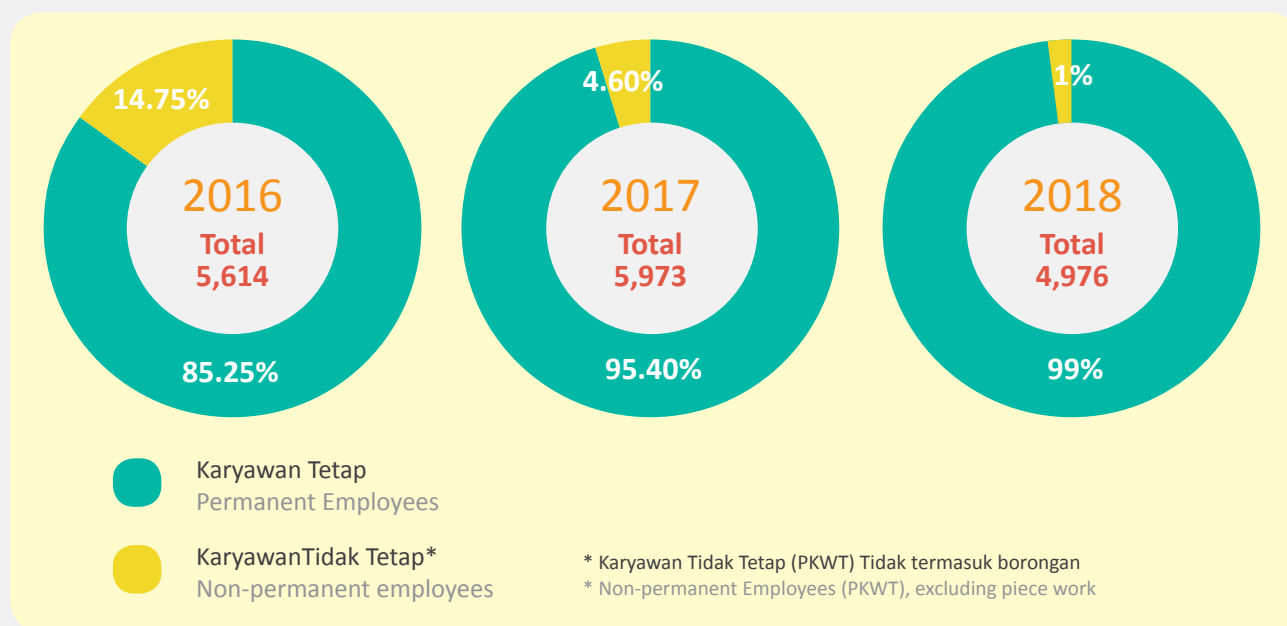
The composition of the Company's employees in 2018 consisted of 4,976 permanent employees, 51 non-permanent employees, and there were no seasonal or part-time employees. As many as 161 employees ended their working period. Meanwhile, turnover rate was 3.23%, lower/higher than in 2017 which reached 4.98%.

Of the total 4,976 employees, all or 100% of employees are bound by the Collective Labor Agreement (PKB) which is a reference in carrying out industrial relations. In the PKB it is regulated regarding work relations, work time and leave, dispensation, remuneration, facilities and welfare, including the prohibition of child labor (under 18 years), and forced labor



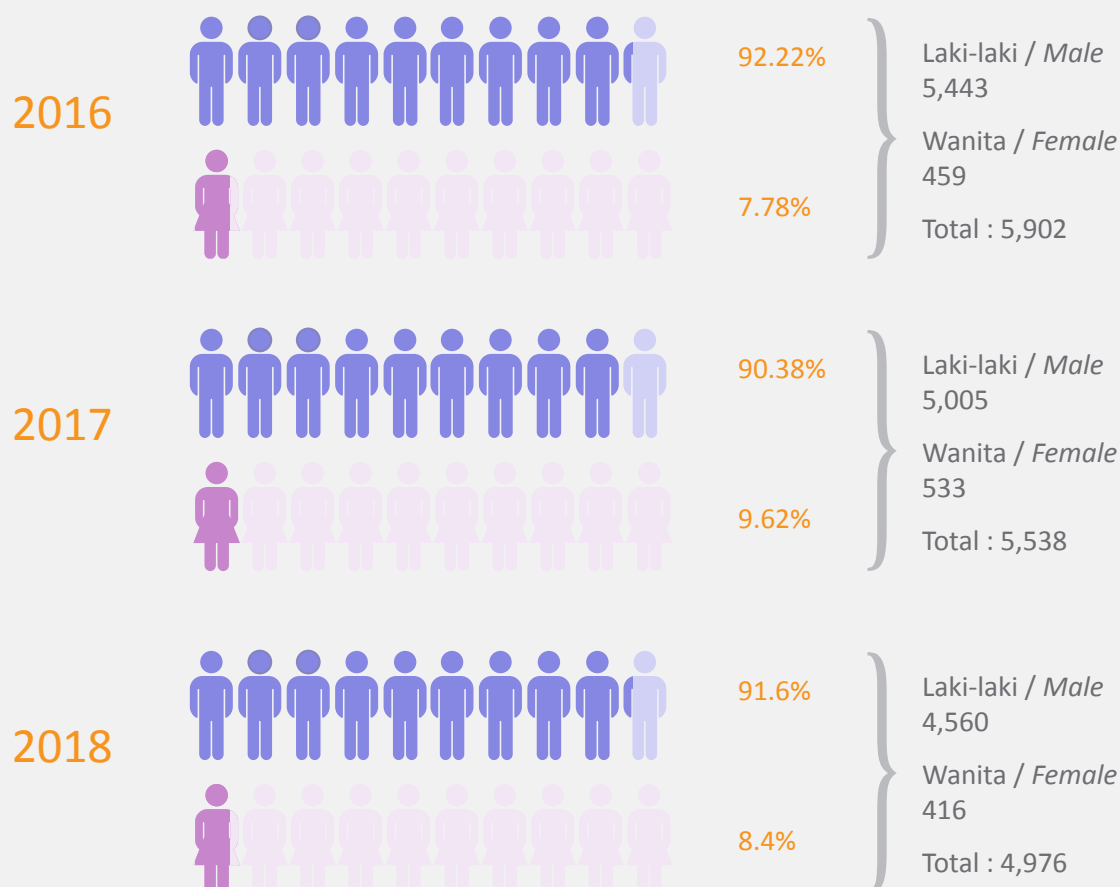
JUMLAH KARYAWAN BERDASARKAN STATUS

NUMBER OF EMPLOYEES BY STATUS



JUMLAH KARYAWAN BERDASARKAN GENDER

NUMBER OF EMPLOYEES BY GENDER



Uraian lebih lengkap mengenai sumber daya manusia Perseroan (termasuk komposisi karyawan berdasarkan tingkat pendidikan, usia, jenjang manajemen) disajikan dalam Laporan Tahunan 2018 yang saling melengkapi Laporan Keberlanjutan ini.

A more detailed description of the Company's human resources (including composition of employees by education level, age, management level) is presented in the Annual Report 2018 which complements this Sustainability Report

INDEKS KEPUASAN PEKERJA

EMPLOYEE SATISFACTION INDEX

Secara umum, skor *Employee Engagement* SMI Group berada di kisaran 76% - 84%. Persentase tersebut merupakan hasil pembandingan skor antara total responden dengan skor maksimal. Hasil *employee engagement* tertinggi tahun 2018 diperoleh oleh PT Semen Indonesia (Persero) Tbk, sementara hasil terendah diperoleh oleh PT Semen Padang.

In general, SMI Group's Employee Engagement score has been in the range of 76% - 84%. This percentage is the result of comparing scores between total respondents with maximum scores. The highest employee engagement results in 2018 was earned by PT Semen Indonesia (Persero) Tbk, while the lowest results was received by PT Semen Padang.

Skor Indeks Kepuasan Pekerja SMI Group

SMI Group Employee Satisfaction Index Score

Perusahaan	Skor Rerata	Kategori
PT Semen Indonesia (Persero)	38	Tinggi
PT Semen Gresik	35	Sedang
PT Semen Padang	34	Sedang
PT Semen Tonasa	37	Tinggi

PT Semen Indonesia (Persero) Tbk

84%

PT Semen Gresik

79%

PT Semen Padang

76%

PT Semen Tonasa

82%

72% 74% 76% 78% 80% 82% 84%

KESETARAAN KARYAWAN DAN REMUNERASI

EQUALITY OF EMPLOYEES AND REMUNERATION

Asas kesetaraan dan kewajaran menjadi dasar bagi Perseroan mengelola sumber daya manusia. Terkait remunerasi dan manfaat bagi karyawan ditetapkan berbasis ketentuan perundangan yang berlaku, termasuk Upah Minimum Provinsi (UMP).

The principle of equality and fairness is the basis for the Company to manage human resources. Remuneration and benefits for employees are determined based on the provisions of applicable laws and regulations, including the Provincial Minimum Wage (UMP).

PERBANDINGAN IMBAL JASA DAN UMP

SERVICE COMPARISON AND UMP

No.	Grup Semen Indonesia Semen Indonesia Group	Provinsi Province	Upah Minimum Provinsi* Provincial Minimum Wage*	Imbal Jasa Karyawan Tingkat Terendah Remuneration of Lowest Rank Employee	Persentase Percentage
1	PT Semen Indonesia (Persero)	DKI Jakarta	Rp 3,355,750 *)	Rp4,294,351	127%
2	Business Unit Tuban	Jawa Timur	Rp 1,388,000 *)	Rp4,234,774	305%
3	PT Semen Padang	Sumatera Barat	Rp 2.100.000 *)	Rp5,413,437	257%
4	PT Semen Tonasa	Sulawesi Selatan	Rp 2,435,625 *)	Rp5,500,000	225%
5	Thang Long Cement	Vietnam, Quang Ninh	900,000 VND estimasi setara Rp1,745,081	3,540,000 VND estimasi setara Rp2,130,092	122%
6	PT Semen Gresik	Rembang	Rp. 1.605.396	Rp4,504,041	281%

Keterangan: *) Upah minimum Provinsi berdasarkan ketentuan Ketetapan Pemerintah Tahun 2018

Note: *) Provincial minimum wage based on Government Decision 2018

PELATIHAN DAN PENGEMBANGAN KOMPETENSI KARYAWAN

EMPLOYEE COMPETENCE TRAINING AND DEVELOPMENT

Seluruh karyawan mendapatkan kesempatan yang sama untuk meningkatkan kompetensi sesuai dengan kebutuhan perseroan melalui berbagai kegiatan pelatihan dan pengembangan. Kegiatan ini disesuaikan dengan jenjang jabatan dan fungsi setiap tahun melalui pelatihan, *workshop*, dan seminar. Rincian pelatihan yang diselenggarakan Perseroan sepanjang tahun 2018 dapat dibaca pada lampiran 3 laporan ini.

Peningkatan kompetensi karyawan juga dilakukan melalui pembelajaran secara elektronik (*E-learning*). Pada tahun 2018, presentasi jam belajar rata-rata setiap pekerja mencapai 44,88 jam/orang/tahun dari target 40 jam/orang/tahun.

All employees get the same opportunity to improve competencies according to the company's needs through various training and development activities. These activities are adjusted every year to the position levels and function through training, workshops, and seminars. Details of the training held by the Company throughout 2018 can be found in appendix 3 of this report.

Improving employee competency is also conducted through electronic learning (e-learning). In 2018, the average learning hours for each employee reached 44.88 hours/person/year from the target of 40 hours/person/year.

STRUKTUR TATA KELOLA

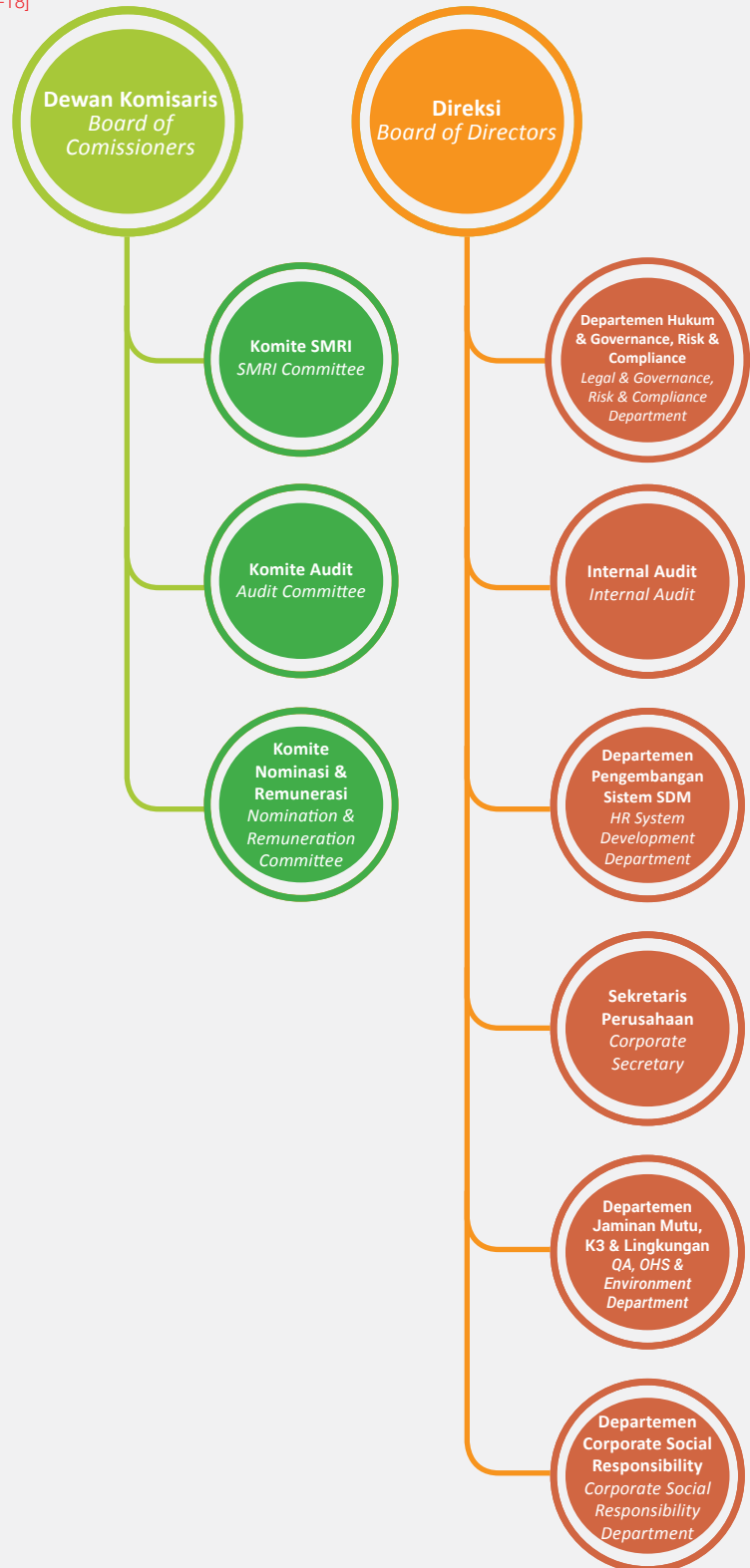
GOVERNANCE STRUCTURE [102-18]

Struktur tata kelola Perseroan merujuk pada Undang-Undang No. 19 Tahun 2003 tentang Badan Usaha Milik Negara; Undang-Undang No 40 Tahun 2007 tentang Perseroan Terbatas; dan pedoman OJK dalam *The Indonesian Corporate Governance Manual* (ICGM). Organ tata kelola Perseroan terdiri dari Rapat Umum Pemegang Saham (RUPS), Dewan Komisaris, dan Direksi. Dewan Komisaris dalam melaksanakan tugas dan tanggungjawabnya dibantu oleh Komite Penunjang, sedangkan Direksi dibantu oleh unit kerja yang terkait dengan mekanisme tata kelola.

Terdapat keterikatan erat antar unit kerja pengelola GCG di Perseroan, yaitu Sekretaris Perusahaan selaku penanggung jawab *Board Governance* (fungsi komunikasi dan koordinasi dengan Direksi, Dewan Komisaris, dan Komite Dewan Komisaris), Departemen Hukum & GRC (fungsi *operational governance*, penyusunan kebijakan, dan kepatuhan), Departemen *Corporate Social Responsibility*, dan Internal Audit.

The Company's governance structure refers to Law No. 19 of 2003 on State-Owned Enterprises; Law No. 40 of 2007 on Limited Liability Companies; and Financial Services Authority (OJK) guidelines in The Indonesian Corporate Governance Manual (ICGM). The Company's governance organs consist of the General Meeting of Shareholders (GMS), Board of Commissioners, and Board of Directors. The Board of Commissioners in carrying out its duties and responsibilities is assisted by the Supporting Committee, while the Board of Directors is assisted by work units related to governance mechanism.

There is a close attachment between the GCG management work unit in the Company, namely the Corporate Secretary as the person in charge of Board Governance (communication and coordination functions with the Board of Directors, Board of Commissioners and Board of Commissioners), Law Department & GRC (operational governance functions, policy formulation, and compliance), Corporate Social Responsibility Department, and Internal Audit.

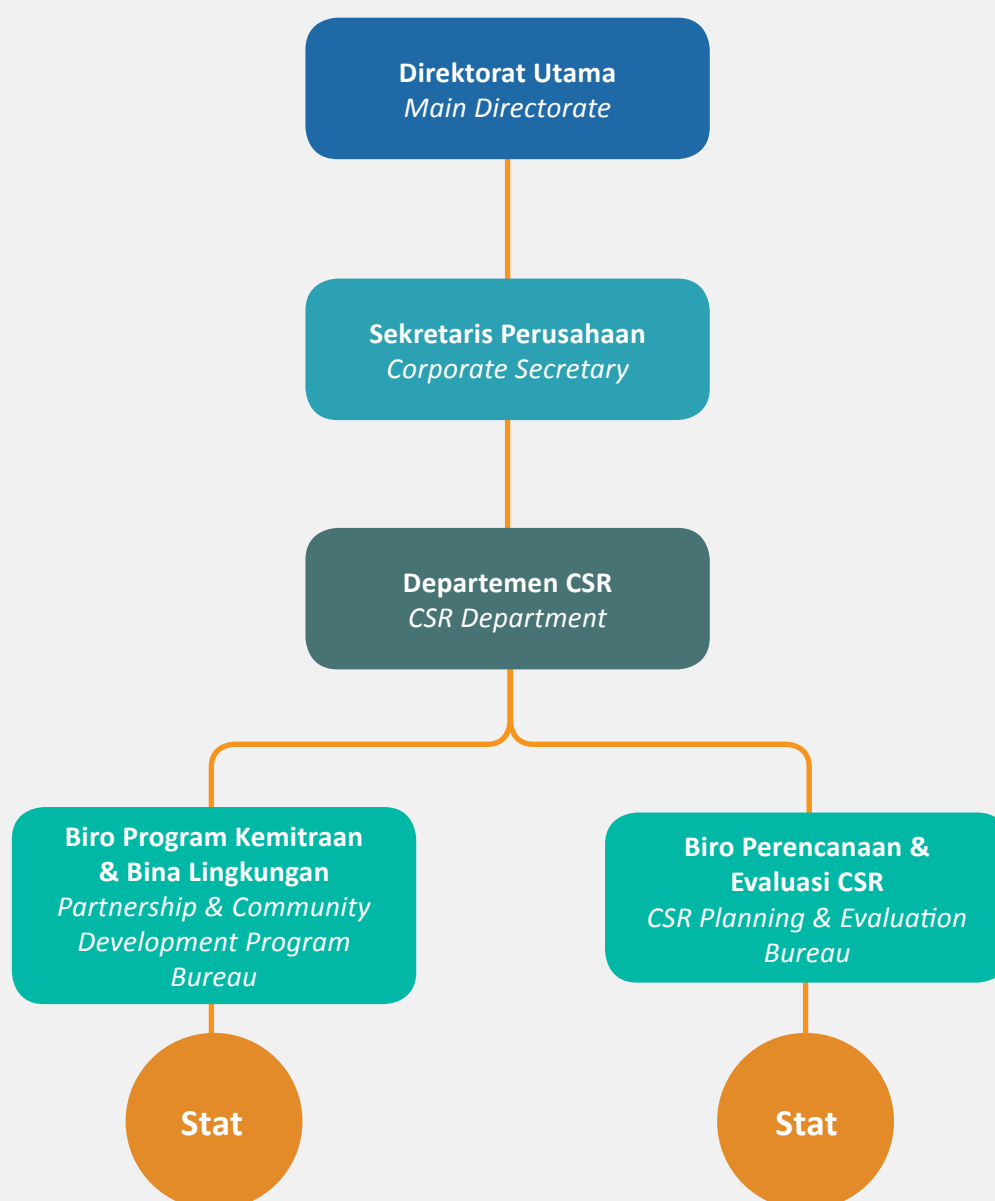


Dalam jajaran Departemen Corporate Social Responsibility terdapat satuan kerja Biro Program Kemitraan & Bina Lingkungan serta Biro Perencanaan & Evaluasi CSR. Satuan kerja ini bertugas merencanakan, menjalankan, dan mengevaluasi setiap inisiatif keberlanjutan terkait aspek ekonomi, sosial, dan lingkungan yang dilaksanakan pada setiap Anak Perusahaan dan *business unit* Perseroan.

Within the management of the Corporate Social Responsibility Department there are work units of the Partnership & Community Development Program Bureau and CSR Planning & Evaluation Bureau. These work units are tasked with planning, implementing, and evaluating every sustainability initiative on economic, social and environmental aspects carried out for every subsidiary and business unit of the Company.

STRUKTUR DEPARTEMEN CSR

CSR DEPARTMENT STRUCTURE



PEMBERANTASAN TINDAK PIDANA KORUPSI

ERADICATION OF CORRUPTION CRIMES

Komitmen Perseroan dalam menerapkan pengendalian gratifikasi merupakan salah satu upaya pemberantasan tindak pidana korupsi yang dilakukan dalam lingkungan Perseroan. Komitmen ini ditandatangani oleh Direktur Utama dan disaksikan oleh Wakil Ketua Komite Pemberantasan Korupsi (KPK) pada 3 Desember 2013.

The Company's commitment in implementing gratification control is one of the efforts to eradicate corruption committed within the Company. This commitment was signed by the President Director and witnessed by the Deputy Chairman of the Corruption Eradication Committee (KPK) on December 3, 2013.

Perseroan juga memiliki Pedoman Pengendalian Gratifikasi sebagai panduan atas tata laksana penerimaan, pemberian, penolakan, dan pelaporan gratifikasi di lingkungan perusahaan. Di samping itu, Perseroan juga menjalankan sejumlah pengendalian gratifikasi, di antaranya melalui sosialisasi, pelatihan, dan Laporan Harta Kekayaan Penyelenggara Negara (LHKPN).

The Company has also established Gratification Control Guidelines as a reference to the procedures for accepting, offering, rejecting, and reporting on gratification within the environment of the company. In addition, the Company also carries out a number of gratification control activities through among other dissemination, training, and State Official's Asset Report (LHKPN).

Sosialisasi dilakukan melalui kegiatan internalisasi GCG, mencetak banner, dan buku pedoman pengendalian gratifikasi, serta sosialisasi lainnya yang dilakukan melalui intranet, media internal perusahaan (koran dan majalah), serta media cetak nasional. Perseroan juga mengadakan pelatihan terkait anti korupsi dalam bentuk *workshop* dan diikuti peserta sebanyak 30 orang. Laporan Harta Kekayaan Penyelenggara Negara (LHKPN) diwajibkan bagi Eselon 1. Sampai dengan tahun 2018, terdapat 12 orang yang sudah melaporkan LHKPN.

The dissemination was carried out through GCG internalization activities, printing banners, and gratification control guidebooks, as well as other dissemination through the intranet, company internal media (newspapers and magazines), and national print media. The company also held training on anti-corruption in the form of workshop and participated by 30 people. State Official's Asset Report (LHKPN) is mandatory for Eselon 1. As of 2018, there have been 12 people who have submitted LHKPN.

Apabila diketahui ada pelanggaran terkait tindak pidana ekonomi dan korupsi di Perseroan maupun Anak Perusahaan atau business unit, pihak internal maupun eksternal dapat menyampaikan keluhan, pengaduan, dan laporan melalui Sistem Pelaporan Pelanggaran/*Whistleblowing System* (WBS).

If there are violations identified related to economic and corruption crimes within the Company, its subsidiaries or business units, internal and external parties can file complaints, complaints and reports through the Whistleblowing System (WBS).



Pelaporan pelanggaran dapat dilakukan melalui saluran berikut:

Violation can be reported through the following channels:

Telepon (031) 3981732 ext 3132 dan/atau 3026
Phone (031) 3981732 ext 3132 and/or 3026

PO Box Kotak 5000
PO Box Box 5000

Email semenindonesiabersih@semenindonesia.com
Email semenindonesiabersih@semenindonesia.com Whistleblowing

Surat Tim Pengelola Pelaporan Pelanggaran Pelanggaran (TP3)
Mail PT Semen Indonesia (Persero) Tbk Jalan Veteran, Gresik 61122
Management Team (TP3) of PT Semen Indonesia (Persero) Tbk Jalan Veteran, Gresik 61122



Direksi bertanggung jawab atas terlaksananya sistem pelaporan pelanggaran dan Dewan Komisaris bertanggungjawab dalam pengawasan terhadap pelaksanaan sistem tersebut. Sepanjang tahun 2018, sebanyak 3 laporan dugaan gratifikasi dan telah diperiksa 2 laporan terduga gratifikasi memberikan barang berupa uang dan barang, sehingga kasus diserahkan ke KPK. Sementara 1 laporan terbukti tidak terduga melakukan gratifikasi.

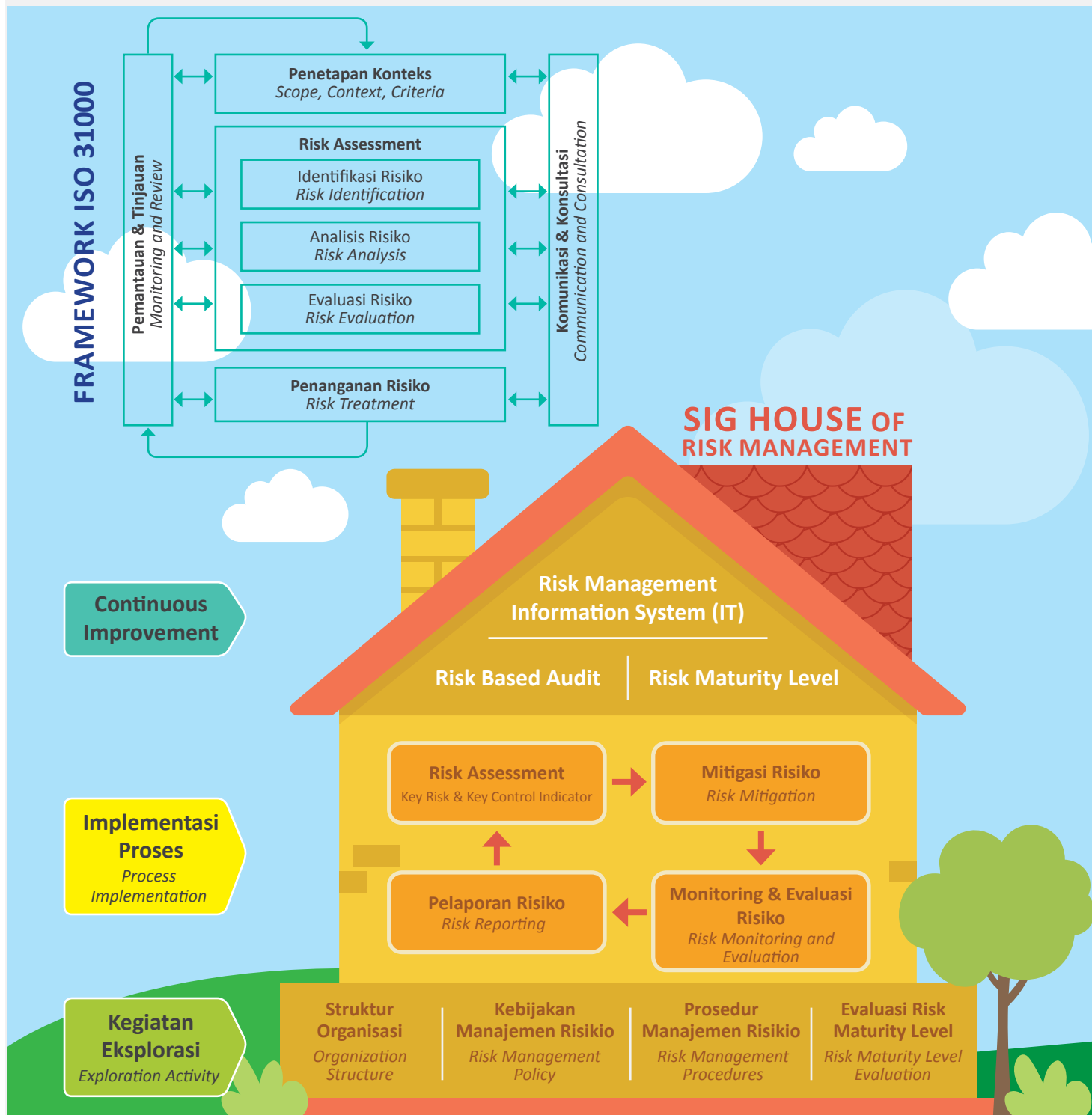
The Board of Directors is responsible for the implementation of the violation reporting system and the Board of Commissioners is responsible for overseeing the the system implementation. Throughout 2018, there were 3 reports of alleged gratification, with 2 of the reports on alleged gratification in the form of money and goods have been investigated and were handed over to Corruption Eradication Commission (KPK). Meanwhile one of the reports was not found to be a gratification act.

MANAJEMEN RISIKO

RISK MANAGEMENT

Perseroan menerapkan sistem manajemen risiko dengan menggunakan kerangka acuan ISO 31000 dan “House of Risk Semen Indonesia” (HORSI). ISO 31000 digunakan sebagai pedoman penerapan manajemen risiko, sedangkan HORSI digunakan mengatur seluruh infrastruktur manajemen risiko agar selaras dan mendukung kinerja Perseroan.

The Company implements risk management system that refers to ISO 31000 framework and the Semen Indonesia House of Risk (HORSI). ISO 31000 is used as a guideline for implementing risk management, while HORSI is used to manage all risk management infrastructure to be aligned and supports the Company's performance.



Perseroan juga melakukan pengelolaan risiko melalui *Enterprise Wide Risk Management (EWRM)* secara terintegrasi pada seluruh sistem manajemen perusahaan dan pengambilan keputusan strategis maupun operasional. Penerapan sistem manajemen risiko dievaluasi setiap tahun menggunakan metode pemeriksaan dokumen, pengiriman kuesioner, dan wawancara dengan pihak-pihak yang terkait. Hasil evaluasi menunjukkan tren peningkatan *score maturity level* penerapan manajemen risiko dalam tiga tahun terakhir. Evaluasi efektifitas penerapan manajemen risiko memiliki rentang hasil penilaian dari skor 1 hingga 5, yang dimulai dari *initial* (level 1), *repeatable* (level 2), *defined* (level 3), *managed* (level 4), dan *optimized* (level 5).

The Company also manages risk through Enterprise Wide Risk Management (EWRM) in an integrated manner throughout the company's management system and strategic and operational decision making. The application of the risk management system is evaluated annually using the method of checking documents, sending questionnaires, and interviewing relevant parties. The evaluation results show the trend of increasing the risk management maturity score in the last three years. Evaluation of the effectiveness of the application of risk management has a range of assessment results from scores 1 to 5, starting from initial (level 1), repeatable (level 2), defined (level 3), managed (level 4), and optimized (level 5).

HASIL PENERAPAN MANAJEMEN RISIKO

RISK MANAGEMENT APPLICATION RESULTS

Tahun	PT Semen Indonesia (Persero) Tbk & Business Unit Tuban	PT Semen Padang	PT Semen Tonasa	PT Semen Gresik
2018	3.7	4.14	N/A	N/A
2017	4.02	4.18	3.96	N/A
2016	3.9	3.9	3.52	N/A

*N/A: PT Semen Tonasa baru akan melaksanakan pengukuran penerapan Manajemen Risiko pada Bulan April 2019

*N/A: PT Semen Gresik belum melakukan pengukuran hasil penerapan Manajemen Risiko karena baru beroperasi

* N/A: PT Semen Tonasa will only measure the application of Risk Management in April 2019

* N/A: PT Semen Gresik has not yet measured the results of the application of Risk Management because it was newly operating

MANAJEMEN KEPATUHAN DAN PRINSIP PENCEGAHAN

COMPLIANCE MANAGEMENT AND PRECAUTIONARY PRINCIPLE [102-11]

Kepatuhan Perseroan mencakup seluruh peraturan perundang-undangan dan standar yang relevan dengan kegiatan operasional industri persemenan. Perseroan menerapkan manajemen kepatuhan untuk mencegah dampak negatif terhadap aspek ekonomi, lingkungan, dan sosial. Manajemen kepatuhan meliputi elemen-elemen dan ruang lingkup yang mencakup, namun tidak terbatas, pada:

- Standar dan pengendalian internal atas pelaporan keuangan/ICoFR (*Internal Control over Financial Reporting*) dengan sistem sertifikasi berjenjang (*Control Self-Assessment*);
- Standar yang diadopsi, seperti ISO/IEC, SNI, OHSAS;
- Regulasi yang berlaku, di dalam maupun luar negeri;
- Pengembangan daftar kewajiban Perseroan dan mendokumentasikan berbagai regulasi, kewajiban legal, dan hasil standarisasi.

The Company complies with all laws and regulations, as well as standards that are relevant to the cement industry's operations. The Company applies compliance management to prevent negative impacts on economic, environmental and social aspects. Compliance management covers elements and scope which include, but are not limited to:

- *Standards and Internal Control over Financial Reporting (ICoFR) with a tiered certification system (Control Self-Assessment);*
- *Standards adopted, such as ISO/IEC, SNI, OHSAS;*
- *Applicable regulations, both domestic and overseas;*
- *Development of Company obligation list and documentarion of various regulations, legal obligations, and standardization results.*

Khusus terkait pencegahan dampak lingkungan, Perseroan memiliki Kebijakan Perusahaan yang disusun berdasarkan ketentuan: Undang-Undang No. 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup; Peraturan Pemerintah No. 27 Tahun 2012 tentang Izin Lingkungan; dan Sistem Manajemen Lingkungan (SML) ISO 14001:2004.

Perseroan memastikan telah memenuhi izin-izin penting/material terkait kegiatan usaha. Pelaksanaan kegiatan usaha mengacu pada sejumlah dokumen, di antaranya Analisis Dampak Lingkungan Hidup (AMDAL), Rencana Pengelolaan Lingkungan (RKL), Rencana Pemantauan Lingkungan (RPL), Upaya Pengelolaan Lingkungan (UPL), dan Upaya Pemantauan Lingkungan (UKL).

Perseroan juga menerapkan SML ISO 14001:2004 yang terintegrasi dalam Sistem Manajemen Semen Indonesia (SMSI). SML ISO 14001:2004 telah disertifikasi oleh Balai Besar Bahan dan Barang Teknik (B4T), Kementerian Perindustrian Indonesia. Ruang lingkup sertifikasi, meliputi seluruh produksi semen, mulai dari *crusher* sampai *packer*, termasuk *Associated Cement Packing* beserta sarana pendukungnya seperti penambangan dan pelabuhan.

Hingga laporan ini diterbitkan, seluruh izin kegiatan usaha Perseroan tidak sedang menerima atau terlibat dalam gugatan administratif atau tuntutan secara resmi yang diajukan oleh pihak ketiga kepada badan peradilan/instansi pemerintah atau pun tercatat dalam register pengadilan terkait penerbitan izin lingkungan.

Perseroan juga tidak pernah melakukan pelanggaran/insiden terkait kerusakan lingkungan hidup pada 2018 yang menyebabkan denda/sanksi dengan nilai moneter yang signifikan dan memiliki dampak material, serta merugikan kegiatan usaha, hasil operasional dan kondisi keuangan. Perseroan juga tidak memiliki kasus terkait lingkungan dengan pihak lain yang diajukan ke mekanisme penyelesaian sengketa.

Regarding environmental impacts, the Company has issued Company Policy formulated based on the provisions of: Law No. 32 of 2009 on Environmental Protection and Management; Government Regulation No. 27 of 2012 on Environmental Permits; and ISO 14001: 2004 of Environmental Management System.

The Company ensures that it has fulfilled important/material permits related to business activities. The implementation of business activities refers to a number of documents, including Environmental Impact Analysis (AMDAL), Environmental Management Plans (RKL), Environmental Monitoring Plans (RPL), Environmental Management Efforts (UPL), and Environmental Monitoring Efforts (UKL).

The company also implements ISO 14001: 2004 of Environmental Management System which is integrated in the Semen Indonesia Management System (SMSI). ISO 14001: 2004 of Environmental Management System has been certified by the Center for Material and Technical Products (B4T), Ministry of Industry of Indonesia. The scope of the certification covers all cement production, from crusher to packer, including Associated Cement Packing along with supporting facilities such as mining and ports.

Up until this report was published, all of the Company's business permits were not being charged or implicated in administrative claims or formal claims filed by third parties to the judiciary bodies/government agencies or recorded in court registers related to the issuance of environmental permits.

The Company has also never committed a violation/incident related to environmental damage in 2018 which resulted in fines/sanctions with significant monetary value that had a material impact, as well as damaging business activities, operational output and financial conditions. In addition, the company did not have any environmental cases with other parties filed to the arbitrary mechanism.

PROFIL LAPORAN / Report Profile

PENGANTAR LAPORAN

INTRODUCTION TO THE REPORT

Laporan Keberlanjutan 2018 merupakan kesinambungan dari Laporan Keberlanjutan 2017 yang telah diterbitkan bersamaan dengan Rapat Umum Pemegang Saham (RUPS) pada tanggal 30 April 2018. Isi laporan mencakup kinerja keberlanjutan periode 1 Januari hingga 31 Desember 2018 dan merupakan satu kesatuan dengan Laporan Tahunan 2018 yang informasinya saling melengkapi. Data dan informasi keuangan bersifat konsolidasi mencakup PT Semen Indonesia (Persero) Tbk sebagai Strategic Holding Company (HoldCo) yang membawahi Business Unit Tuban, PT Semen Padang, PT Semen Tonasa, Thang Long Cement, dan PT Semen Gresik-Pabrik Rembang. Dalam laporan ini terdapat pernyataan kembali (*restatement*) yang bersifat memperbaiki informasi pada laporan sebelumnya. Pernyataan kembali tersebut mencakup informasi mengenai total kapitalisasi dan aset, energi, emisi, pelepasan air, limbah B3, material digunakan, dan luas kawasan yang direhabilitasi. Pernyataan kembali disebabkan oleh perbedaan metode perhitungan yang digunakan. [102-45, 102-48, 102-50, 102-51, 102-52]

Perseroan menunjuk lembaga eksternal independen yang terakreditasi dan kompeten di bidang keberlanjutan, yaitu SR Asia untuk melakukan proses penjaminan (*assurance*). Pemilihan assesor eksternal sesuai kebijakan perusahaan dan tidak ada benturan kepentingan dengan pihak manapun. Proses *assurance* dimulai dengan verifikasi sampel bukti dokumentasi dan konfirmasi kepada pihak narasumber, yang melibatkan fungsi, di antaranya Health, Safety, and Environment (HSE), Human Resources Development (HRD), dan Community Development (CD). Selain *assurance* yang dilakukan untuk laporan keberlanjutan ini, beberapa data sudah diaudit oleh pihak independen. Data-data ini disampaikan sesuai dengan hasil verifikasi pihak auditor.

[102-55, 102-56]

The Sustainability Report 2018 is the continuity of the Sustainability Report 2017 which was published in conjunction with the General Meeting of Shareholders (GMS) on April 30, 2018. This report discloses sustainability performance in the period January 1 to December 31, 2018 and is an integral part of the Annual Report 2018 as complementary. Financial data and information is consolidated covering PT Semen Indonesia (Persero) Tbk as the Strategic Holding Company (HoldCo) which oversees Business Unit Tuban, PT Semen Padang, PT Semen Tonasa, Thang Long Cement, and PT Semen Gresik-Rembang Plant. There are several restatements in this report as corrections of information in the previous report. The restatements includes information about total capitalization and assets energy, emissions, water discharge, hazardous and toxic (B3) waste, materials used, and the area of rehabilitated land. The restatements were made due to differences in the calculation method.

The company appointed accredited and competent independent external agency in the sustainability field, SR Asia, to conduct the assurance process. The selection of external assurers is based on the company policy and there was no conflict of interest with any parties. The assurance process began with verification of sample documentation evidence and confirmation with the sources, involving several functions such as Health, Safety, and Environment (HSE), Human Resources Development (HRD), and Community Development (CD). In addition to the assurance carried out for this sustainability report, some data has been audited by an independent party. These data were provided in accordance with the results of the auditor's verification.

PRINSIP DAN TAHAPAN PELAPORAN

PRINCIPLES AND STAGES OF REPORTING [102-46, 102-54]

Laporan ini disusun sesuai dengan *Standar Global Reporting Initiative (GRI): core option* dan mengacu pada Peraturan Otoritas Jasa Keuangan (POJK) no. 51/POJK.03/2-17.

This report was prepared in accordance with the Global Reporting Initiative (GRI) Standard: core option and refers to the Financial Services Authority Regulation (POJK) No. 51/POJK.03/2-17.

Proses penentuan isi mempertimbangkan prinsip keterlibatan pemangku kepentingan, konteks berkelanjutan, materialitas, dan kelengkapan. Kualitas pelaporan memperhatikan prinsip keseimbangan, komparabilitas, akurasi, ketepatan waktu, kejelasan, dan keandalan.

The process of determining content takes into account the principles of stakeholder engagement, sustainable context, materiality, and completeness. The quality of reporting takes into account the principles of balance, comparability, accuracy, timeliness, clarity, and reliability.

TAHAPAN DALAM MENENTUKAN ISI LAPORAN:

STAGES IN DEFINING REPORT CONTENT:

IDENTIFIKASI IDENTIFICATION



1

Identifikasi konteks keberlanjutan (*sustainability context*) mempertimbangkan prinsip *stakeholders inclusiveness* dan karakteristik industri semen yang relevan dengan mengacu pada *Sustainability Accounting Standards Board (SASB)-Construction Materials*. Setiap topik material ditentukan batasan atas dampaknya terhadap pemangku kepentingan yang relevan, baik di dalam maupun di luar perusahaan (*boundary*). Identifikasi konteks keberlanjutan ini dilakukan bersama pada tanggal 3 dan 4 Desember 2018.

Identification of sustainability context considers the principle of stakeholder inclusiveness and relevant cement industry characteristics by referring to the Sustainability Accounting Standards Board (SASB)-Construction Materials. Each material topic is determined by its impact on relevant stakeholders, both inside and outside the company (boundary). This sustainability context identification was carried out jointly on December 3 and 4, 2018.

PRIORITAS PRIORITY



2

Proses penentuan topik dan isu keberlanjutan yang material dilakukan melalui pelatihan pada 3-4 Desember 2018. Peserta pelatihan dihadiri oleh 13 orang pihak internal yang menentukan prioritas topik material. Setelah itu, pihak internal memperhatikan kebutuhan pihak eksternal, dengan membagi kelompok menjadi 3 orang masyarakat, 2 orang pemegang saham, 2 orang investor, 2 orang mitra, 2 orang pelanggan, dan 2 orang pemerintah daerah. Dengan adanya diskusi mendalam antara pihak internal yang juga memperhatikan kepentingan pihak eksternal, maka dipetakan matriks topik material.

The process of determining material topics and sustainability issues was carried out through training on December 3-4, 2018. The training was attended by 13 participants from internal party who prioritized the material topics. Afterward, the internal party took into account the needs of external parties, by dividing the group into 3 community members, 2 shareholders, 2 investors, 2 partners, 2 customers, and 2 representatives from local governments. With the in-depth discussion between internal parties who also took into account the interests of external parties, the material topic matrix was mapped

VALIDASI VALIDATION



3

Proses validasi dilakukan berdasarkan prinsip kelengkapan (*completeness*) dan disetujui oleh Sekretaris Perusahaan.

Validation process was conducted based on completeness principle and approved by the Corporate Secretary.

TINJAUAN REVIEW



4

Kajian ulang terhadap laporan tahun sebelumnya dilakukan dengan memperhatikan saran dari pemangku kepentingan, baik internal maupun eksternal.

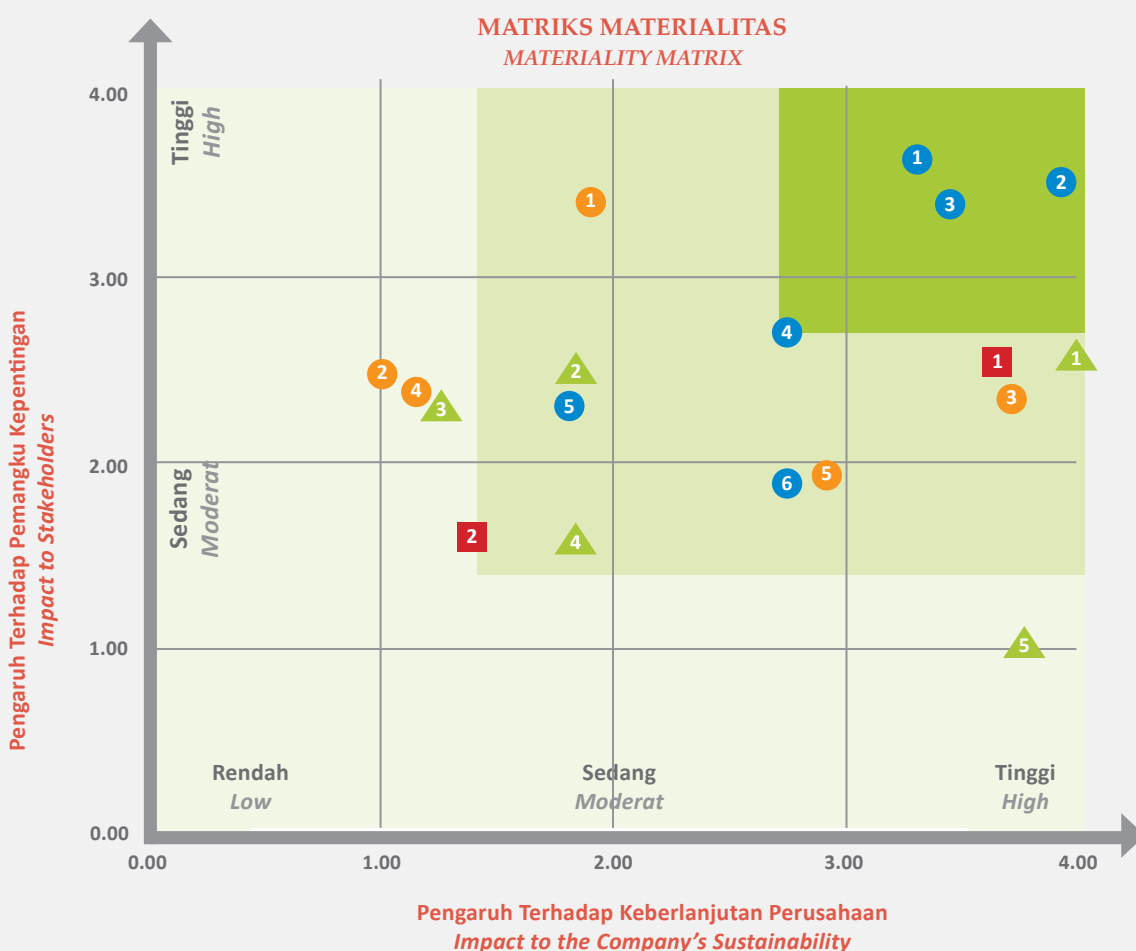
A review of the previous year's report was carried out with regard to recommendations from both internal and external stakeholders.

TOPIK MATERIAL [102-47] [102-49]

MATERIAL TOPICS

Perseroan menentukan tujuh prioritas topik material yang akan disampaikan secara lebih komprehensif, dibandingkan dengan topik lain yang relevan. Tujuh prioritas topik ini memberikan dampak yang penting selama tahun 2018.

The Company has determined seven priority material topics to be disclosed more comprehensively, compared to other relevant topics. These seven priority topics have significant impacts during 2018.

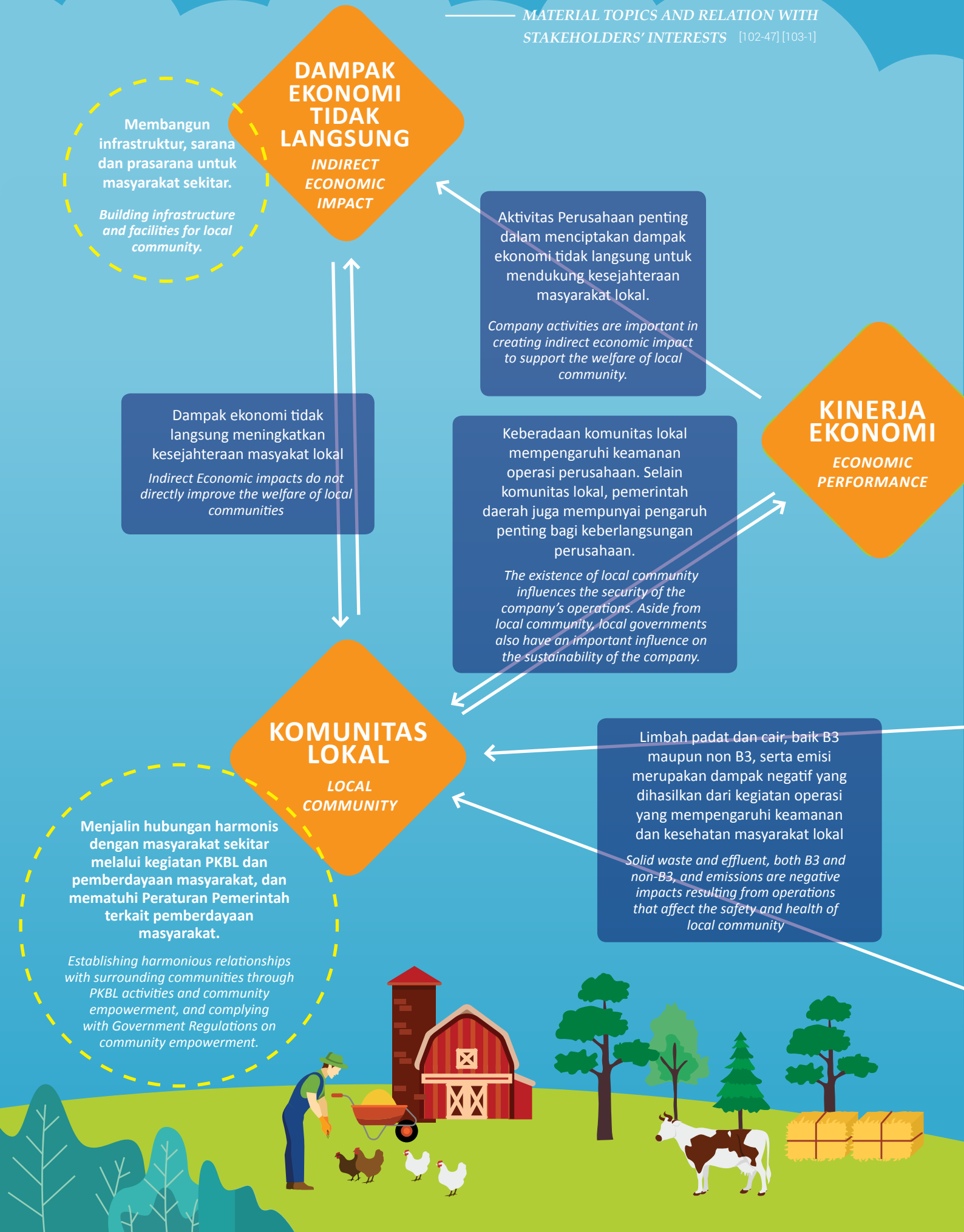


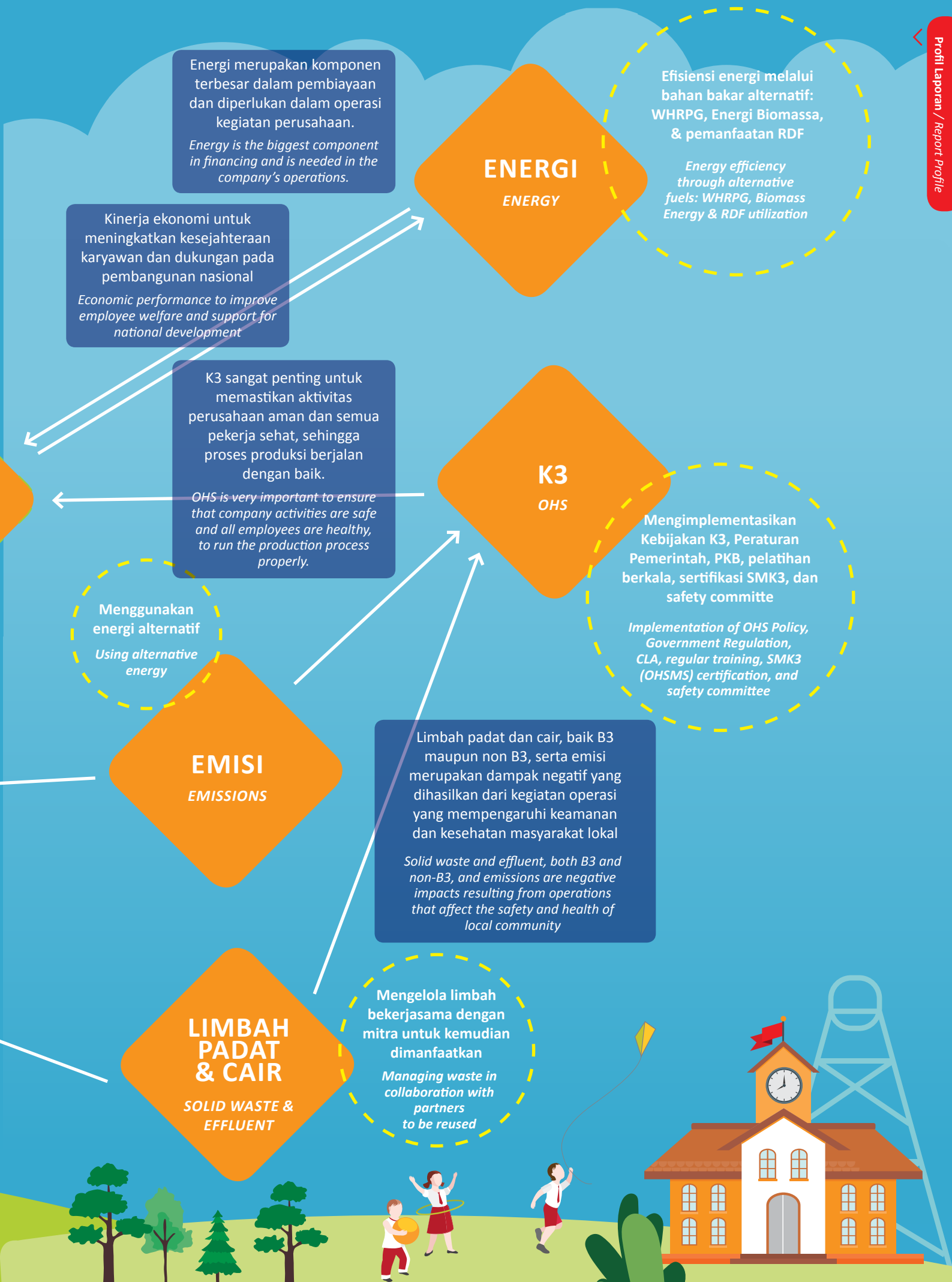
Aspek Material Material Aspect

- | | | |
|--|--|---|
| 1. Kinerja Ekonomi
Economic Performance | 4. Limbah dan Efluen
Effluent and Waste | 5. Kepatuhan Sosioekonomi
Socioeconomic compliance |
| 2. Emisi
Emission | 3. K3
OHS | 6. Anti-Korupsi
Anti-corruption |
| 1. Dampak Ekonomi Tidak Langsung
Indirect Economic Performance | 2. Hak Masyarakat Adat
Indigenous Community Rights | |
| 1. Kepatuhan Lingkungan
Environmental Compliance | 4. Praktik Pengadaan
Procurement Practices | 5. Keanekaragaman Hayati
Biodiversity |
| 2. Ketenagakerjaan
Employment | 3. Komunitas Lokal
Local Community | |
| 1. Energi
Energy | 3. Penilaian Lingkungan Pemasok
Supplier's Environmental Compliance | 5. Material
Material |
| 2. Kesehatan & Keselamatan Pelanggan
Customer Health and Safety | 4. Pemasaran & Pelabelan
Marketing and Labeling | |

TOPIK MATERIAL DAN HUBUNGANNYA DENGAN KEPENTINGAN PEMANGKU KEPENTINGAN

MATERIAL TOPICS AND RELATION WITH
STAKEHOLDERS' INTERESTS [102-47] [103-1]





Selain topik material dengan prioritas tinggi, ada beberapa topik lain yang relevan, yang tetap disampaikan dalam laporan ini, antara lain: Anti Korupsi, Keanekaragaman Hayati, Hak Masyarakat Adat, Pemasaran dan Pelabelan, Kepatuhan Lingkungan, Kesehatan dan Keselamatan Pelanggan, Kepatuhan Sosioekonomi, Ketenagakerjaan, Praktik Pengadaan, Penilaian Lingkungan Pemasok dan Material

In addition to highly prioritized material topics, there are several other relevant topics, which are still presented in this report, among others, Anti-Corruption, Biodiversity, Indigenous Rights, Marketing and Labeling, Environmental Compliance, Customer Health and Safety, Socioeconomic Compliance, Employment, Procurement Practices, Environmental Assessment of Suppliers and Materials.



BATASAN DAMPAK TOPIK MATERIAL PADA PRIORITAS TINGGI

IMPACT BOUNDARIES OF MATERIAL TOPICS WITH HIGH PRIORITY [103-1]

Setiap topik material memberikan dampak, baik positif maupun negatif pada pemangku kepentingan, di dalam maupun di luar Perseroan.

Every material topic has an impact, either positive or negative on both internal and external stakeholders of the Company.

Batasan Dampak Topik Material Pada Pemangku Kepentingan

Impact Boundaries of Material Topics to Stakeholders

No	Topik Material Material Topic	Di Dalam Perseroan Within the Company	Di Luar Perseroan Outside the Company
		Pemangku Kepentingan yang Terdampak Affected Stakeholders	Pemangku Kepentingan yang Terdampak Affected Stakeholders
1	Kinerja Ekonomi Economic performance	Pemegang Saham Shareholders Investor Investors Karyawan Employees	Pelanggan Customers Mitra Kerja Partners
2	Energi Energy	Karyawan Employees	Mitra Kerja Partners
3	Kesehatan dan Keselamatan Kerja Occupational Health and Safety	Karyawan Employees	Mitra Kerja Partners
4	Dampak Ekonomi Tidak Langsung Indirect Economic Impact	Karyawan Employees	Masyarakat Community Pemerintah Daerah Local Government
5	Emisi Emission	Karyawan Employees	Mitra Kerja Partners Masyarakat Community Pemerintah Daerah Local Government
6	Masyarakat Lokal Local Community	Karyawan Employees	Masyarakat Community Pemerintah Daerah Local Government
7	Efluen dan Limbah Effluent and Waste	Karyawan Employees	Masyarakat Community Mitra Kerja Partners

PEMANGKU KEPENTINGAN

STAKEHOLDERS [102-42]

Identifikasi dan seleksi pemangku kepentingan dilakukan melalui diskusi yang melibatkan pihak internal dan eksternal, dengan mempertimbangkan tingkat pengaruh dan kepentingan, baik dari dalam ke luar, maupun dari luar ke dalam Perseroan.

Stakeholder identification and selection is carried out through discussions involving internal and external parties, considering the level of impact, either from the company's internal to external, or vice versa.

Pelibatan Pemangku Kepentingan

Stakeholder Inclusiveness [102-40, 102-43, 102-44]

Pemangku Kepentingan Stakeholder	Metode Pelibatan Inclusiveness Method	Frekuensi Pertemuan Meeting Frequency	Topik yang Penting bagi Pemangku Kepentingan Material Topic for Stakeholders	Respons dari Perusahaan Response from the Company
 PEMEGANG SAHAM SHAREHOLDERS	RUPS Tahunan, dan RUPS Luar Biasa <i>Annual GMS and Extraordinary GMS</i>	Minimal 1 kali setahun <i>At least once a year</i>	Capaian kinerja perusahaan (termasuk kinerja ekonomi), perubahan susunan tata kelola perusahaan. <i>Company performance achievement (including economic performance), corporate governance composition changes</i>	- Melakukan evaluasi kinerja perusahaan <i>Evaluated company performance</i> - Meningkatkan kinerja untuk tahun berikutnya <i>Increased the performance for the following year</i> - Membuat laporan tahunan dan laporan keberlanjutan <i>Prepared annual report and sustainability report</i>
 INVESTOR INVESTOR	RUPS Tahunan dan RUPS Luar Biasa <i>Annual GMS and Extraordinary GMS</i>	Minimal 1 kali setahun <i>At least once a year</i>	Capaian kinerja perusahaan (termasuk kinerja ekonomi), Kecukupan modal perusahaan, Kondisi keuangan perusahaan <i>Company performance achievement (including economic performance), capital adequacy, financial condition</i>	- Membuat laporan tahunan dan laporan keberlanjutan <i>Developed annual report and sustainability report</i> - Memberikan informasi lainnya terkait kinerja perusahaan <i>Providing other information relating to company performance</i>
 KARYAWAN EMPLOYEE	Serikat Karyawan Semen Indonesia (SKSI) <i>Semen Indonesia Workers Union (SKSI)</i>	Minimal 1 kali setahun <i>At least once a year</i>	- Kesejahteraan karyawan <i>Employee welfare</i> - Perjanjian kerja <i>Work contract</i> - Kinerja karyawan <i>Employee performance</i> - Rencana kerja <i>Work plan</i> - Kinerja ekonomi perusahaan, pengelolaan energi, K3, dampak ekonomi tidak langsung, pengelolaan emisi, kinerja pengembangan masyarakat lokal, pengelolaan limbah cair dan limbah padat. <i>Company's economic performance, energy management, OHS, indirect economic performance, emission management, local community development, effluent and waste management.</i>	- Monitoring dan evaluasi <i>Performed monitoring and evaluation</i> - Membuat strategi dan action plan <i>Prepared strategy and action plan</i> - Membuat rencana diklat <i>Developed education and training plan</i> - Penyesuaian gaji <i>Adjusted salaries</i> - Pengadaan medical check up bukan hanya utk karyawan tapi juga istri/suaminya, yang sedang diupayakan ada di seluruh anak-Anak Perusahaan <i>Provided medical check up not only for employees, but also their spouses which are attempted to be available in all subsidiaries</i>
 MASYARAKAT COMMUNITY	Pemantauan dan evaluasi program CSR, PKBL, dan Community development <i>Monitoring and Evaluation of CSR, PKBL, and Community development programs</i>	Minimal 1 kali setahun <i>At least once a year</i>	Dampak positif dan negatif dari program yang telah dilaksanakan, dampak ekonomi tidak langsung, kinerja pengurangan emisi, pengelolaan limbah cair dan padat <i>Positive and negative impact of the implemented programs, indirect economic performance, emission reduction performance, effluent and waste management</i>	- Merencanakan program yang lebih strategis bagi masyarakat <i>Planned more strategic programs for the community</i> - Memfasilitasi program <i>Facilitated the programs</i>

Pemangku Kepentingan Stakeholder	Metode Pelibatan Inclusiveness Method	Frekuensi Pertemuan Meeting Frequency	Topik yang Penting bagi Pemangku Kepentingan Material Topic for Stakeholders	Respons dari Perusahaan Response from the Company
 PELANGGAN CUSTOMER	Gathering / Temu Pelanggan <i>Customer Gathering</i>	12 kali setahun <i>12 times a year</i>	Komunikasi produk, Penyampaian capaian perusahaan, dan target kedepan, menggali kebutuhan dan keluhan pelanggan, kinerja ekonomi perusahaan <i>Product communication, published company achievement and future targets, as well as customer complaints, economic performance</i>	- Menyediakan wadah untuk masukan dan keluhan pelanggan <i>Provided customer with facilities for feedback and complaints</i> - Memberikan informasi yang diperlukan pelanggan <i>Provided required information for customer</i>
	Gebyar Loyalitas <i>Loyalty event 'Gebyar Loyalitas'</i>	Minimal 1 kali setahun <i>At least once a year</i>		
 MITRA KERJA PARTNERS	Rakor <i>Coordination Meeting</i>	Minimal 1 kali setahun <i>At least once a year</i>	Kebutuhan-kebutuhan perusahaan dalam 1 tahun, kinerja ekonomi perusahaan, pengelolaan energi, pengelolaan limbah cair dan padat <i>Company needs within a year, economic performance, energy management, effluent and waste management</i>	Memfasilitasi pertemuan dengan mitra <i>Facilitated meetings with partners</i>
	Distributor summit <i>Distributor summit</i>	2 kali setahun <i>Twice a year</i>		
	Survei pemasok <i>Supplier survey</i>	1 kali setahun <i>Once a year</i>		
	Negosiasi pekerjaan <i>Job negotiation</i>	1 kali setahun <i>Once a year</i>		
 PEMERINTAH DAERAH LOCAL GOVERNMENT	Forum desa <i>Village forum</i>	3 bulan sekali <i>Every 3 months</i>	Kegiatan CSR dan PKBL yang dilaksanakan dan kebutuhan dilaksanakan, dampak ekonomi tidak langsung, kinerja pengurangan emisi, pengelolaan limbah cair dan padat <i>Ongoing CSR and PKBL activities, the community needs, indirect economic impacts, emission reduction performance</i>	- Menampung masukan dari Pemerintah Daerah, <i>Accommodated feedback from Local Government,</i> - Merencanakan program CSR yang sesuai dengan kebutuhan masyarakat <i>Planned CSR programs according to the community needs</i> - Mematuhi peraturan Pemerintah Daerah <i>Complied with the Local Government regulations</i>
	Forum kecamatan <i>District forum</i>	2 bulan sekali <i>Every 2 months</i>		
	Forum kabupaten <i>Regency forum</i>	3 bulan sekali <i>Every 3 months</i>		

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PERTUMBUHAN EKONOMI MENUJU MASA DEPAN

ECONOMIC GROWTH TOWARDS THE FUTURE





MENEGASKAN PERTUMBUHAN EKONOMI

Affirming Economic Growth [201]

Kinerja ekonomi penting dikelola agar sumber daya dapat digunakan secara optimal dalam menghadapi perubahan, sehingga memberikan nilai manfaat bagi pemangku kepentingan, termasuk mendukung pembangunan nasional. Kinerja ekonomi yang positif berdampak pada kepercayaan investor dalam meningkatkan investasi, dividen bagi pemegang saham, pendapatan bagi mitra kerja, kesejahteraan karyawan dan distribusi nilai manfaat pada masyarakat.

Economic performance is essential to be managed to optimize the use of resources in the face of change, so as to provide value for the benefit of stakeholders, including supporting national development. Positive economic performance has an impact on investors' confidence in increasing investment, dividends for shareholders, income for partners, employee welfare and distribution of benefits to the community. [103-1]

PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH [103-2]

Pengelolaan kinerja ekonomi menjadi tanggung jawab Departemen Akuntansi dan Keuangan Grup di bawah Direktur Keuangan. Kebijakan ekonomi menekankan untuk mempertahankan kinerja agar tetap positif dengan melakukan efisiensi, diversifikasi produk, pemasaran, dan transformasi biaya ke seluruh unit perusahaan.

Management of economic performance is the responsibility of the Group's Accounting and Finance Department under the Finance Director. Economic policy emphasizes on maintaining positive performance through efficiency, product diversification, marketing and cost transformation to all company units.

Guna meningkatkan penjualan semen, PT Semen Indonesia (Persero) Tbk menawarkan layanan total solusi konstruksi. Layanan yang terintegrasi terbaru dari hulu ke hilir yang meliputi produk semen, nonsemen, hingga jasa, melalui jaringan perusahaan (*operating company*), Anak Perusahaan, dan afiliasinya. Hingga akhir tahun 2018 Semen Indonesia menargetkan penjualan ekspor sebesar 3,2 juta ton. Untuk mencapai target tersebut, Perseroan menghadapi tantangan untuk memperkuat jaringan ekspor di negara-negara tujuan diantaranya adalah Sri Lanka, Tahiti, Timor Leste, Tonga, Uni Emirat Arab, Yaman, Filipina, China serta negara lain SMGR juga mengekspor ke Australia, Austria, Maldives, India dan Bangladesh) serta menjajaki berbagai negara lainnya dan ikut aktif dalam kegiatan misi dagang.

To boost cement sales, PT Semen Indonesia (Persero) Tbk offers total construction solutions. It is the latest integrated services from upstream to downstream encompassing cement, non-cement products, and services, through the company's network (operating companies), subsidiaries and affiliates. Until the end of 2018, Semen Indonesia set export sales target at 3.2 million tons. To achieve this target, the Company faced the challenge in strengthening its export network in destination countries including Sri Lanka, Tahiti, Timor Leste, Tonga, United Arab Emirates, Yemen, the Philippines, China and other countries. SMGR also exports to Australia, Austria, Maldives, India and Bangladesh) as well as exploring various other countries and actively participating in trade mission.

EVALUASI PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH EVALUATION [103-2]

Kinerja ekonomi dipantau oleh tim audit internal dan eksternal. Dari hasil evaluasi tahunan, pencapaian kinerja ekonomi tahun 2018 didukung oleh implementasi teknologi baru, misalnya WHRPG yang dapat menekan biaya pembelian energi listrik.

Economic performance is monitored by internal and external audit teams. The results of annual evaluation showed that economic performance achievements in 2018 supported by new technology, such as WHRPG, managed to reduce costs from electricity

PENCAPAIAN KINERJA EKONOMI

Economic Performance Achievement [201-1]

Fundamental keuangan Perseroan tetap kokoh di tengah dinamika persaingan yang semakin ketat. Hal ini ditandai dengan kemampuan Perseroan melakukan perluasan kapasitas produksi, serta ekspansi usaha selama setahun terakhir. Kemampuan Perseroan juga tercermin pada kinerja ekonomi pada 2018 yang dibukukan dengan pendapatan sebesar Rp 30.687.625.970, tumbuh 10,33% dari tahun sebelumnya Rp 27.813.664.176, dan laba bersih setelah pajak sebesar Rp 3.079.865.966, naik 50,75% dari tahun sebelumnya Rp 2.043.025.914. Nilai ekonomi ini berkontribusi terhadap pembayaran pajak penghasilan kepada pemerintah sebesar Rp 1.022.797.942, naik 45,38% dari tahun sebelumnya Rp 703.520.449. Di sisi lain, distribusi nilai ekonomi untuk investasi masyarakat Rp 116.861 juta, turun 39,4% dari tahun sebelumnya Rp 192.854 juta.

The Company's financial fundamentals remain strong amidst increasingly fierce competition dynamics. This is indicated by the Company's ability to build production capacity and conduct business expansion over the past year. The Company's ability was also reflected in the economic performance in 2018 which recorded revenues of Rp30,687,625,970, grew 10.33% from the previous year of Rp27,813,664,176 and net income after tax of Rp3,079,865,966, up 50.75% from the previous year of Rp2,043,025,914. This economic value contributed to the payment of income tax to the government of Rp1,022,797,942, up 45.38% from the previous year of Rp703,520,449. Meanwhile, the distribution of economic value for community investment was Rp116,861 million, decreased 39.4% from the previous year of Rp192,854 million.



Nilai Ekonomi Langsung Didapat dan Didistribusikan
Direct Economic Value Generated and Distributed [103-3] [201-1]

No	Uraian Description	Periode Pelaporan dan Besaran Nilai (Juta IDR) Reporting Period and Value (Million IDR)		
		2018	2017	2016
NILAI EKONOMI LANGSUNG DIHASILKAN DIRECT ECONOMIC VALUE				
	Pendapatan Income	30,687,626	27,813,664	26,134,306
Ditambah (+/+) Addition				
	• Penerimaan bunga bank Interest income	181,973	168,673	183,772
	• Penerimaan investasi pada Anak Perusahaan Subsdiary income	1,606	-9,637	37,228
	• Pendapatan Operasi lainnya (Penjualan aset, denda dan klaim, laba rugi selisih kurs, dan lainnya) Other Operating Income (assets sales, fines and claims, profit and loss on foreign exchange, etc)	162,429	218,067	253,698
	Nilai Ekonomi Langsung dihasilkan Direct Economic Value	31,033,634	28,190,767	26,609,004
NILAI EKONOMI DIDISTRIBUSIKAN ECONOMIC VALUE DISTRIBUTED				
1	Beban Pokok Pendapatan, Penjualan, Umum dan administrasi Lainnya Cost of Goods Sold and Other Direct Costs	21,373,933	19,854,065	16,278,433
2	Biaya pegawai Employee Expenses	2,578,312	2,866,810	2,614,362
3	Biaya Keuangan atas pinjaman jangka pendek Short term loan interest and bank payment	959,259	756,448	363,493
4	Pengeluaran untuk pemerintah Government expenditure	1,022,798	703,520	549,584
5	Pengeluaran untuk masyarakat Public expenditure	116,861	192,854	186,815
	Nilai Ekonomi Didistribusikan Total Distributed Economic Value	26,051,163	24,373,697	19,992,687
NILAI EKONOMI DITAHAN ECONOMIC VALUE RETAINED				
	Laba Bersih Tahun Berjalan Net Profit for The Year	3,079,866	2,043,026	4,535,036
	Pembayaran dividen Dividen payment	805,678	1,808,638	1,818,504
	Nilai Ekonomi yang Ditahan Economic Value Retained	2,274,188	234,388	2,716,532

PELAYANAN DAN PERLINDUNGAN KONSUMEN

Consumer Services and Protection

Pelayanan konsumen, baik distributor maupun pengguna akhir, merupakan prioritas utama Perseroan sebagai entitas bisnis. Sebagai bentuk tanggung jawab terhadap konsumen, Perseroan berupaya mencapai target tahunan, antara lain:

- Menyediakan produk di pasaran secara memadai melalui peningkatan volume produksi dari fasilitas produksi baru di Padang dan Rembang, serta peningkatan distribusi dengan menyediakan *Packing Plant* di Oba, Maluku Utara dan di Bengkulu.
- Memenuhi harapan konsumen melalui penelitian dan pengembangan, kontrol kualitas yang ketat, dan penyelesaian keluhan pelanggan;
- Memenuhi kontrak-kontrak pasokan semen dengan tepat waktu dan mutu, melalui pembentukan Unit Corporate Marketing dan penyediaan Corporate Relationship Manager, pembenahan saluran distribusi semen dan merevitalisasi peran distributor semen;
- Mitigasi risiko dampak kesehatan dan keselamatan konsumen melalui pembuatan kemasan sak produk semen sesuai berat beban ergonomi yang dapat diangkat manusia tanpa alat bantu, yaitu 40 kilogram dan 50 kilogram. Selain itu melengkapi informasi terkait spesifikasi semen, antara lain: lambang/logo dari perusahaan yang memproduksi, nama produk, nomor SNI, berat dalam kemasan, jenis semen, petunjuk penggunaan, dan nomor layanan konsumen bila ada keluhan/pengaduan.

Pelayanan konsumen dievaluasi melalui survei tingkat kepuasan pelanggan setiap tahun. Hasil survei ditampilkan dalam indeks survei kepuasan pelanggan (*customer satisfaction index* atau CSI) untuk saluran distribusi dan pelanggan. Survei kepuasan pelanggan untuk tahun 2018 baru akan dilaksanakan pada bulan Maret 2019.

Services for consumers, both distributors and end users, become the Company's top priority as a business entity. As a form of responsibility towards consumers, the Company strives to meet its annual targets, including:

- *Provide sufficient products on the market by increasing production volume from new production facilities in Padang and Rembang, as well as increasing distribution by providing Packing Plants in Oba, North Maluku and Bengkulu.*
- *Meet consumer expectations through research and development, strict quality control, and resolution of customer complaints;*
- *Meet cement supply contracts in a timely manner and maintained quality, through the establishment of Corporate Marketing Unit and the provision of Corporate Relationship Managers, revamping the cement distribution channel and revitalizing the role of cement distributors;*
- *Mitigate the risk of impact on consumers' health and safety through the manufacture of packaging for cement products according to the weight of ergonomic loads that can be lifted by humans without assistance, which are 40 kilograms and 50 kilograms. In addition, completing information regarding cement specifications, including: the symbol/logo of the manufacturing company, product name, SNI number, weight in packaging, type of cement, instructions for use, and customer service number if there are complaints/grievances.*

Consumer services are evaluated annually through customer satisfaction survey. The survey results are shown in the customer satisfaction index (CSI) for distribution channels and customers. The customer satisfaction survey for 2018 will only be conducted in March 2019.



Terkait perlindungan konsumen, Perseroan memastikan seluruh atau 100% produk telah memenuhi regulasi dan standar yang relevan dengan industri semen, termasuk Undang-Undang No. 8 Tahun 1999 tentang Perlindungan Konsumen. Kepatuhan ini merupakan kriteria umum proses penilaian dampak kesehatan dan keselamatan konsumen di seluruh daur hidup (*life cycle*) produk.

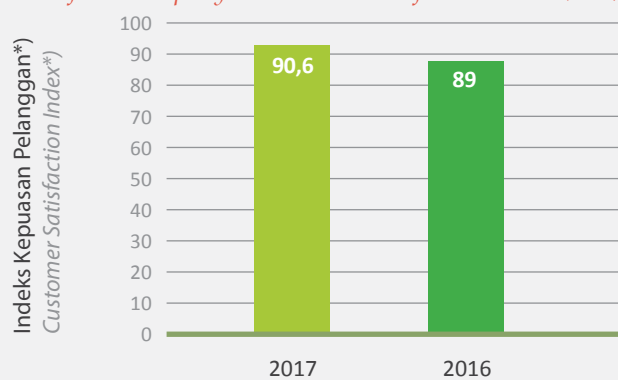
Perseroan juga memberikan jaminan mutu dan keamanan produk berupa perolehan sertifikat Standar Nasional Industri (SNI) dari setiap jenis produk. inisiatif ini menghasilkan tidak adanya catatan pelanggaran hukum maupun peristiwa penarikan produk yang telah dirilis sepanjang tahun 2018.

Regarding consumer protection, the Company ensures that all 100% of its products meet relevant regulations and standards of cement industry, including Law No. 8 of 1999 on Consumer Protection. This compliance is a general criterion of the consumer health and safety impact assessment process throughout the product life cycle.

The Company also provides quality assurance and safety of product by receiving certificates of the Industrial National Standard (SNI) of each type of product. This initiative resulted in the absence of legal offense or recall of products released during 2018.



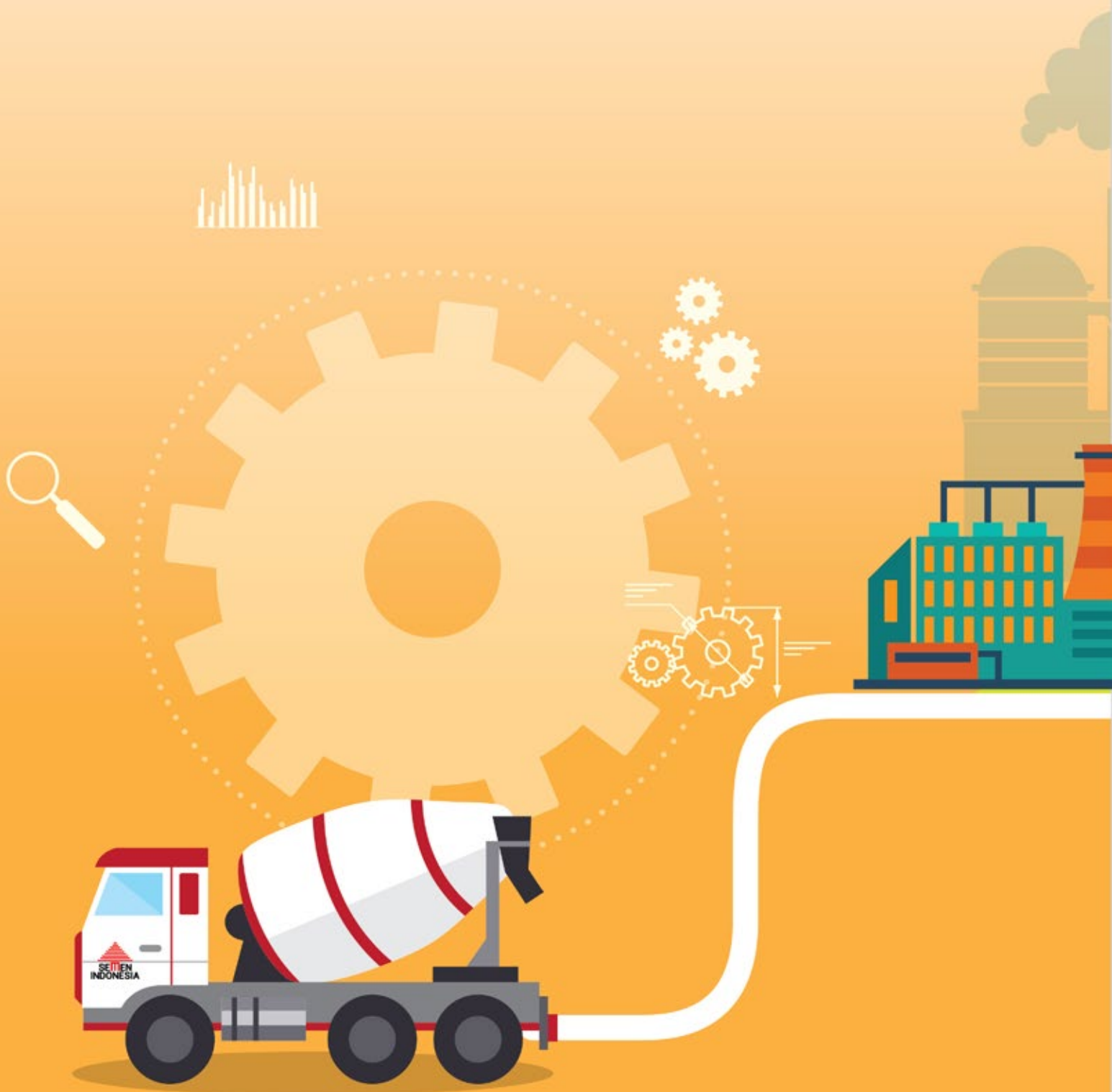
Hasil Survei Index Kepuasan Pelanggan (CSI) Perseroan Results of the Company's Customer Satisfaction Index (CSI) Survey



Keterangan: *) Skala 0-100 | Scale 0-100

PENGELOLAAN K3 DI TEMPAT KERJA

OHS Management in the Workplace





PENGELOLAAN K3 DI TEMPAT KERJA

OHS Management in the Workplace [403]

Perseroan mempunyai tanggung jawab menyediakan tempat maupun fasilitas yang aman bagi karyawan dan mitra kerja agar terhindar kejadian berbahaya pada kegiatan operasional perusahaan dan operasi pertambangan. Perseroan berkomitmen mengelola Kesehatan dan Keselamatan Kerja (K3) untuk mencegah penyakit dan kecelakaan akibat kerja. Pengelolaan K3 sangat penting untuk memastikan aktivitas perusahaan yang sehat, aman, dan nyaman. Kinerja K3 yang maksimal berdampak signifikan pada jaminan kerja bagi karyawan dan mitra kerja.

The Company has a responsibility to provide safe places and facilities for employees and partners to avoid dangerous incidents in the company's operations and mining operations. The Company is committed to managing Occupational Health and Safety (OHS) to prevent occupational illnesses and work accidents. OHS management is very important to ensure a healthy, safe and comfortable activities in the company. Optimum OHS performance has a significant impact on job security for employees and partners. [103-1]

PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH [103-2]

Pengelolaan K3 merupakan tanggung jawab Departemen Jaminan Mutu, K3, dan Lingkungan di bawah Direktur Operasi. Kebijakan terkait mengacu pada klausul PKB, Peraturan Pemerintah, Sistem Manajemen Keselamatan & Kesehatan Kerja (SMK3), serta OHSAS 18001:2007.

OHS management is the responsibility of the Quality Assurance, OHS, and Environmental Department under the Director of Operations. Related policies refer to the CLA clauses, Government Regulations, Occupational Health & Safety Management System (OHSMS/ SMK3), and OHSAS 18001: 2007.

Adapun pelaksanaan program K3 dipantau oleh Panitia Pembinaan Keselamatan dan Kesehatan Kerja (P2K3). Pelaksanaan kegiatan K3 mencakup pelatihan secara berkala dan implementasi program-program pencegahan insiden kecelakaan kerja. Program K3 pada tahun 2018, antara lain:

The OHS program implementation is monitored by the Occupational Health and Safety Committee (P2K3). The implementation of OHS activities covers regular training and implementation of work accident prevention programs. The OHS program in 2018 includes:

- Program Ringkas, Rapi, Resik, Rawat, dan Rajin (5R);
- Program audit internal oleh Internal Audit dan audit eksternal oleh lembaga sertifikasi setiap setahun sekali;
- Melakukan kegiatan *Safety Talk* satu minggu sekali dalam unit kerja;
- Meningkatkan kegiatan P2K3 unit kerja melalui penunjukkan Duta K3;
- Meningkatkan pengetahuan/kompetensi karyawan melalui Sertifikasi Ahli K3 Umum, Sertifikasi Operator Boiler;
- *Concise, Neat, Rehearsal, Tidy, and Diligent (5R) program;*
- *Internal audit program by Internal Audit unit and external audit by certification bodies annually;*
- *Weekly Safety Talk within work unit;*
- *Increased activities of P2K3 in work unit through OHS Ambassador appointment;*
- *Improved employees' knowledge/ competencies through General OHS Specialist Certification, Boiler Operator Certification.*

Sasaran K3 PTSI, antara lain menjamin keselamatan pekerja dan orang lain, menjamin keamanan peralatan yang digunakan, serta menjamin proses produksi yang aman dan lancar.

Target pengelolaan K3 adalah *zero accident* dengan melakukan berbagai inisiatif, seperti menciptakan budaya K3 dengan cara mematuhi UU K3 beserta peraturan pendukungnya, identifikasi bahaya lingkungan sekitar perusahaan, serta sosialisasi kepada pekerja dan tamu perusahaan melalui *safety talk*, *safety induction*, dan pelatihan K3.

The OHS objectives of PTSI, include the assurance for the safety of employees and others, ensure the safety of the equipment used, and ensure a safe and smooth production process.

The OHS management target is zero accident by carrying out various initiatives, such as creating a OHS culture by complying with laws on OHS and supporting regulations, identifying hazards in the environment around the company, and disseminating to employees and company guests through safety talk, safety induction and OHS training.

EVALUASI PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH EVALUATION [103-3]

Dari hasil evaluasi tahunan, kinerja K3 tahun 2018 mengalami kenaikan karena pada tahun 2018 tidak terjadi kecelakaan fatal yang menyebabkan hilangnya nyawa pekerja.

Dari hasil evaluasi tahunan, kinerja K3 tahun 2018 mengalami kenaikan karena pada tahun 2018 tidak terjadi kecelakaan fatal yang menyebabkan hilangnya nyawa pekerja.



PELAKSANAAN PROGRAM K3

OHS Program Implementation

Pelaksanaan dan pemantauan program K3 menjadi tugas dan tanggung jawab komite bersama perwakilan manajemen-karyawan dalam P2K3. Anggota P2K3 di masing-masing Anak Perusahaan mewakili seluruh atau 100% karyawan tetap dalam menyampaikan usulan, masukan, maupun kritik terkait pelaksanaan program K3.

The implementation and monitoring of OHS program are the duties and responsibility of joint committee of with employee-management representatives in P2K3. Its members in each subsidiary represent all or 100% of permanent employees in submitting proposals, feedback, or criticism related to the implementation of OHS programs.

Jumlah Karyawan di Kepengurusan K3 [403-1]

Number of Employees in OHS Management

Uraian Description	Business Unit Tuban			PT Semen Padang			PT Semen Tonasa			PT Semen Gresik
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018
Keselamatan Kerja Occupational Safety	19	23	23	21	27	13	33	29	30	45
Kesehatan Kerja Occupational Health	2	5	4	5	N/A	7	20	1	4	1
Jumlah Total	21	28	27	26	27	20	53	30	34	46

Topik K3 menjadi bagian dari pokok bahasan dalam perjanjian kerja bersama (PKB) antara karyawan yang diwakili serikat pekerja semen Indonesia (SKSI) dengan Perseroan. Pokok bahasan K3 mencakup hak dan kewajiban masing-masing pihak SKSI dan Perseroan terkait klausul pengobatan dan fasilitas kesehatan, serta kesehatan dan keselamatan kerja. Terdapat 7 pasal atau 4,62% terkait topik K3 dari 66 pasal dalam PKB.

[403-4]

OHS topics are part of the subjects of the collective labor agreement (CLA) between the employees represented by the Semen Indonesia Workers Union (SKSI) and the Company. The OHS topics cover the respective rights and obligations of SKSI and the Company regarding clauses on medical treatment and health facilities, as well as occupational health and safety. There are 7 articles or 4.62% related to OHS topics from 66 articles in the CLA.

Klausul Kesehatan dan Keselamatan Kerja dalam PKB

Occupational Health and Safety Clauses in CLA [403-1]

Topik K3 OHS Topics	Pasal Dalam PKB Articles in CLA
Pengobatan dan Fasilitas Kesehatan <i>Medical Treatment and Health Facilities</i>	
Pengobatan <i>Medical Treatment</i>	Pasal 26 <i>Article 26</i>
Pengobatan Rawat Jalan <i>Outpatient Treatment</i>	Pasal 27 <i>Article 27</i>
Pengobatan Rawat Inap <i>Inpatient Treatment</i>	Pasal 28 <i>Article 28</i>
Biaya Kehamilan, Bersalin dan Imunisasi <i>Pregnancy, Maternity and Immunization Fees</i>	Pasal 29 <i>Article 29</i>
Bantuan Khusus <i>Special Assistance</i>	Pasal 30 <i>Article 30</i>
Fasilitas Kesehatan Berkala <i>Periodic Health Facilities</i>	Pasal 31 <i>Article 31</i>
Kesehatan dan Keselamatan Kerja <i>Occupational Health and Safety</i>	Pasal 45 <i>Article 45</i>

Pada tahun 2018, angka peristiwa kecelakaan meningkat dibandingkan tahun 2017, sebesar 17,65%, karena pada tahun 2018 cakupan perhitungan kinerja K3 sudah melibatkan Thang Long Cement dan PT Semen Gresik Pabrik Rembang.

In 2018, the number of accidents increased to 17.65% compared to 2017, because in 2018 the measurement scope of OHS performance included Thang Long Cement and PT Semen Gresik Rembang Plant.



Jumlah Peristiwa Kecelakaan Kerja

Number of Work Accidents

Keterangan Description	2018	2017	2016
Kecelakaan Kerja Work Accident	20	17	19

Keterangan *: Data tahun 2017 tidak mencakup TLCC

Note *: Data 2017 did not include TLCC

[403-9]	Number of Accident (NOA)	Total Recordable Injury Rate (TRIR)	Lost Time Injury Frequency (LTIF)	Manhours
Kinerja K3 Semen Padang <i>OHS Performance of Semen Padang</i>	4	1.08	0.27	3,705,014
Kinerja K3 Semen Tonasa <i>OHS Performance of Semen Tonasa</i>	11	3,01	134.12	3.645.796
Kinerja K3 Semen Gresik <i>OHS Performance of Semen Gresik</i>	0	0	0	346,571
Kinerja K3 Business Unit Tuban OHS <i>Performance of Tuban Business Unit</i>	2	0,97	7,24	2.071.360
Kinerja K3 TLCC <i>OHS Performance of TLCC</i>	3	0	0	568

METODE PERHITUNGAN K3

K3 PERFORMANCE CALCULATION METHOD

Perhitungan kinerja K3 Anak Perusahaan dan Business Unit Semen Indonesia berbeda-beda antara satu Anak Perusahaan dengan yang lainnya. Berikut ini contoh metode perhitungan kinerja K3 PT Semen Tonasa:

Number of Accident = Jumlah Laka Kerja / Lalin + Ringan + Berat + Fatatiliy

Total Recorded Injury Rate (TRIR) = (Jumlah Kecelakaan Kerja x 1.000.000) / Jumlah Jam Kerja

Severity Rate = (Jumlah Hari Kerja Hilang x 1.000.000) / Jumlah Jam Kerja

Calculation of K3 performance of Subsidiaries and Semen Indonesia Business Units varies from one subsidiary company to another. The following are examples of PT Semen Tonasa's K3 performance calculation methods:

Number of Accident = Number of Work / Traffic + Light + Weight + Fatatiliy

Total Recorder Injury Rate (TRIR) = (Number of Incident x 1.000.000) / Employee Hours

Severity Rate = (Number of Work Days Lost x 1,000,000) / 7 x 356 x Number of Employees

PEMELIHARAAN DAN PELAYANAN KESEHATAN / Health Care and Service

Pemeliharaan kesehatan dan kebugaran fisik karyawan (*physical fitness*) mendapat perhatian khusus dari Perseroan karena mendukung kelancaran operasional. Untuk itu Perseroan mendorong terciptanya budaya hidup sehat melalui pemberian fasilitas olahraga, lomba-lomba olahraga, dan fasilitas untuk mengikuti kegiatan pada club olahraga tertentu.

Perseroan juga memiliki program pemeriksaan kesehatan menyeluruh (*medical check-up/ MCU*) bagi seluruh karyawan setiap satu kali dalam setahun untuk mendeteksi secara dini penyakit yang diderita, serta tindakan medis jika diperlukan. Pemeriksaan kesehatan kepada karyawan, meliputi pemeriksaan fisik, kesegaran jasmani, laboratorium, EKG, spirometri, audiometri, x-ray, serta pemeriksaan gigi dan mata. Hasil MCU karyawan dikirim langsung ke email masing-masing karyawan. Jika ditemukan kelainan pada hasil MCU, maka akan dilakukan pemanggilan terhadap karyawan tersebut untuk konsultasi kepada dokter.

Di sisi lain, masing-masing Grup Semen Indonesia menyediakan klinik kesehatan sebagai sarana berobat karyawan yang sakit akibat kerja. Apabila karyawan membutuhkan tindakan medis yang tidak dapat dilakukan di klinik, maka dirujuk ke rumah sakit terdekat perusahaan, seperti Semen Padang ke Semen Padang Hospital, Semen Tonasa ke Rumah Sakit Umum Daerah Pangkep dan Rumah Sakit di Kota Makassar, RSUD Blora untuk Semen Gresik, dan Rumah Sakit Semen Gresik untuk Business Unit Tuban. Untuk pembahasan lebih lanjut terkait daftar penyakit dominan dan upaya tindakan medis di setiap Anak Perusahaan dan business unit Perseroan dapat dilihat pada lampiran 4 laporan ini.

Health care and physical fitness of employees receive special attention from the Company because they can support smooth operations. Therefore, the Company encourages the culture of healthy living by providing sports facilities, sports competitions, and facilities to participate in certain sports clubs.

The company also has a comprehensive medical check-up (MCU) program for all employees every once in one year to for early detection of illnesses, as well as medical actions if needed. Medical checks for employees, including physical examination, physical fitness, laboratory, EKG, spirometri, audiometry, x-ray, and dental and eye examination. Employee MCU results are sent directly to each employee's e-mail. If abnormalities are found in the results of the employees' MCU will be summoned to consult the doctor. .

On the other hand, each member of Semen Indonesia Group provides health clinics as a means of treating sick employees due to work. If the employees need medical procedure that cannot be done at the clinic, they are referred to the nearest hospital, such as employees of Semen Padang will be referred to Semen Padang Hospital, Semen Tonasa to Regional General Hospital (RSUD) of Pangkep and other hospitals in Makassar City, RSUD Blora for Semen Gresik, and Semen Gresik Hospital for Business Unit Tuban. Further description on the list of dominant diseases and medical actions in each subsidiary and business unit of the Company can be found in appendix 4 of this report.

MENGENDALIKAN DAMPAK LINGKUNGAN

Controlling Environmental Impact





MENGENDALIKAN DAMPAK LINGKUNGAN

Controlling Environmental Impact [302, 305, 306]

Perseroan memahami bahwa kegiatan operasional berdampak terhadap lingkungan, baik dari penggunaan energi sebagai faktor utama produksi maupun eksternalitas fabrikasi berupa emisi (gas rumah kaca/GRK, pencemar udara, dan emisi debu), serta limbah (padat dan cair). Kebijakan Perusahaan menekankan pentingnya pengelolaan lingkungan untuk mencapai efisiensi energi, pengendalian emisi, serta pengurangan dan pemanfaatan limbah B3 dan/atau non B3.

The Company understands that operational activities may have an impact on the environment, both from energy use as the main factor of production and fabrication externalities in the form of emissions (greenhouse gases/GHGs, air pollutants, and dust emissions), and waste (solid and liquid). Company policy emphasizes on the importance of environmental management to achieve energy efficiency, control of emissions, and reduction and utilization of hazardous & toxic waste (B3) and/or non-B3 waste.

PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH [103-1, 103-2]

Bagi Perseroan, energi penting untuk dikelola karena keterbatasan energi fosil (batu bara dan minyak bumi/solar) sebagai bahan bakar utama dan merupakan komponen terbesar dalam pembiayaan dari seluruh Anak Perusahaan. Penggunaan energi terbarukan merupakan salah satu upaya pengamanan pasokan energi dan solusi efisiensi biaya energi. Upaya ini juga menjadi bagian penting dari pengendalian emisi. Emisi dikelola melalui penerapan teknologi termutakhir untuk mengurangi potensi pencemaran yang mungkin terjadi. Emisi GRK (CO₂), pencemar udara (NOx dan SOx) berpotensi menimbulkan gangguan kesehatan karyawan maupun masyarakat sekitar, termasuk pemanasan global yang memicu perubahan iklim.

Selain energi dan emisi, limbah penting dikelola untuk mencegah dampak negatif berupa pencemaran lingkungan, keamanan dan gangguan kesehatan karyawan maupun masyarakat. Pengelolaan limbah yang memiliki nilai guna melibatkan mitra yang berijin dari instansi terkait melalui daur-ulang (*recycle*) dan pemanfaatan kembali (*reuse*).

For the Company, energy management is essential due to the limited amount of fossil energy (coal and oil/diesel fuel) as the main fuel and is the largest component in financing of all subsidiaries. The use of renewable energy is an effort for security of energy supply and energy cost efficiency solutions. This effort is also an important part of controlling emissions. Emissions are managed through the application of the latest technology to reduce potential pollution that might occur. GHG (CO₂) emissions, air pollutants (NOx and SOx) have the potential to cause health problems for employees and the surrounding community, including global warming that triggers climate change.

In addition to energy and emissions, important waste is managed to prevent negative impacts in the form of environmental pollution, security and health problems for employees and the community. Management of waste that has useful value to involve licensed partners from the relevant agencies, through recycling and reuse.

EVALUASI PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH EVALUATION [103-3]

Kinerja pengelolaan lingkungan secara keseluruhan dievaluasi secara berkala setiap tahun oleh pihak internal dan eksternal. Tim internal melakukan pemantauan kinerja lingkungan untuk memastikan kesesuaian dengan parameter atau standar perundang-undangan, mengetahui pencapaian target yang telah ditetapkan, dan langkah-langkah perbaikan secara berkesinambungan yang perlu ditempuh. Adapun evaluasi melalui pihak eksternal melibatkan tenaga profesional untuk melakukan pemantauan sekaligus penilaian kinerja lingkungan agar lebih objektif.

Overall environmental management performance is evaluated regularly every year by internal and external parties. The internal team monitors environmental performance to ensure compliance with legal parameters or standards, identify the achievement of targets that have been set, and measures for continuous improvement that need to be taken. External evaluation involves professionals to monitor and evaluate environmental performance to be more objective.

Perseroan dan Anak Perusahaan mengikuti Program Penilaian Peringkat Kinerja Lingkungan Hidup Perusahaan (PROPER) yang diselenggarakan Kementerian Lingkungan Hidup dan Kehutanan tahun 2018. Business Unit Operasi PTSI Pabrik Tuban menjadi salah satu kandidat peringkat Emas, PT Semen Tonasa meraih peringkat Hijau, dan PT Semen Padang meraih peringkat Biru.

The Company and its subsidiaries participated in the Company's Environmental Performance Rating Program (PROPER) held by the Ministry of Environment and Forestry in 2018. PTSI's Tuban Operating Business Unit became one of the Gold rating candidates, PT Semen Tonasa received Green rating, and PT Semen Padang won Blue rating.

Di tahun 2018, PT Semen Padang hanya mendapatkan peringkat PROPER Biru, setelah berhasil mendapatkan PROPER Hijau selama dua tahun berturut-turut. Hal tersebut disebabkan oleh adanya perbedaan format form Pengendalian Pencemaran Udara yang dikeluarkan oleh laboratorium yang bekerjasama dengan PT Semen Padang tidak sesuai dengan format lampiran IX Peraturan Menteri Lingkungan Hidup dan Kehutanan No. P.19/Menlhk/Setjen/Kum.1/2/2017 Tahun 2017 tentang Baku Mutu Emisi Bagi Usaha dan/atau Kegiatan Industri Semen. Ketidakesesuaian tersebut ada pada form laporan Pengendalian Pencemaran Udara dari Laboratorium terakreditasi hanya menampilkan hasil yang telah terkoreksi, sedangkan format pelaporan dari KLHK diwajibkan menampilkan hasil yang terukur dan hasil terkoreksi.

PT Semen Padang's rating declined from previously Green in 2016 and 2017 consecutively to Blue rating in 2018 due to differences in valuations between the PROPER Board, the Company, and independent parties. Based on information from the Environment and Hygiene Agency (DLHK), independent parties only calculate measurable emissions and have not calculated corrected emissions. DLHK then recalculated the corrected emissions, resulting in a double calculation with the results of the Company's emissions at 18%, higher than the emission standard of 12%. This measurement was based on the Minister of Environment and Forestry Regulation No. P.19/Menlhk/Setjen/Kum.1/2/2017 on Emission Quality Standards for Cement Businesses and/or Industrial Activities.

Selain PROPER, kinerja lingkungan juga dievaluasi dari pencapaian level penghargaan Industri Hijau dari Kementerian Perindustrian atas upaya efisiensi dan efektifitas penggunaan sumber daya secara berkelanjutan pada proses produksinya. Business Unit Tuban, PT Semen Padang dan PT Tonasa meraih Industri Hijau Level 5 (tertinggi) pada tahun 2018. Pencapaian ini mendorong Perseroan terus meningkatkan kinerja lingkungan sesuai dengan parameter peraturan perundang-undangan dan standar yang relevan dengan industri semen.

In addition to PROPER, environmental performance is also evaluated from the achievement of the Green Industry award from the Ministry of Industry for the efforts to efficiently and effectively use resources in the production process. Business Unit Tuban, PT Semen Padang and PT Tonasa won the Green Industry Level 5 (highest) in 2018. This achievement encouraged the Company to continue to improve environmental performance in compliance with the parameters of laws and regulation, as well as standards relevant to the cement industry.

PENGAMANAN PASOKAN ENERGI

Energy Supply Security [103-2, 103-3]

Perseroan berencana menerapkan Sistem Manajemen Energi berbasis ISO 50001 di masing-masing Anak Perusahaan sebagai tools untuk meningkatkan pengelolaan energi secara efisien. Pengelolaan energi memiliki tujuan strategis untuk mengefisiensi biaya energi, penghematan pemakaian energi, dan pengamanan pasokan energi serta kelistrikan. Kebijakan Perusahaan terkait efisiensi energi mengacu pada: Peraturan Pemerintah No. 70 tahun 2009 tentang Konservasi Energi.

The company plans to implement an ISO 50001-based Energy Management System in each subsidiary as tools to improve energy management efficiently. Energy management has a strategic goal to reduce energy costs, save energy use, and secure energy supply and electricity. Company policy regarding energy efficiency refers to: Government Regulation No. 70 of 2009 on Energy Conservation.

Pabrik Indarung V PT Semen Padang merupakan pabrik semen pertama di Asia Tenggara yang memanfaatkan energi terbarukan melalui WHRPG.

Indarung V Plant of PT Semen Padang is the first cement plant in Southeast Asia to use renewable energy through WHRPG.

Sejak tahun 2005, Perseroan menetapkan strategi “*Manage Energy Security*” yang dinilai memberikan kontribusi signifikan dalam efisiensi energi. Strategi ini diimplementasikan melalui tiga inisiatif, yaitu:

1. Penggunaan energi biomassa dalam kerangka program Clean Development Mechanism (CDM) untuk mensubstitusi penggunaan batubara. Pabrik Tuban memakai 65% sekam padi, 30-33% *cocopeat*, dan sisanya limbah tembakau, kertas, sampah (RDF). Pabrik Indarung Padang memakai sekam padi dan serbuk gergaji, sedangkan Pabrik Pangkep Sulawesi Selatan memakai sekam padi, serbuk gergaji dan sampah organik. Dana investasi yang dikeluarkan oleh PT Semen Tonasa untuk program ini, yaitu Rp769.499.600 yang telah menghasilkan total energi sebesar 44.743,49 GJ selama tahun 2018.
2. Penggunaan energi bersih dari unit *Waste Heat Recovery Power Generator* (WHRPG). Kapasitas WHRPG di Pabrik Indarung V Semen Padang sebesar 8 MW, sedangkan WHRPG di Pabrik Tuban I-IV, Jawa Timur berkapasitas 30,6 MW yang mulai beroperasi sejak Bulan Maret 2018;
3. Penggunaan bahan bakar alternatif dari pemanfaatan *Refused Derived Fuel* (RDF) yang difokuskan pada pengelolaan sampah kota (*Municipal Solid Waste*) di Kabupaten Gresik dengan kapasitas 240 ton/hari. RDF diharapkan dapat mengurangi pemakaian batubara hingga 2%. Selain itu, PT Semen Tonasa bekerjasama dengan masyarakat dan DKLHK untuk memanfaatkan limbah non-B3, seperti kulit kacang mente untuk diolah menjadi energi. Energi yang dihasilkan mencapai 46.742 GJ yang digunakan sebagai bahan bakar alternatif pengganti batubara sebesar 0,24%.

Selain itu, Perseroan juga mengembangkan teknologi “*Upgrading Low Rank Coal*” untuk meningkatkan nilai kalori batubara dari *low rank coal* (4.200 kcal/kg) menjadi *high calorie* (6.700 kcal/kg). Teknologi ini dapat diterapkan di seluruh pabrik, sehingga dapat mengurangi pemakaian batubara.

Sasaran inisiatif efisiensi energi adalah penurunan indeks pemakaian energi listrik dan panas.

Since 2005, the Company has adopted the strategy “Manage Energy Security” which is considered to have contributed significantly to energy efficiency. This strategy is implemented through three initiatives, namely:

1. *Use of biomass energy under the Clean Development Mechanism (CDM) program to substitute the use of coal. Tuban Plant uses 65% of rice husk, 30-33% of cocopeat, and the rest is tobacco, paper, garbage (RDF) waste. Indarung Padang plant uses rice husks and sawdust, while Pangkep Plant in South Sulawesi uses rice husks, sawdust and organic waste.*
2. *Clean energy use from the Waste Heat Recovery Power Generator (WHRPG) unit. WHRPG capacity at Semen Padang Indarung V Plant is 8 MW, while WHRPG at Tuban I-IV Plants, East Java, has a capacity of 30.6 MW which began operating since March 2018;*
3. *The use of alternative fuels from the Refused-Derived Fuel (RDF) was focused on the management of municipal solid waste in Gresik Regency with a capacity of 240 tons/day. RDF was expected to reduce coal usage by 2%. In addition, PT Semen Tonasa collaborated with the community and DLHK to utilize non-B3 waste, such as rice husks to be processed into energy. The use of rice husks of 4,274 tons generated 46,742 GJ of energy which was used as alternative fuel to substitute coal by 0.24%.*

Addition, the Company also developed the “Upgrading Low Rank Coal” technology to increase coal calorific value from low rank coal (4,200 kcal/kg) to high calorie (6,700 kcal/kg). This technology can be applied in all plants, to reduce use of coal.

The goal of energy efficiency initiative is to reduce the index of electricity and heat consumption.

Pengelolaan energi menjadi tanggung jawab seluruh departemen yang bernaung dibawah Direktorat Operasi. Audit energi internal dilakukan setiap tahun dan tahun 2018 dilakukan audit energi eksternal oleh PT ISBI (Institut Semen & beton Indonesia) yang biasanya dilakukan setiap tiga tahun sekali. Hasil audit energi 2018 merekomendasikan Perseroan melakukan beberapa penyesuaian, di antaranya:

- Pemasangan VSD (Inverter) untuk mengatur kecepatan dan torsi motor
- Menurunkan pembebanan yang kurang & menghindari motor yang ukurannya terlalu besar
- Menaikkan kontrak daya pemakaian energi listrik dengan PLN
- Koreksi Faktor Daya dengan pemasangan Kapasitor
- Rancang bangun Coal Pre-Dryer untuk meningkatkan kualitas batubara
- Mengganti Coal Feeder dengan keakurasian yang lebih tinggi
- Membuat Kestabilan Kualitas Raw Mill
- Menambah Sensor Temperatur di ujung Cooler sebelum Hammer
- Program Penutupan Kebocoran (*False Air*)
- Peningkatan Pemakaian Bahan Bakar Alternatif

Energy management is the responsibility of all departments under the auspices of the Operations Directorate. Internal energy audits are carried out every year and in 2018 an external energy audit is carried out by PT ISBI (Indonesian Cement & Concrete Institute) which is usually carried out every three years. The results of the 2018 energy audit recommend that the Company make some adjustments, including:

- Installation of VSD (Inverter) to adjust motor speed and torque*
- Reduce the load that is less & avoid motors that are too large in size*
- 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*
- Making the Quality of Raw Mill Quality*
- Add a Temperature Sensor at the end of the Cooler before the Hammer*
- False Air Program*
- Increased Use of Alternative Fuels*

AUDIT ENERGI

ENERGY AUDIT [302-3]

Penggunaan energi dalam proses produksi semen terdiri dari dua jenis energi, yaitu energi panas dan energi listrik. Energi panas berasal dari pemakaian batubara sebagai bahan bakar utama, serta energi listrik dari pembangkit listrik internal dan PLN. Penggunaan energi dihitung setiap sekali setahun dengan metode perhitungan konsumsi energi panas yang dimanfaatkan untuk menghasilkan terak dan perhitungan konsumsi energi listrik yang dimanfaatkan untuk menghasilkan semen. Perhitungan penggunaan energi di pabrik PT Semen Tonasa dilakukan dengan menjumlah total kWh untuk semua unit operasi termasuk *packer* dalam pabrik.

Energy use in the cement production process consists of two types of energy, namely heat energy and electricity. Heat energy comes from the use of coal as the main fuel, as well as electricity from internal power plants and PLN. Energy use is calculated once a year with the method of heat energy consumption which is used to produce slag and the calculation of electricity consumption that is used to produce cement. The energy use at PT Semen Tonasa plant is calculated by adding total kWh for all operating units including the packer in the plant.

Pada tahun 2018, total konsumsi energi di dalam perusahaan mencapai 104,949,443 GJ, meningkat 2,76% dari tahun sebelumnya. Perhitungan ini mencakup energi yang dihasilkan sendiri dan dibeli untuk proses produksi. Kenaikan konsumsi energi karena terjadinya penurunan produksi, terutama di Business Unit Tuban dibandingkan dengan tahun 2017.

In 2018, total energy consumption in the company reached 109,834,435 GJ, up 2.76% from the previous year. This calculation included energy from own generation and purchased for the production process. The increase in energy consumption was due to an increase in slag production in Business Unit Tuban in 2018 and PT Semen Gresik which began operating in mid 2017, thus energy calculations only started from July 2017.

Konsumsi Energi di Dalam Perusahaan

Energy Consumption within the Company

Grup Semen Indonesia Semen Indonesia Group	Besaran Energi (GJ) Energy Quantity (GJ)		
	2018	2017	2016
Business Unit Tuban	47,465,089	47,350,297**	44,944,046**
PT Semen Padang	26,367,971	25,461,256	21,632,917
PT Semen Tonasa	21,781,468	23,211,556**	22,679,325**
Thang Long Cement	8,065,502	7,745,362	7,617,158
PT Semen Gresik	6,154,405	3,157,381	N/A
Total	109,834,435	106,880,852	96,873,446

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

**Terdapat restatement pada Business Unit Tuban di tahun 2017 & 2016 karena metode perhitungan yang berbeda

**Terdapat restatement Semen Tonasa di tahun 2017 & 2016 karena metode perhitungan yang berbeda

N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

** There were restatements of Business Unit Tuban in 2017 & 2016 due to different calculation methods

** There were restatements of Semen Tonasa in 2017 & 2016 due to different calculation methods

Total konsumsi energi di luar perusahaan mencapai 87.057 GJ, turun 57,5% dari tahun sebelumnya. Perhitungan ini mencakup energi yang dibeli (PLN, solar, batu bara) yang digunakan untuk kegiatan di luar proses produksi utama, seperti transportasi/ pembelian bahan baku, distribusi produk, perjalanan bisnis. Penurunan konsumsi energi diluar perusahaan karena Anak Perusahaan dan Business Unit berhasil dalam melaksanakan program efisiensi energi.

Total energy consumption outside the company reached 87,057 GJ, down 57.5% from the previous year. This calculation included energy purchase (PLN, diesel fuel, coal) which was used for activities outside the main production process, such as transportation/ raw material purchases, product distribution, business trips. The decrease in energy consumption outside the company was due Subsidiaries and Business Unit managed to carry out energy efficiency program.

Konsumsi Energi di Luar Perusahaan

Energy Consumption Outside the Company

Grup Semen Indonesia Semen Indonesia Group	Besaran Energi (GJ) Energy Quantity (GJ)		
	2018	2017	2016
Business Unit Tuban	N/A	N/A	123,782
PT Semen Padang	N/A	N/A	N/A
PT Semen Tonasa	34,392	26,126**	29,382**
Thang Long Cement	52,665	50,475	49,125
PT Semen Gresik	0	0	N/A
Total	87,057	204,843	1,352,742

• N/A: Not Available, karena pada tahun 2016 & 2017 Business Unit Tuban dan PT Semen Padang belum menghitung konsumsi energi di luar perusahaan

• N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

• **Terdapat restatement Semen Tonasa di tahun 2017 & 2016 karena metode perhitungan yang berbeda

• N/A: Not Available, in 2016 & 2017 Business Unit Tuban and PT Semen Padang have not calculated energy consumption outside the company

• N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

Intensitas Energi Per Produk Semen

Energy Intensity Per Cement Product [302-3]

Grup Semen Indonesia Semen Indonesia Group	Intensitas Energi (GJ/Ton Semen) Energy Intensity (GJ / Ton of Cement)		
	2018	2017	2016
Business Unit Tuban	3.66	3.59**	3.59**
PT Semen Padang	3.65	3.58	3.35
PT Semen Tonasa	3.86	3.89**	3.80**
Thang Long Cement	4.04	3.14	3.24
PT Semen Gresik	4.53	4.03	N/A

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

**Terdapat Business Unit Tuban restatement di tahun 2017 dan 2016 karena metode perhitungan yang berbeda dari Tahun sebelumnya

**terdapat restatement Semen Tonasa di tahun 2017 & 2016 karena metode perhitungan yang berbeda dari Tahun sebelumnya

N/A: Not Available, because PT Semen Gresik only began to operate in mid 2017

** There were restatements of Business Unit Tuban in 2017 and 2016 due to different calculation method from the previous year

** There were restatements of Semen Tonasa in 2017 and 2016 due to different calculation method from the previous year

Kinerja energi Perseroan mendapatkan Penghargaan Subroto Bidang Efisiensi Energi tahun 2018 dari Kementerian ESDM, sebagai *the best special submission category*.

The Company's energy performance received the Subroto Award in Energy Efficiency Sector of 2018 from the Ministry of Energy and Mineral Resources, as the best special submission category.



Pengurangan Konsumsi Energi

Energy Consumption Reduction [302-4]

Grup Semen Indonesia Semen Indonesia Group	Inisiatif Initiative	Jumlah dalam Giga Joule Quantity in Giga Joule		
		2018	2017	2016
Business Unit Tuban	Pemanfaatan Biomassa Sebagai Bahan Bakar Alternatif <i>Use of Biomass as an Alternative Fuel</i>	717,759	844,157**	765,882**
PT Semen Padang	1. Pemanfaatan gas buang sebagai pembangkit listrik (waste heat recovery power generator) 2. Pemanfaatan bahan bakar alternatif (biomassa dan oli bekas) <i>1. Use waste heat recovery for power generator</i> <i>2. Use of alternative fuels (biomass and used oil)</i>	190,394	183,286	193,321
PT Semen Tonasa	Pemanfaatan bahan bakar alternative (sekam) untuk menurunkan emisi karbon. Catatan: di tahun 2016 terdapat penurunan pemakaian sekam dikarenakan terjadi penurunan kualitas batubara <i>Use of alternative fuels (husks) to reduce carbon emissions</i> <i>Note: in 2016 there was a decrease in the use of husks due to a decline in coal quality</i>	46,742	93,364	36,850
Total		1,135,387	1,120,449	996,151

**Terjadi restatement pada Business Unit Tuban di tahun 2017 dan 2016 dikarenakan metode perhitungan yang berbeda

**Terjadi restatement pada PT Semen Padang di tahun 2016 dikarenakan perhitungan yang berbeda

**Terdapat restatement PT Semen Tonasa di tahun 2017 & 2016 karena perhitungan yang berbeda

** There were restatements of Tuban Business Unit in 2017 and 2016 due to difference in calculation

** There were restatements of PT Semen Padang in 2016 due to difference in calculation

** There were restatements of PT Semen Tonasa in 2017 & 2016 due to difference in calculation

PENGENDALIAN EMISI

/ Emission Control [103-2, 103]

Sejalan dengan inisiatif efisiensi energi, Perseroan berupaya mengurangi beban emisi GRK dan pencemar udara dari proses pabrikasi semen. Tujuan strategis pengendalian emisi adalah turut berkontribusi dalam program pemerintah menghambat pemanasan global. Kebijakan Perusahaan terkait pengurangan emisi mengacu pada:

- Peraturan Presiden Nomor 61 Tahun 2011 tentang Rencana Aksi Nasional Penurunan Emisi GRK;
- Peraturan Presiden Nomor 71 Tahun 2011 tentang Penyelenggaraan Inventarisasi GRK Nasional;
- Peraturan Menteri Perindustrian No. 12/M-IND/PER/1/2012 tentang peta panduan (roadmap) Pengurangan Emisi CO₂ Industri Semen di Indonesia;
- Presidential Regulation Number 61 of 2011 on National Action Plan for Reducing GHG Emissions;
- Presidential Regulation Number 71 of 2011 on Implementation of National GHG Inventory;
- Minister of Industry Regulation No. 12/M-IND/PER/1/2012 on the CO₂ Emission Reduction roadmap for Cement Industry in Indonesia;

In line with energy efficiency initiatives, the Company seeks to reduce the load of GHG emissions and air pollutants from the cement manufacturing process. The strategic goal of controlling emissions is to contribute to government programs in global warming prevention. The Company policy related to emission reduction refers to:

Inisiatif pengendalian emisi GRK melalui penerapan teknologi WHRPG di Pabrik Tuban I-IV mampu menekan emisi CO₂ sebesar 122 ribu ton per tahun, sedangkan WHRPG di Pabrik Indarung V Padang mengurangi emisi CO₂ sebesar 43 ribu ton per tahun dan pengurangan emisi partikulat sebesar 51%.

The GHG emission control initiative through the application of WHRPG technology at Tuban Plant IV-IV was able to reduce CO₂ emissions by 122,000 tons per year, while WHRPG at e Indarung V Plant, Padang, reduced CO₂ emissions by 43,000 tons per year and reduced particulate emissions by 51%.

Penggunaan bahan bakar alternatif dalam pelaksanaan proyek CDM mampu mereduksi emisi hingga 150 ribu ton CO₂ per tahun. Perseroan masih menjalankan proyek CDM hingga saat ini meskipun Protokol Kyoto telah dihentikan pada tahun 2012. Proyek CDM telah menghasilkan *Certified Emission Reduction (CER)* sebesar 213.717 ton CO₂eq dari United Nation Framework Convention on Climate Change (UNFCCC) pada tahun 2016. Sebagian CER telah dibeli oleh negara Swedia dengan harga 3,75 EURO per CER dengan perjanjian jual-beli yang berlaku hingga tahun 2019.

The use of alternative fuels in the implementation of the CDM project managed to reduce emissions by up to 150,000 tons of CO₂ per year. The company still carries out CDM project up until now even though the Kyoto Protocol has ended in 2012. The CDM project has produced Certified Emission Reduction (CER) of 213,717 ton CO₂eq from the United Nation Framework Convention on Climate Change (UNFCCC) in 2016. Some CERs have been purchased by Sweden with price at 3.75 EURO per CER under a sale-purchase agreement that is valid until 2019.

Perseroan juga berkomitmen mengendalikan sumber emisi dari pemakaian klinker tanpa harus menurunkan kapasitas produksi semen. Perseroan mengembangkan teknologi untuk memproduksi semen dengan faktor klinker rendah, seperti hasil inovasi hijau produk jenis *portland slag* (MaxSTRENGTH Cement) yang diproduksi pertama kali di Indonesia dapat menekan emisi CO₂ per satuan produk.

The company is committed to controlling the source of emissions from clinker use without having to reduce cement production capacity. The company has developed technology to produce cement with low clinker factors, such as the results of the green innovation of the portland slag products (MaxSTRENGTH Cement) produced for the first time in Indonesia, can reduce CO₂ emissions per unit of product.

Dari keseluruhan inisiatif yang telah dilakukan, sasaran Perseroan adalah menurunkan beban emisi GRK dan pencemar udara. Adapun target pengurangan pencemar udara adalah di bawah baku mutu yang dipersyaratkan dalam Peraturan Menteri Lingkungan Hidup Dan Kehutanan No. P.19/Menlhk/Setjen/Kum.1/2/2017 Tahun 2017 tentang Baku Mutu Emisi bagi Usaha dan/atau Kegiatan Industri Semen.

Out of all initiatives that have been carried out, the Company's target was to reduce the load of GHG emissions and air pollutants. The target of reducing air pollutants was below the quality standard required in the Minister of Environment and Forestry Regulation No. P.19/Menlhk/Setjen/Kum.1/2/2017 on Emissions Quality Standards for Business and/ or Activities of Cement Industry.

Evaluasi pengurangan emisi GRK dilakukan melalui perhitungan emisi CO₂ secara berkala setiap satu tahun sekali, sedangkan pencemar udara NO₂ dan SO₂ dilakukan setiap tiga bulan sekali.

Evaluation of GHG emissions reduction is carried out by calculating CO₂ emissions regularly every year, while NO₂ and SO₂ air pollutants are evaluated every three months.

Pengelolaan pengurangan beban emisi GRK, pencemar udara dan emisi partikulat menjadi tanggung jawab Departemen Jaminan Mutu, K3 dan Lingkungan di bawah Direktur Produksi.

Management of reducing GHG emission loads, air pollutants and particulate emissions is the responsibility of the Department of Quality Assurance, Health and Environment under the Production Director.

Sepanjang tahun 2018, total emisi GRK langsung cakupan 1 mencapai 24.157,690 ton CO₂ eq, naik 1,85% dari tahun sebelumnya.

Throughout 2018, total direct scope 1 GHG emissions reached 24,157,690 tons CO₂eq, up 1,85% from the previous year.

PERHITUNGAN EMISI GRK

GHG EMISSION CALCULATION

Sumber emisi GRK langsung terbesar Perseroan berasal dari pembakaran batu kapur dan pemakaian batu bara dalam proses pembuatan klinker.

The Company's biggest direct GHG emission source is from limestone burning and use of coal in the process of making clinkers.

Perseroan melakukan perhitungan emisi GRK berdasarkan metode WBCSD CSI Version 3 setiap setahun sekali. Saat ini Perseroan hanya dapat menyajikan informasi terkait emisi GRK cakupan/scope 1 dan cakupan/scope 2 yang merupakan emisi yang masih dapat dipantau. Pengukuran sumber emisi CO₂ berasal dari proses pembakaran batu kapur dan pemakaian batu bara termasuk dalam cakupan 1 dan penggunaan energi listrik dari PLN di Pabrik Tuban termasuk dalam cakupan 2. Perhitungan emisi CO₂ tidak langsung lainnya dalam cakupan/scope 3 belum dapat dilakukan karena keterbatasan pengukuran penggunaan energi yang bersumber dari BBM untuk keperluan transportasi di luar Grup Semen Indonesia.

The Company calculates GHG emissions based on the WBCSD CSI Version 3 method annually. At present the Company can only provide information related to GHG emissions of scope 1 and scope 2, which are emissions that can still be monitored. CO₂ emissions originating from the burning process of limestone and coal use are included in scope 1 and the use of electricity from PLN at Tuban Plant is included in scope 2. Other indirect CO₂ emissions in scope 3 cannot be calculated due to limitations in measurement the use of energy sourced from oil fuel (BBM) for transportation outside Semen Indonesia Group.

Hasil Pengukuran Emisi GRK Langsung (Cakupan 1)

Direct GHG Emission Measurement Results (Scope 1)

Grup Semen Indonesia Semen Indonesia Group	Satuan Ton CO ₂ eq Unit in Ton CO ₂ eq		
	2018	2017	2016
Business Unit Tuban	9,605,213	9,428,793**	9,220,868**
PT Semen Padang	5,475,730	6,018,235**	4,596,097**
PT Semen Tonasa	5,108,377	5,440,738**	5,211,923**
Thang Long Cement	2,281,041	2,175,627	2,156,089**
PT Semen Gresik	1,687,329	655,176	N/A
Total	24,157,690	23,718,569	21,184,977

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

**Terdapat restatement PT Semen Tonasa di tahun 2017 & 2016 karena menggunakan metode yang berbeda

** There were restatements of Business Unit Tuban in 2017 and 2016 due to different calculation method

Total emisi GRK tidak langsung cakupan 2 mencapai 125,017 ton CO₂ eq, turun 91,38% dari tahun sebelumnya.

Total indirect GHG emissions scope 2 reached 125,017 tons of CO₂eq, down 91.38% from the previous year.

Hasil Pengukuran Emisi GRK Tidak Langsung (Cakupan 2)

Indirect (Scope 2) GHG Emission Measurement Results

Grup Semen Indonesia Semen Indonesia Group	Satuan Ton CO ₂ eq Unit in Ton CO ₂ eq		
	2018	2017	2016
Business Unit Tuban	976,713	1,034,309	977,320
PT Semen Padang	-227,041	169,771	772,974
PT Semen Tonasa	-358,454	33,261**	331,754**
PT Semen Gresik	-266,201	23,056	N/A
Total	125,017	1.451.269	2.001.578

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

**Terdapat restatement PT Semen Tonasa di tahun 2017 & 2016 karena menggunakan metode yang berbeda

** There were restatements of PT Semen Tonasa in 2017 & 2016 due to different calculation method

Total emisi GRK pada tahun 2018 sebesar 24.282.707 ton CO₂ eq. Total emisi GRK mencakup perhitungan emisi GRK langsung dan tidak langsung sebagai pembilang. Rasio penyebut dipilih untuk mengetahui jumlah emisi yang dihasilkan per satuan produk.

Total GHG emissions include the calculation of direct and indirect GHG emissions as a numerator. The denominator ratio is chosen to determine the amount of emissions produced per unit of product.

Intensitas Emisi GRK

GHG Emission Intensity [305-4]

Grup Semen Indonesia Semen Indonesia Group	Keterangan Information	kg CO ₂ /ton semen produk kg of CO ₂ / ton of cement products		
		2018	2017	2016
Business Unit Tuban	Total GRK Langsung (Cakupan 1) Total Direct GHG (Scope 1)	690	698	704
	Total GRK Tidak Langsung (Cakupan 2) Total Indirect GHG (Scope 2)	80	83	83
PT Semen Padang	Total GRK Langsung (Cakupan 1) Total Direct GHG (Scope 1)	684	687**	690
	Total GRK Tidak Langsung (Cakupan 2) Total Indirect GHG (Scope 2)	66	58	66
PT Semen Tonasa	Total GRK Langsung (Cakupan 1) Total Direct GHG (Scope 1)	673	725**	733**
	Total GRK Tidak Langsung (Cakupan 2) Total Indirect GHG (Scope 2)	-50	4**	48**
Thang Long Cement	Total GRK Langsung (Cakupan 1) Total Direct GHG (Scope 1)	1,143	882	917
PT Semen Gresik	Total GRK Langsung (Cakupan 1) Total Direct GHG (Scope 1)	747	787	N/A
	Total GRK Tidak Langsung (Cakupan 2) Total Indirect GHG (Scope 2)	72	93	N/A

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

**Terjadi restatement di Semen Padang tahun 2017 dikarenakan menggunakan metode yang berbeda

**Terdapat restatement di Semen Tonasa tahun 2017 & 2016 karena menggunakan metode yang berbeda

N/A: Not Available, because PT Semen Gresik only began to operate in mid 2017

** There were restatements of Semen Padang in 2017 due to different calculation method

** There were restatements of Semen Tonasa in 2017 & 2016 due to different calculation method

Perhitungan pengurangan emisi Business Unit Tuban menggunakan metode WBCSD CSI CO₂ Protocol. Pengurangan emisi secara signifikan berasal dari program Penurunan index clinker melalui peningkatan bahan pozzoland dan filler pengganti clinker.

Business Unit Tuban's emission reduction calculations used the method of WBCSD CSI CO₂ Protocol. Significant emission reductions from the clinker index reduction program through increased pozzoland material and clinker substitute fillers.

Total Pengurangan Emisi GRK

Total GHG Emission Reduction [305-5]

Grup Semen Indonesia <i>Semen Indonesia Group</i>	Inisiatif <i>Initiative</i>	Total Pengurangan Emisi GRK (Ton CO ₂ eq) <i>Total GHG Emission Reductions (Ton CO₂ eq)</i>		
		2018	2017	2016
Business Unit Tuban	Pemakaian biomassa sebagai bahan bakar alternative <i>Use of biomass as an alternative fuel</i>	84,912	92,745	118,135
	Penurunan index clinker melalui peningkatan bahan pozzolanic pengganti clinker <i>Decreased clinker index by increasing pozzolanic substitute for clinker</i>	139,071	81,015	0
PT Semen Padang	Pemakaian biomassa sebagai bahan bakar alternative <i>Use of biomass as an alternative fuel</i>	0	75	3
PT Semen Tonasa	Pemakaian biomassa sebagai bahan bakar alternative <i>Use of biomass as an alternative fuel</i>	6,291	11,755	3,932
	Penurunan index clinker melalui peningkatan bahan pozzolanic pengganti clinker <i>Decreased clinker index by increasing pozzolanic substitute for clinker</i>	29,151	872	721
Thang Long Cement	Pemanfaatan limbah batu bara untuk mengurangi konsumsi panas <i>Utilization of coal waste to reduce heat consumption</i>	12,509	14,640	10,980

PERHITUNGAN BEBAN PENCEMAR UDARA DAN PARTIKULAT

CALCULATION OF AIR POLLUTANT AND PARTICULATE LOAD

Pengukuran emisi pencemar udara, SO_x, NO_x dan partikulat dari cerobong kiln dilakukan secara berkala setiap tiga bulan sekali. Business Unit Tuban menggunakan metode pengukuran SO₂ dan NO_x menggunakan metode EI 36.015 (Gas Analyzer) dan metode EI 36.015 (Isokinetik). Sementara PT Semen Padang melakukan pengukuran SO_x menggunakan metode 22-9/IK/UETB-O (combustion gas analyzer), pengukuran NO_x menggunakan metode 22-9/IK/UETB-O (combustion gas analyzer), dan pengukuran total partikel menggunakan metode SNI 7117.17-2009. PT Semen Tonasa menggunakan alat CEMS (Continuous Emission Monitoring System) dan menggunakan metode Metode Isokinetik (pengukuran manual) yang dilakukan oleh pihak luar (Balai Besar Industri Hasil Perkebunan). [305-7]

Measurement of air pollutant emissions, SO_x, NO_x and particulates from the kiln chimneys is carried out periodically every three months. Business Unit Tuban used the SO₂ dan NO_x measurement methods of EI 36.015 (Gas Analyzer) and EI 36.015 (Isokinetik). While PT Semen Padang measures SO_x with 22-9/IK/UETB-O (combustion gas analyzer) method, NO_x measurement uses 22-9/IK/UETB-O (combustion gas analyzer) method, and total particle measurement uses the SNI 7117.17-2009 method. PT Semen Tonasa uses the CEMS (Continuous Emission Monitoring System) tool and uses the Isokinetic Method (manual measurement) method that is carried out by external parties (the Center for Plantation Products Industry).

Hasil Pengukuran Kualitas Rata-Rata Tertinggi Emisi

Highest Emission Quality Measurement Results [305-7]

Grup Semen Indonesia Semen Indonesia Group	NO _x			SO _x			Partikulat Particulate		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Business Unit Tuban	311.12	184	306.29	49.06	13.9	10.83	19,67	25.6	11.69
PT Semen Padang	292.90	432.5	347	38.78	54	29	30.93	37.5	38
PT Semen Tonasa	161.88	57.13	4.38	20.00	22	5.88	70.72	57.63	60.88
PT Semen Gresik	162,5	16	N/A	14,5	7,3	N/A	27,2	26,5	N/A

Keterangan:

- Satuan dalam mg/Nm³
- Baku mutu menurut Peraturan Menteri LHK No.19 Tahun 2017 tentang Baku Mutu Emisi Bagi Usaha Dan / Atau Kegiatan Industri Semen
- Titik pengukuran cerobong, pendingin klinker, pengolahan batubara, pengolahan semen
- N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

Note:

- Units in mg/Nm³
- Quality standards according to Minister of Environment and Forestry Regulation No.19 of 2017 on Emission Quality Standards for Cement Business and/or Industrial Activities
- Chimney measurement spots, clinker coolers, coal processing, cement processing
- N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

PENGENDALIAN EMISI DEBU DAN KEBISINGAN

DUST EMISSIONS AND NOISE CONTROL

Emisi debu dan dampak kebisingan dari kegiatan operasional menjadi salah satu parameter lingkungan yang menjadi perhatian Perseroan. Terkait pengendalian beban emisi debu, Perseroan telah melengkapi teknologi penangkap debu di seluruh fasilitas produksi seperti *electrostatic precipitator*, *cyclone*, *conditioning tower*, dan *bag filter*. Selain itu, Perseroan menanam pohon di area *green belt* atau sekitar lahan bahan baku, dan *green barrier* di dalam dan sekitar pabrik, serta menyediakan *buffer zone*. Pengukuran emisi debu dilakukan secara rutin setiap 3 bulan menggunakan metode 16-7058-2004.

Perseroan juga berupaya meminimalkan dampak kebisingan pada saat kegiatan penambangan dengan menggunakan *surface miner*. Pengukuran kebisingan dilakukan secara rutin setiap 3 bulan menggunakan metode SNI 7231:2009.

Dust emissions and noise impacts from operational activities are one of the environmental parameters that are of concern to the Company. Regarding the control of dust emission loads, the Company has equipped dust capture technology in all production facilities such as electrostatic precipitators, cyclones, conditioning towers and filter bags. In addition, the Company planted trees in the green belt area or around raw material land, and green barriers in and around the plant, and provided a buffer zone. Measurement of dust emissions is carried out routinely every 3 months using the method 16-7058-2004.

The Company also seeks to minimize the impact of noise during mining activities using surface miners. Noise measurement is carried out routinely every 3 months using the SNI 7231: 2009 method.

Hasil Pengukuran Partikulat Debu dan Kebisingan

Results of Measurement of Particulate Dust and Noise

Grup Semen Indonesia Semen Indonesia Group	Parameter Lingkungan Environmental Parameters	Satuan Unit	Baku Mutu Quality standards	Hasil Pengukuran Measurement results		
				2018	2017	2016
Business Unit Tuban	Debu lingkungan kerja Work environment dust	mg/nm ³	10	4.94	2.80	4.15
	Kebisingan lingkungan kerja Work environment noise	Db	85	74.78	63.00	76.59
PT Semen Padang	Debu lingkungan kerja Work environment dust	mg/nm ³	10	0.56	0.45	0.16
	Kebisingan lingkungan kerja Work environment noise	Db	85	65.88	66.99	70.11
PT Semen Tonasa	Debu lingkungan kerja Work environment dust	mg/nm ³	10	8.23	0.35	0.89
	Kebisingan lingkungan kerja Work environment noise	Db	85	77.84	71.04	72.66
Thang Long Cement	Debu lingkungan kerja Work environment dust	mg/nm ³	≤4	2.1	1.92	1.89
	Kebisingan lingkungan kerja Work environment noise	Db	≤85	78	79	77.56
PT Semen Gresik	Debu lingkungan kerja Work environment dust	mg/nm ³	10	5.53	N/A	N/A
	Kebisingan lingkungan kerja Work environment noise	Db	85	66.81	N/A	N/A

- Baku mutu menurut Per.Men LHK No.19 Tahun 2017 tentang Baku Mutu Emisi Bagi Usaha dan / atau Kegiatan Industri Semen
- N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017
- - Quality standards according to Minister of Environment and Forestry Regulation No.19 of 2017 on Emission Quality Standards for Business and/or Activities Cement Industry
- -N / A: Not Available, because PT Semen Gresik only operated in mid 2017

PENGURANGAN DAN PEMANFAATAN LIMBAH

/ Reduction and Utilization of Waste [103-2, 103-3]

Pada dasarnya limbah dalam industri semen merupakan sumberdaya yang dapat dimanfaatkan dalam kegiatan produksi. Pengelolaan limbah bahan berbahaya dan beracun (B3) dan non-B3 Perseroan mencakup rangkaian kegiatan reduksi, penyimpanan, pengumpulan, pengangkutan, pemanfaatan, pengolahan, penimbunan limbah (B3), termasuk penimbunan hasil pengolahan tersebut. Tujuan strategis pengelolaan limbah adalah melakukan pengurangan dan pemanfaatan limbah sesuai dengan peraturan yang berlaku. Kebijakan Perusahaan terkait pengelolaan limbah mengacu pada:

- Undang-Undang No.32 tahun 2009 tentang Perlindungan dan pengelolaan Lingkungan Hidup
- Kep.Bapedal No.Kep-01/Bapedal/09/1995 tentang Tata cara dan Persyaratan Teknis penyimpanan dan Pengumpulan Limbah B3
- Peraturan pemerintah No.101 tahun 2014 tentang Pengelolaan Limbah B3
- Peraturan Menteri Lingkungan Hidup No.3 Tahun 2014 tentang Program penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup.

Kegiatan pemanfaatan limbah B3 berdasarkan izin No. 281 Tahun 2016 dari Kementerian Lingkungan Hidup dan Kehutanan (KLHK), yaitu pemanfaatan oli bekas, majun bekas, dan *bag filter* bekas sebagai bahan bakar alternatif, serta pemanfaatan 'refraktori bekas' sebagai bahan baku alternatif. Limbah B3 padat yang tidak dapat dimanfaatkan kembali diserahkan kepada pihak ketiga yang memiliki izin dari KLHK. Jenis limbah B3 tersebut, di antaranya aki bekas, lampu TL bekas, *toner/catridge*, dan botol kimia.

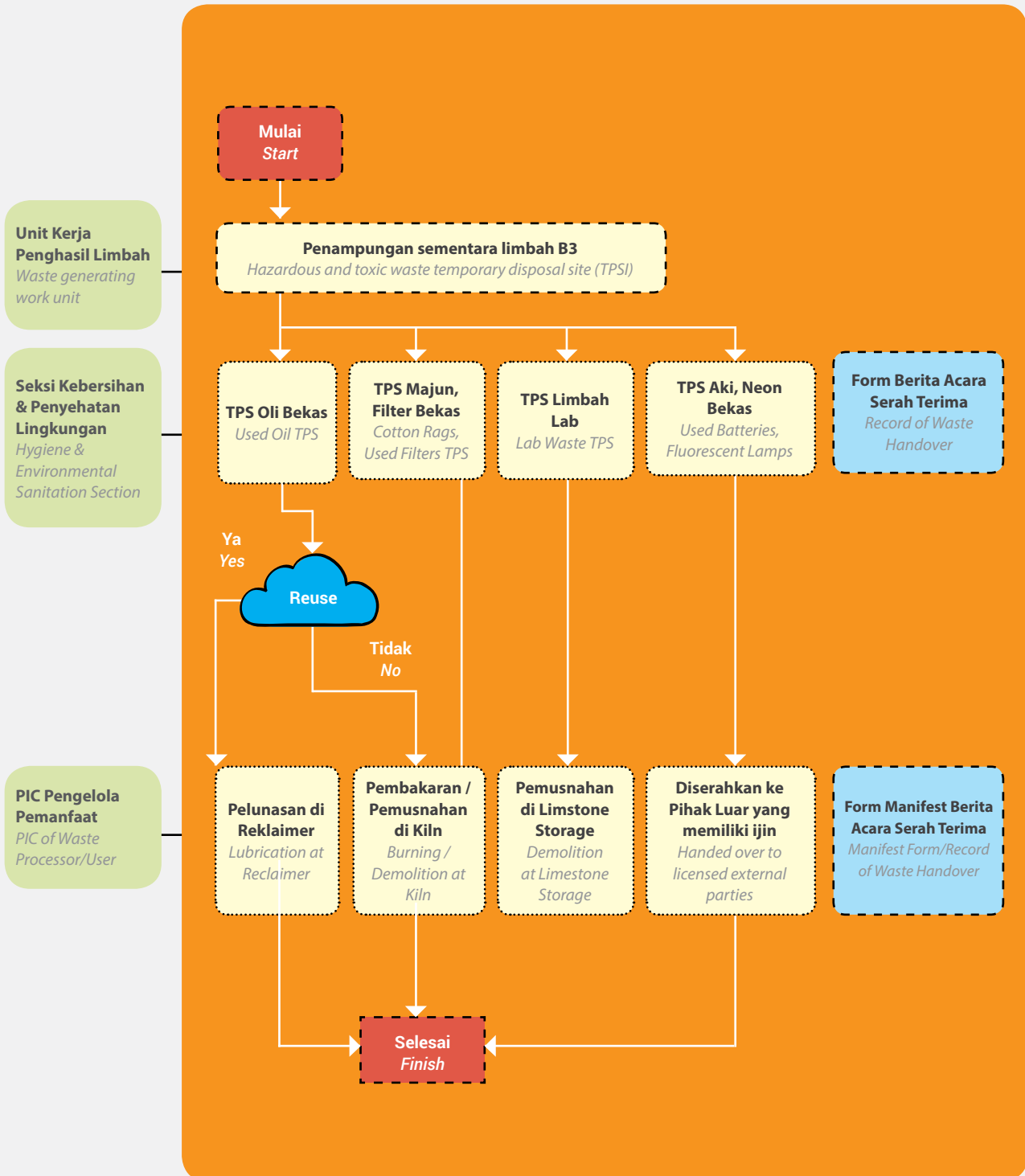
Basically waste in the cement industry is a resource that can be utilized in production activities. Management of the Company's hazardous and toxic (B3) and non-B3 waste includes a series of activities to reduce, store, collect, transport, utilize, process landfill (B3), including the stockpiling of the results of such processing. The strategic goal of waste management is to reduce and utilize waste in accordance with applicable regulations. Company policy regarding waste management refers to:

- *Law No. 32 of 2009 concerning Protection and management of the Environment*
- *Kep.Bapedal No. Kep-01 / Bapedal / 09/1995 concerning Procedures and Technical Requirements for B3 Waste Collection and Storage*
- *Government Regulation No.101 of 2014 concerning B3 Waste Management*
- *Minister of Environment Regulation No. 3 of 2014 concerning Program Rating for Corporate Performance in Environmental Management.*

B3 waste utilization activities are based on permit No. 281 of 2016 from the Ministry of Environment and Forestry (KLHK), regarding the reuse of used oil, used cotton rags, and used filter bags as alternative fuels, as well as the reuse of 'used refractories' as alternative raw materials. Solid B3 waste that cannot be reused is handed over to third parties who have permit from the Ministry of Environment and Forestry. The types of B3 waste, including used batteries, used TL lamps, toner/catridges, and chemical bottles.

Alur Pengelolaan Limbah B3 di Pabrik Tuban

Flow of B3 Waste Management at Tuban Plant



Selain pengelolaan limbah B3, Perseroan memanfaatkan limbah non-B3 dari sampah domestik sebagai bahan bakar alternatif pada tanur (*kiln*). Limbah padat logam non-B3, seperti material rusak dan barang bekas pakai (avfal) diserahkan ke pihak ketiga dan secara umum diolah kembali untuk pembuatan barang logam lainnya.

Waste management, the Company utilizes non-B3 waste from domestic waste and alternative fuel in the kiln. Non-B3 metal solid waste, such as damaged materials and used goods, third parties and generally reprocessed into other metal goods.

Sasaran utama pengelolaan limbah, antara lain pengurangan limbah internal, pemanfaatan limbah B3, dan penataan lingkungan. Target pengurangan internal Business Unit Tuban pada tahun 2018 adalah 10 ton limbah B3 atau 1,4% dari *baseline* tahun 2016 Target pemanfaatan limbah pada tahun 2018 adalah 200 ton limbah B3 atau 40% dari *baseline* tahun 2017

The main objectives of waste management include reduction of internal waste, utilization of B3 waste, and environmental management. The target of Tuban Business Unit internal waste reduction in 2018 is 10 tons of B3 waste or 1.4% from the 2016 baseline. The waste utilization target in 2018 is 200 tons of B3 waste or 40% from the 2017 baseline.

Pengelolaan dan pemanfaatan limbah menjadi tanggung jawab Departemen Jaminan Mutu, K3 dan Lingkungan dibawah Direktur Produksi.

Management and utilization of waste are the responsibility of the Quality Assurance, Occupational Health, Safety and Environment Department under the Production Director.

PERHITUNGAN VOLUME LIMBAH INTERNAL

CALCULATION OF INTERNAL WASTE VOLUME

Evaluasi kegiatan pengurangan dan pemanfaatan limbah dilakukan melalui perhitungan limbah di area pabrik maupun kantor.

Evaluation of waste reduction and utilization activities is carried out by calculation of waste in the plant and office areas.

Volume Limbah B3

B3 Waste Volume [306-2]

Grup Semen Indonesia Semen Indonesia Group	Volume Limbah Dihasilkan (Ton) Volume of Waste Generation (ton)			Volume Dimanfaatkan (Ton) Volume of Utilization (ton)			Dikelola Pihak Ketiga (Ton) Managed by Thir Party (ton)		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Business Unit Tuban	1,400.61	2,048	1,980	1,396.28	2,034.98	1,943	5.87	24	56
PT Semen Padang	9.46	41,46	39,35	16,65	33.500	30,46	6.60	7.96**	8.89**
PT Semen Tonasa	24,379.11	24,935.98**	27,881.70**	24,367.40	24,933.37**	27,876.72**	11.60	2.02**	1.61**
Thang Long Cement	20	15	41,255	0	15	0	0	15	41,255
PT Semen Gresik	1,649	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Total	27,458.18	27,030.36	71,150.86	25,779.65	27,006.11	29,839.14	24.07	48.98	41,321.5

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

* Terdapat restatement PT Semen Tonasa dan Semen Padang di tahun 2017 & 2016 karena metode perhitungan yang berbeda

N/A: Not Available, because PT Semen Gresik only operated in mid 2017

** There were restatements of Semen Tonasa and Semen Padang in 2017 & 2016 due to different calculation method

PENGELOLAAN LIMBAH EKSTERNAL

EXTERNAL WASTE MANAGEMENT

Selain limbah B3 internal, Perseroan juga memanfaatkan limbah B3 eksternal yang dihasilkan oleh industri lain sebagai bahan baku alternatif dengan metode *co-processing*. Metode ini memungkinkan pembakaran limbah secara terkendali dalam tanur dapat meningkatkan nilai tambah limbah dalam bentuk *recovery* energi dan material untuk bahan baku proses produksi.

Limbah B3 eksternal yang dimanfaatkan, di antaranya *flyash-bottom ash*, *COCS*, *spent earth*, *drilling cutting*, dan *sludge paper*. Pengelolaan ini membantu mencegah terjadinya pencemaran lingkungan akibat timbulnya limbah B3 dari Industri lain. Sepanjang tahun 2018, total limbah yang didatangkan dari industri lain sebesar 154.925,47 ton. Rincian jenis dan limbah B3 yang didatangkan masing-masing Anak Perusahaan dari industri lain dapat dibaca pada lampiran 5.

In addition to internal B3 waste, the Company also utilizes external B3 waste produced by other industries as alternative raw materials through co-processing method. This method allows the controlled waste burning in the kiln that can increase the added value of waste with energy and material recovery for the raw material of production process.

External B3 waste reused included flyash-bottom ash, COCS, spent earth, drilling cutting, and sludge paper. The waste management helps prevent environmental pollution due to generated B3 waste from other industries. Throughout 2018, total waste coming from other industries was 154,925.47 tons. Details of the types and B3 waste brought in by each subsidiary of other industries, see Appendix 5.

KOMPOSISI BAHAN BAKU

RAW MATERIAL COMPOSITION

Area-area tambang Perseroan memiliki cadangan bahan baku/material dengan kualitas terbaik dan dalam jumlah besar, sehingga menjamin kelangsungan produksi semen di seluruh pabrik Perseroan dalam jangka panjang. Seluruh bahan baku utama semen dan bahan baku pembantu (termasuk bahan baku alternatif berupa material daur ulang dari industri lain) merupakan material yang tidak dapat diperbaharui. Rincian material yang digunakan dan material daur ulang dapat dibaca pada lampiran 6.

The Company's mining areas have the highest quality raw/material reserves in large quantities, thus ensuring the continuity of cement production in all of the Company's plants in the long term. All the main raw materials for cement and supporting raw materials (including alternative raw materials in the form of recycled materials from other industries) are non-renewable materials. Details of the materials used and recycled materials can be read in appendix 6.

PEMANFAATAN SUMBER AIR DAN PENGELOLAAN AIR LIMBAH

WATER SOURCE UTILIZATION AND WASTEWATER MANAGEMENT

Grup Semen Indonesia secara umum menggunakan sumber air permukaan untuk memenuhi kebutuhan kegiatan produksi maupun domestik. Jumlah pemakaian air pada tahun 2018 sebesar 6.094.185 m³, turun 16,26% dari tahun sebelumnya. Penurunan ini pemakaian air karena berhasil menerapkan program efisiensi air.

Semen Indonesia Group generally uses surface water sources to meet the needs of both production and domestic activities. The amount of water consumption in 2018 was 6,094,185 m³, down from the previous year. Water consumption decreased.

Sumber Air dan Pemakaian Air (m³)

Water Source and Water Use (m³)

Grup Semen Indonesia Semen Indonesia Group	Sumber Air Water Source	Tujuan Aliran Flow Destination	2018	2017	2016
Business Unit Tuban	Air Tanah Groundwater	Unit pengolahan air Water treatment plant	631,980	473,390	237,345
	Air Hujan Rainwater	Unit pengolahan air Water treatment plant	1,064,740	1,657,528	1,018,730
PT Semen Padang	Air Permukaan Surface water	Pendinginan Mesin Machine Cooling	2,613,768	3,268,841	3,357,790
PT Semen Tonasa	Air Permukaan Surface water	Proses produksi Production process	1,588,992	1,771,033	1,791,251
	Air Hujan Rainwater	Proses produksi Production process	86,205	62,764	81,635
PT Semen Gresik	Air Tanah Groundwater	Unit pengolahan air Water treatment plant	42,702	17,580	N/A
		Unit pengolahan air Water treatment plant	65,798	26,680	N/A
Total			6,094,185	7,277,816	6,486,751

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

Proses produksi semen dengan sistem kering memungkinkan tidak menghasilkan air bekas pakai. Namun, Perseroan memanfaatkan air limbah domestik yang telah diproses di *Water Treatment* sebagai air sanitasi dan pendingin peralatan pabrik dengan mekanisme sirkulasi tertutup. Kualitas air domestik dari hasil pengolahan di *Water Treatment* dipastikan di bawah baku mutu peraturan yang berlaku. Pengukuran kualitas air bekas pakai dilakukan oleh laboratorium independen dengan standar perhitungan SNI 3554-2015.

Cement production with a dry system allows the process without the use of water. However, the Company utilizes domestic wastewater which has been processed in Water Treatment plant as sanitation water and factory equipment cooling with closed circulation mechanism. Domestic water quality produced from Water Treatment processing is ensured to be below the threshold of established quality standards. The grey used water quality is measured by independent laboratories with SNI 3554-2015 calculation standards.

Hasil Pengukuran Kualitas Pengolahan Air Limbah Domestik

Results of Domestic Wastewater Treatment Quality Measurement [306-1]

Grup Semen Indonesia Semen Indonesia Group	Parameter Lingkungan Environmental Parameters	Satuan Unit	Baku Mutu Quality Standard	Hasil Pengukuran Measurement Result		
				2018	2017	2016
Business Unit Tuban	BOD5	µg/m ³	30	8.25	15	7
	Ph		6.0 – 9.0	8.2	7.5	7
	TSS	mg/m ³	30	12.7	15.3	6
PT Semen Padang	BOD5	µg/m ³	100	N/A	N/A	N/A
	Ph		8.30	N/A	8.8	7.38
	TSS	mg/m ³	100	N/A	N/A	N/A
PT Semen Tonasa	BOD5	µg/m ³	100	29.3	22.54	19.43
	Ph		6-9	7.76	7.76	7.30
	TSS	mg/m ³	100	28.1	40.9	17.54
Thang Long Cement	BOD5	µg/m ³	100	41.5	43	7.6
	Ph		6.0 – 9.0	6.67	7.1	6.58
	TSS	mg/m ³	100	51	43	34.8
PT Semen Gresik	BOD5	µg/m ³	100	5.67		
	Ph		6.0 – 9.0	8.43	N/A	N/A
	TSS	mg/m ³	100	11		

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

N/A: Not Available, because PT Semen Gresik only operated in mid 2017

Jumlah Pelepasan Olahan Air Bekas Pakai ke Badan Air (m³)

Amount of Discharged Grey Water Discharged to Water Body (m³) [306-1]

Grup Semen Indonesia Semen Indonesia Group	Asal Air Bekas Pakai Origin of Grey Water	Tujuan Aliran Air Destination of Water flow	Total yang Dialirkan Total Discharge		
			2018	2017	2016
Business Unit Tuban	Non-Produksi Non-Production	Boozem	510,453	556,057**	758,702**
PT Semen Padang	Proses Produksi Production Process	Sungai Padang Besi	2,613,768	3,268,841	3,357,790
PT Semen Tonasa	Proses Produksi Production Process	Laut Biringkassi	103,736,797	175,305,690	158,207,631
PT Semen Gresik	Proses Produksi Production Process	N/A	N/A	N/A	N/A
	Non-Produksi Non-Production	Bozem	82,175	22,080	N/A
Total			106.943.193	179.152.668	162,324,123

N/A: Not Available, karena PT Semen Gresik baru beroperasi pada pertengahan tahun 2017

N/A: Not Available, due to PT Semen Gresik's operations only started in mid 2017

**Terdapat restatement Business Unit Tuban di tahun 2017 & 2016 karena cara perhitungan yang berbeda

** There were restatements of Business Unit Tuban in 2017 & 2016 due to different calculation method

PERLINDUNGAN KEANEKARAGAMAN HAYATI

Biodiversity Protection

Perseroan mengedepankan perlindungan keanekaragaman hayati, meskipun seluruh area operasi Grup Semen Indonesia tidak berada di daerah konservasi atau memiliki keanekaragaman hayati tinggi. Lokasi dan luas area masing-masing Anak Perusahaan dan *business unit* dapat dibaca pada lampiran 7 laporan ini, sedangkan luas kawasan yang direhabilitasi dapat dibaca di lampiran 8. Masing-masing Anak Perusahaan dan *business unit* sudah memiliki program konservasi flora-fauna langka dan endemik dengan sasaran utama meningkatkan indeks keanekaragaman hayati dan jumlah spesies langka. Jenis-jenis fauna di kawasan konservasi dapat dibaca di lampiran 9 dalam laporan ini.

The company promotes biodiversity protection, even though the entire operating areas of Semen Indonesia Group are not located in a conservation area or area with high biodiversity. Details of location and area of each subsidiary and business unit can be found in Appendix 7 of this report, while the rehabilitated areas can be read in Appendix 8. Each subsidiary and business unit already has a rare and endemic flora-fauna conservation program with the main target is to increase the biodiversity index and number of rare species. The types of fauna in the conservation area can be found in appendix 9 of this report.

SI LESTARI: TAMAN KEHATI DI AREA BEKAS TAMBANG

SI LESTARI: TAMAN KEHATI IN FORMER MINE AREA

Keberadaan Taman Kehati di setiap wilayah operasi Anak Perusahaan dan *Business Unit* Semen Indonesia merupakan wujud komitmen perlindungan keanekaragaman hayati. Taman Kehati adalah suatu kawasan pencadangan sumber daya alam hayati lokal di luar kawasan hutan.

The existence of Taman Kehati park in each operating area of Semen Indonesia's subsidiaries and business unit is a manifestation of the commitment to protect biodiversity. Taman Kehati is a reservation area of local biodiversity resources outside forest area.

Business Unit Tuban mengembangkan dua Taman Kehati bernama Arboretum Bukit Daun dan Arboretum Bukit Herbal di kuari Batu Kapur, Temandang. Area konservasi Arboretum Bukit Daun seluas 1.980 m² dioptimalkan untuk melestarikan 10 jenis tanaman langka dari berbagai macam Family yang sulit ditemukan di sekitar kuari batu kapur. Beberapa jenis tanaman yang dikembangkan antara lain Gaharu (*Aquilaria Malaccensis*), Ulin (*Eusideroxylon zwageri*), Damar (*Pycnonotus aurigaster*). Adapun area konservasi Arboretum Bukit Herbal yang berada di lahan seluas 2.200 m² ditanami dengan berbagai jenis tanaman herbal yang baik untuk kesehatan.

*Business Unit Tuban developed two Taman Kehati called Bukit Daun Arboretum and Bukit Herbal Arboretum in Batu Kapur quarry, Temandang. Bukit Daun Arboretum conservation with area of 1,980 m² has been optimized to preserve 10 species of rare plants from various families that are difficult to find around limestone quarries. Some plants being developed include Agarwood (*Aquilaria Malaccensis*), Ironwood (*Eusideroxylon zwageri*), Damar (*Pycnonotus aurigaster*). Meanwhile, Bukit Herbal Arboretum conservation area located on an area of 2,200 m² has been planted with various types of herbs that are good for health.*

Inisiatif perlindungan keanekaragaman hayati melalui pembangunan Taman Kehati juga dikembangkan oleh PT Semen Padang. Melalui taman kehati internal perusahaan ditanami bunga bangkai (*Amorphophallus*),

*The biodiversity protection initiative by developing Taman Kehati Park was also conducted by PT Semen Padang. The company's internal taman kehati is planted with carrion flowers (*Amorphophallus*), which*

yaitu tanaman asli dan endemik Sumatera yang termasuk kategori rentan (*vulnerable*) dalam daftar merah IUCN. Bunga bangkai dipindahkan dari habitat aslinya untuk ditanam di lima lokasi perusahaan.

PT Semen Tonasa juga mengembangkan Taman Kehati Tonasa Park di sekitar area tambang serta kawasan pendidikan Geopark dan Purbakala. Dalam kawasan Tonasa Park dan Geopark terdapat tanaman lokal dan endemik, serta berbagai flora dan fauna beserta goa-goa pra sejarah. Perusahaan menambah koleksi tanaman dengan menanam 1.000 pohon pada saat peresmian Tonasa Park pada 11 Mei 2018 dan 500 pohon bertepatan dengan peringatan HUT PT Semen Tonasa ke 50 tahun pada tahun 2018.

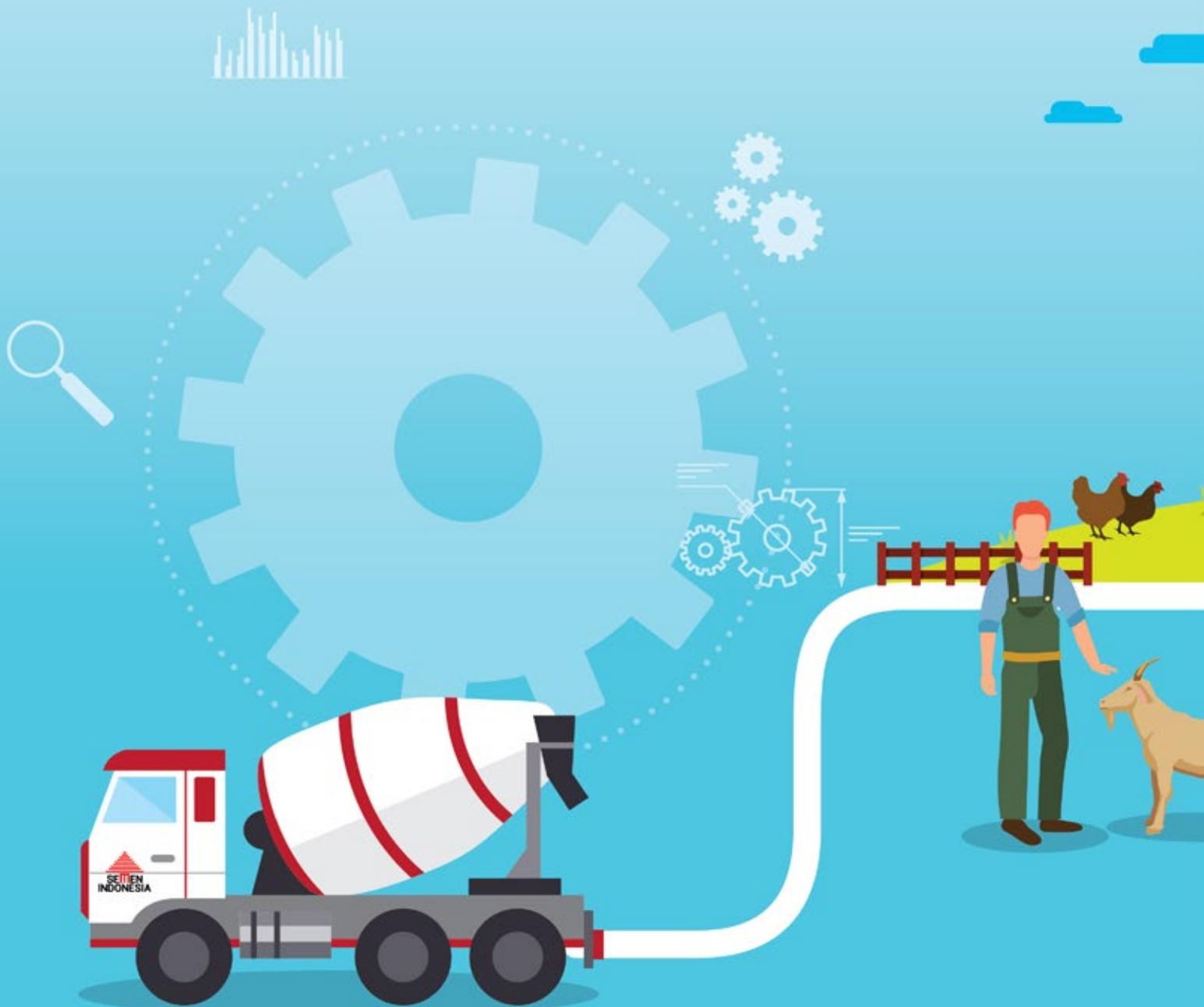
are native and endemic plant of Sumatra, categorized as vulnerable in the IUCN red list. Carrion flowers are relocated from their natural habitat to be planted in five company locations.

PT Semen Tonasa also developed Taman Kehati of Tonasa Park around the mine area as well as the Geopark and Archaeological education area. In the Tonasa Park and Geopark areas there are local and endemic plants, as well as various flora and fauna along with prehistoric caves. The company added a collection of plants by planting 1,000 trees at the inauguration of Tonasa Park on May 11, 2018 and 500 trees during the commemoration of PT Semen Tonasa's 50th anniversary in 2018.



MENCIPTAKAN NILAI SOSIAL

Creating Social Value





MENCIPTAKAN NILAI SOSIAL

Creating Social Value [413, 203]

Masyarakat sekitar wilayah operasi atau komunitas lokal merupakan bagian yang tidak terpisahkan dari Perseroan sebagai entitas sosial. Keberadaan komunitas lokal memberikan dampak keamanan dan perizinan beroperasi. Di sisi lain, keberadaan Anak Perusahaan dan Business Unit Semen Indonesia di daerah memberikan dampak ekonomi tidak langsung pada peningkatan kesejahteraan masyarakat, peluang lapangan kerja, dan pembangunan daerah. Oleh karena itu, ekspektasi pemerintah dan masyarakat setempat sangat tinggi terhadap kontribusi Perseroan sebagai BUMN

Communities around the operating area or local community are an integral part of the Company as a social entity. The existence of local communities has the impact on security and operational licensing. On the other hand, the existence of Subsidiaries and Semen Indonesia Business Units in the regions has indirect economic impacts on improving community welfare, job opportunities, and regional development. Therefore, the approach of the government and local community is very high towards the Company's contribution as an SOE.

[103-1]

PENDEKATAN MANAJEMEN

MANAGEMENT APPROACH [103-2]

Pengelolaan komunitas lokal menjadi tanggung jawab Departemen CSR dibawah SPV Corporate Communication. Pelaksanaan program CSR Perseroan mengacu pada Kebijakan Perusahaan yang disusun berdasarkan:

- UU No.19 Tahun 2003 tentang Badan Usaha Milik Negara.
- UU No.40 Tahun 2007 tentang Perseroan Terbatas.
- Peraturan Pemerintah No. 47 Tahun 2012 tentang Tanggung Jawab Sosial dan Lingkungan Perseroan Terbatas.
- Peraturan Menteri Negara BUMN No. PER-03/MBU/12.2016 tentang Perubahan Atas Peraturan Menteri BUMN No. PER-09/MBU/07/2015 tentang Program Kemitraan dan Program Bina Lingkungan Badan Usaha Milik Negara
- ISO 26000 SR: 2010 Guidance on Social Responsibility dengan Core-Subjects Community Development and Involvement

Management of local communities is the responsibility of CSR Department under SPV Corporate Communication. The implementation of the Company's CSR program refers to Company Policies prepared based on:

- Law No.19 of 2003 on State-Owned Enterprises.*
- Law No. 40 of 2007 on Limited Liability Companies.*
- Government Regulation No. 47 of 2012 on Social and Environmental Responsibilities of Limited Liability Companies.*
- State Minister of SOEs Regulation No. PER-03/MBU/12.2016 on Amendments to Regulation of the Minister of SOEs No. PER-09/MBU/07/2015 on State-Owned Enterprises' Partnership Program and Community Development Program*
- ISO 26000 SR: 2010 Guidance on Social Responsibility with Core-Subjects Community Development and Involvement.*

VISI CSR CSR VISSION

Menjadi Perusahaan persemenan internasional yang terkemuka di Asia Tenggara dengan kinerja *excellence* bersama *stakeholder* dan berkontribusi pada pembangunan berkelanjutan.

To be a leading international cement Company in Southeast Asia with performance excellence together with stakeholders and contribute to sustainable development.

MISI CSR CSR MISSION

Menerapkan kinerja operasi yang bertata kelola yang baik, bersahabat dengan lingkungan hidup, mampu meningkatkan kualitas hidup karyawan dan masyarakat sekitarnya.

To implement good governance-based operating performance, friendly to the environment, increase the quality of life of employees and local community.

Menjadi perilaku beretika dalam semangat *social responsibility* pada semua insan perusahaan dan *stakeholders*.

To act ethically in the spirit of social responsibility towards all personnels of the Company and its stakeholders.

Mewujudkan praktek operasi yang adil, berkesadaran HAM, religius, dan mempertahankan kearifan lokal bagi kemajuan stakeholder dan pertumbuhan usaha yang berkelanjutan.

To realize fair, human rights conscious operating practices and maintain local wisdom for the advancement of stakeholders and sustainable business growth.

Mengembangkan dan menciptakan nilai-nilai manfaat bersama (*Creating Shared Value*), sehingga diperoleh efisiensi yang tinggi dalam operasi perusahaan dan budaya bersinergi secara harmonis bagi kemajuan pembangunan berkelanjutan bagi seluruh *stakeholder*.

To develop and form creating shared value in order to achieve high efficiency in the Company operations and culture synergized harmoniously for the betterment of sustainable development for all stakeholders.

TUJUAN STRATEGIS STRATEGIC GOAL

Meningkatkan reputasi dan kredibilitas perusahaan melalui kegiatan pengembangan masyarakat yang terintegrasi dengan strategi bisnis.

To increase the Company reputation and credibility through community development activities integrating with business strategies.

Dalam Kebijakan Perusahaan, Perseroan berkomitmen mengendalikan dampak seluruh kegiatan usaha melalui pemberdayaan masyarakat, pelaksanaan Program Kemitraan dan Bina Lingkungan (PKBL), serta pemenuhan seluruh peraturan pemerintah. Perseroan juga mengalokasikan dana untuk membangun infrastruktur, sarana dan prasarana untuk meningkatkan kesejahteraan masyarakat sekitar. Perseroan mengutamakan pelaksanaan 80% program pengembangan masyarakat dan 20% program yang bersifat kedermawanan (*charity*).

Sasaran pengelolaan komunitas lokal diprioritaskan kepada masyarakat di sekitar wilayah operasi yang terbagi dalam empat wilayah, yaitu: Ring 1, terdampak fisik kegiatan usaha dan berpotensi mengganggu kegiatan usaha; Ring 2, berpotensi terkena dampak sosial dan sepanjang jalan transportasi semen serta pengembangan usaha; Ring 3, wilayah pemasaran utama di area provinsi; dan Ring 4, wilayah pemasaran utama di luar cakupan wilayah Anak Perusahaan. Sasaran pengelolaan komunitas lokal juga mencakup area operasi Perseroan yang dianggap masyarakat adat sebagai warisan nenek moyang.

Target pengelolaan komunitas lokal adalah memberi dampak positif bagi kinerja perusahaan dalam mewujudkan visi dan misi untuk turut menyejahterahkan bangsa. Adapun dampak ekonomi tidak langsung yang diharapkan dapat mendukung program pemerintah melalui pembangunan infrastruktur di daerah.

In the Company Policy, the Company is committed to controlling the impact of all business activities through community empowerment, implementation of the Partnership and Community Development Program (PKBL), and compliance with all government regulations. The Company also allocates funds to build infrastructure and facilities to improve the welfare of local community. The Company prioritizes the implementation of 80% community development programs and 20% charity programs.

The target of local community management is prioritized for communities around the operating area which are divided into four areas, namely: Ring 1, physically affected by business activities and potentially disrupting business activities; Ring 2, potentially affected by social impacts and along the road of cement transportation and business development; Ring 3, the main marketing area in the provincial area; and Ring 4, the main marketing areas outside subsidiary's coverage. The target of managing local communities also covers the Company's operating areas which are considered by indigenous peoples as heritage.

The target of the local community management is to have a positive impact on the company's performance in realizing its vision and mission to contribute to the nation's welfare. The indirect economic impacts are expected to support government programs through infrastructure development in the regions.

EVALUASI PENDEKATAN MANAJEMEN

EVALUATION OF MANAGEMENT APPROACH [103-3]

Perseroan melakukan monitoring dan evaluasi pengelolaan komunitas lokal secara berkala setiap tahun untuk mengetahui kesesuaian program yang dijalankan dengan tujuan awal pada perencanaan program. Hasil evaluasi program CSR tahun 2018 merekomendasikan agar inisiatif keberlanjutan diarahkan dapat menciptakan nilai (*value creation*), terutama mendukung market dan *revenue* di masa mendatang

The Company periodically conducts monitoring and evaluation of local community management to determine the conformity of programs implementation with the initial objectives in the program planning. The results of CSR program evaluation in 2018 recommended that sustainability initiatives are aimed at value creation, especially supporting the market and revenue in the future.

PENGEMBANGAN MASYARAKAT

Community Development [413-1]

Sebelum menetapkan dan menjalankan program pengembangan masyarakat, Perseroan melakukan studi pemetaan sosial dan pemangku kepentingan (*social and stakeholder mapping*) dengan metode observasi, wawancara mendalam, *desk study*, dan *focus group discussion* (FGD) di setiap wilayah operasi Anak Perusahaan dan Business Unit Semen Indonesia. Studi pemetaan social dan pemangku kepentingan dilakukan Business Unit Tuban tahun 2016 dan pembaruan setiap tahunnya, PT Semen Padang pada tahun 2015, PT Tonasa tahun 2018 Namun, sampai dengan tahun 2018 PT Semen Gresik belum melaksanakan pemetaan sosial dan pemangku kepentingan, sehingga penentuan program CSR didasarkan pada RPL dan RKL perusahaan.

Before establishing and running a community development program, the Company conducted a social and stakeholder mapping study with observation, in-depth interviews, desk studies, and Focus Group Discussion (FGD) methods in each of the subsidiaries' operational areas and Semen Indonesia Business Unit. The social and stakeholder mapping study was conducted in Tuban Business Unit 2016 and renewal in 2018, PT Semen Padang in 2018, and PT Tonasa in 2018. However, until 2018 PT Semen Gresik has not implemented social mapping and stakeholders, so the determination of the program CSR is based on RPL and company RKL.





Kegiatan pemetaan sosial dan pemangku kepentingan bertujuan untuk menggambarkan informasi yang sistematis mengenai masyarakat, termasuk penilaian dampak sosial dan lingkungan di sekitar wilayah operasi. Hasilnya dijadikan pedoman dalam menyusun program pengembangan masyarakat sesuai rencana strategis dalam cetak biru CSR Perseroan. Sementara, pemetaan pemangku dilaksanakan untuk melihat tingkat pengaruh dan kepentingan oleh setiap *stakeholder* yang berada di sekitar Anak Perusahaan dan *Business Unit* Perseroan. Penyusunan maupun pelaksanaan program melibatkan para pemangku kepentingan, seperti tokoh masyarakat, tokoh agama, tokoh pemuda, perwakilan pemerintah daerah, dan kelompok rentan yang menjadi prioritas penerima manfaat program.

The social and stakeholder mapping activities aim to describe systematic information about the community, including an assessment of the social and environmental impacts around the operating area. The results are used as guidelines in developing community development programs according to the strategic plan in the Company's CSR blueprint. Meanwhile, stakeholder mapping is carried out to see the level of influence and importance of each stakeholder around the Subsidiary and the Company's Business Unit. The preparation and implementation of the program involved stakeholders, such as community leaders, religious leaders, youth leaders, local government representatives, and vulnerable groups who were the priority of program beneficiaries.

Pelaksanaan program pengembangan masyarakat menggunakan pendekatan *Sustainable Livelihood Approach* (SLA) yang menekankan adanya kerjasama partisipatoris antara masyarakat dengan perusahaan.

The community development program is implemented with reference to the Sustainable Livelihood Approach (SLA) which emphasizes to the participatory collaboration between the community and the company.

Perseroan membentuk forum komunikasi multi-pemangku kepentingan (*multistakeholder*) untuk mengawal proses pengambilan keputusan penyusunan program pengembangan masyarakat maupun program yang bersifat kedermawanan secara optimal dan tepat sasaran.

Pembentukan forum komunikasi disesuaikan dengan ciri khas atau kearifan lokal di area masing-masing Anak Perusahaan dan Business Unit Semen Indonesia. Business Unit Tuban memiliki Forum Masyarakat Kokoh (FMK), PT Semen Padang mempunyai Forum Nagari, PT Semen Tonasa telah membentuk Forum Desa dan PT Semen Gresik membangun Forum Masyarakat Madani.

The Company has established a multi-stakeholder communication forum to oversee the decision-making process of community development programs as well as charity programs that are optimal and on target.

Establishment of a communication forum tailored to the characteristics or local wisdom in the area of each Subsidiary and the Business Unit of Semen Indonesia. Business Unit Tuban has established multi-stakeholder forum Forum Masyarakat Kokoh (FMK), PT Semen Padang formed sub-district forum Forum Nagari, PT Semen Tonasa has a village forum Forum Desa and PT Semen Gresik has formed a Civic Forum Forum Masyarakat Madani.

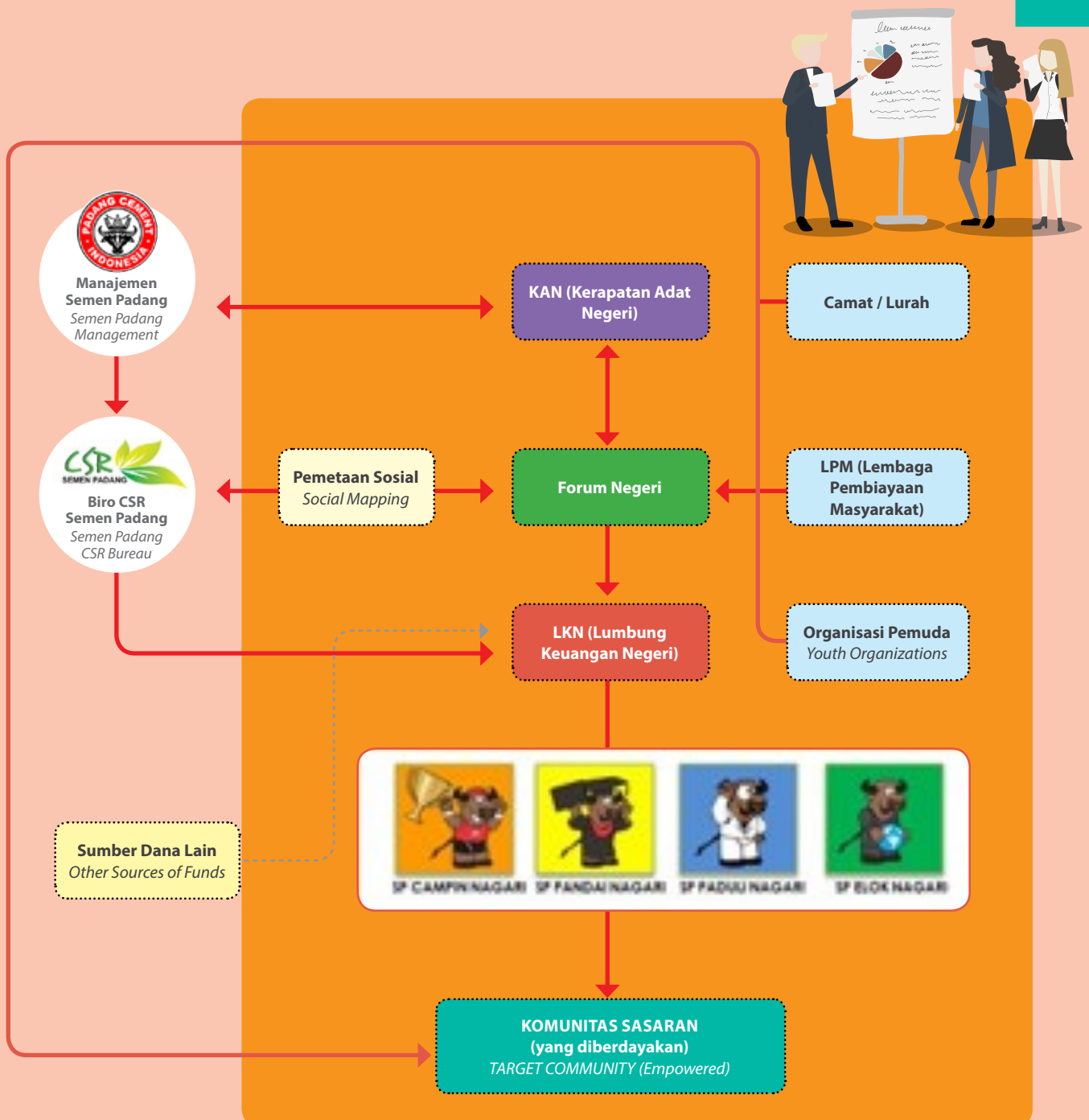


MEKANISME PENYUSUNAN & PELAKSANAAN PROGRAM MELALUI FORUM NAGARI

MECHANISM OF PROGRAM PREPARATION & IMPLEMENTATION THROUGH FORUM NAGARI

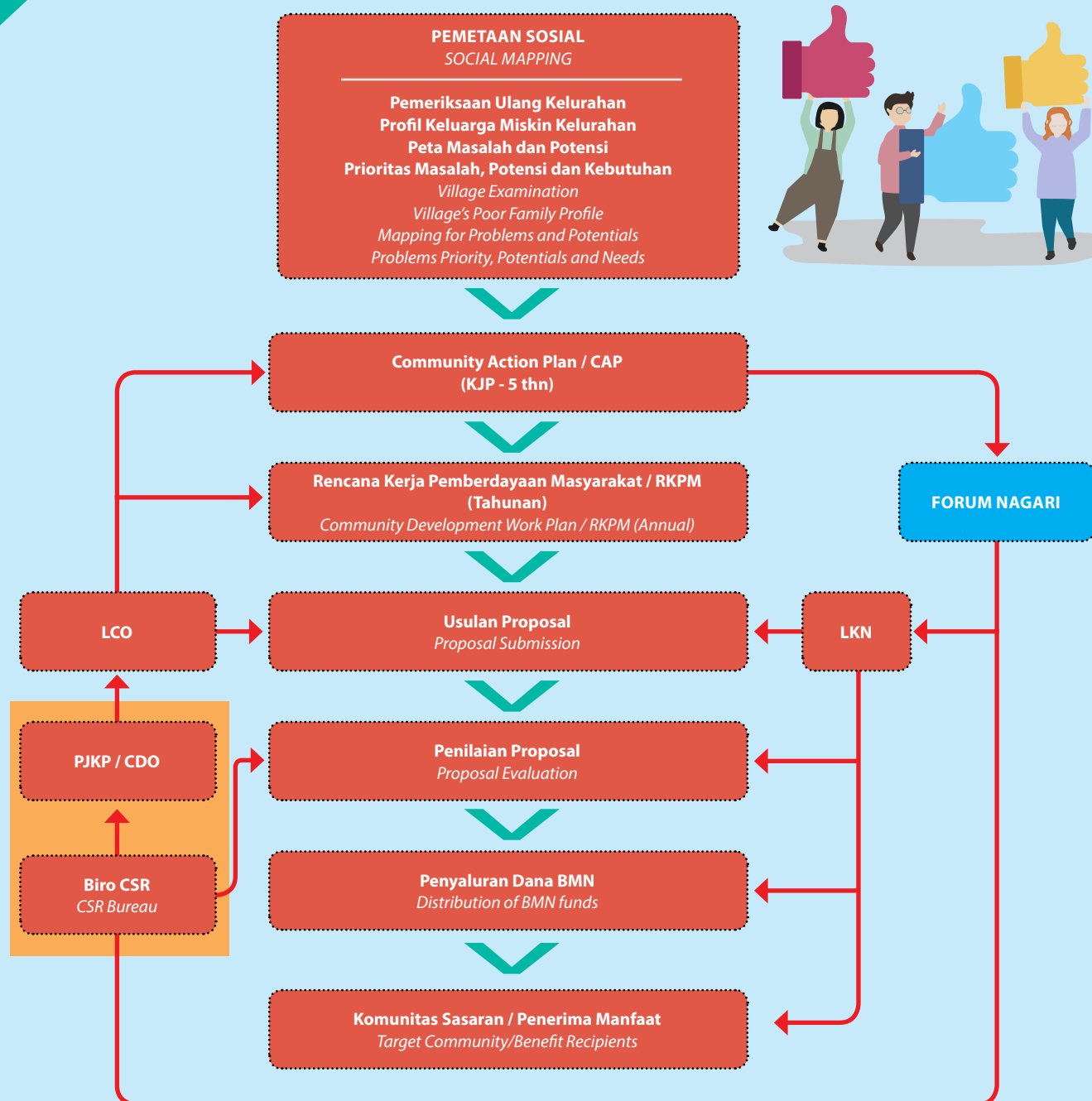
PERENCANAAN PROGRAM

PROGRAM PLANNING



PELAKSANAAN PROGRAM

PROGRAM IMPLEMENTATION



LCO : Local Community Organizer

CDO : Community Development Officer

PJKP : Penanggung Jawab Kegiatan Pemberdayaan

LKN : Lembaga Keuangan Negeri

Pembentukan forum komunikasi diharapkan dapat memberikan dampak positif, di antaranya:

- Dapat menyelesaikan masalah-masalah sosial yang terjadi di masyarakat atau mengurangi konflik sosial,
- Membangun komunikasi dan koordinasi dengan pemangku kepentingan dengan baik,
- Meningkatkan kapasitas SDM pelaku di tingkat desa, dan
- Meningkatkan kesejahteraan melalui kegiatan-kegiatan ekonomi masyarakat.

Pada tahun 2018, FMK sudah memiliki 116 anggota yang terdiri dari empat orang perwakilan (sebelumnya dua orang) dari 26 desa dan tiga kecamatan. Para perwakilan ini bertanggung jawab mengawal dana program CSR yang diusulkan melalui forum pemberdayaan berbasis partisipatif masyarakat. Total dana inventasi program FMK tahun 2018, yaitu Rp7,91 miliar yang mencakup dana untuk setiap desa dan kecamatan, serta dana untuk pendamping program.

Proporsi program CSR tahun 2018 lebih diprioritaskan pada pengembangan masyarakat daripada program-program infrastruktur. Pelaksanaan program pengembangan masyarakat dilakukan dengan pola rencana dari bawah, tuntutan dari atas (rebah tuntas), termasuk penyediaan prasarana, perubahan pola pikir, perilaku, tata nilai, dan membekali dengan pengetahuan/keterampilan, dan penguatan kelembagaan. Beberapa program pemberdayaan masyarakat yang dilakukan pada tahun 2018, yaitu ternak kambing, lele, ayam petelur, bebek, usaha kios pertanian, mobil siaga, pelatihan kerja, dan budidaya jamur.

The communication forum establishment is expected to have positive impacts, including:

- *Capable of solving social problems that occur in the community or reduce social conflict,*
- *Building good communication and coordination with stakeholders,*
- *Building HR capacity at the village level, and*
- *Improving welfare through community economic activities.*

In 2018, FMK has had 116 members consisting of four representatives (previously two) from 26 villages and three districts. These representatives are responsible for overseeing the proposed CSR program funds through a community-based participatory empowerment forum. Total investment fund of Rp7.25 billion for FMK program in 2018, consisted of funds for each village and district, as well as funds for program facilitators.

The proportion of CSR programs in 2018 prioritizes community development rather than infrastructure programs. The implementation of community development programs is carried out with a pattern of complete settlement, including the provision of infrastructure, changes in mindset, behavior, values, and providing knowledge / skills, and institutional strengthening. Some community empowerment programs carried out in 2018, namely goats, catfish, laying hens, ducks, agricultural kiosks, standby cars, job training, and mushroom cultivation.

TAHAPAN PENGEMBANGAN PROGRAM CSR

STAGES OF CSR PROGRAM DEVELOPMENT



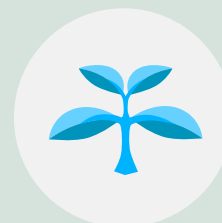
GIVING



INVOLVING



SHARING



MANDIRI

PERSYARATAN TERUKUR

MEASURABLE REQUIREMENTS

Untuk memastikan manfaat dan dampak pelaksanaan program-program pengembangan masyarakat, Perseroan melakukan studi terkait Indeks Kepuasan Masyarakat (IKM) khususnya penerima manfaat program dan evaluasi keberlanjutan terhadap program. Hasil IKM program pengembangan masyarakat Business Unit Tuban di delapan desa Ring 1, yaitu 65,6 dengan konversi B (Baik). Penilaian IKM terbagi menjadi empat indikator, di antaranya sumber daya manusia/people 73,75 (konversi B), proses implementasi/delivery 60,88 (konversi B), luaran/output 75,8 (konversi A), dan dampak/impact 54,78 (konversi B). PT Semen Tonasa juga melaksanakan IKM pada tahun 2017 terhadap lima pilar CSR, yaitu Tonasa Mandiri dengan nilai 73,59, Tonasa Cerdas dengan nilai 72,83, Tonasa Sehat dengan nilai 71,90, Tonasa Bersahaja dengan nilai 72,90, dan Tonasa Hijau dengan nilai 364,12. Secara keseluruhan indeks kepuasan masyarakat terhadap program CSR bernilai 72,82 (Konversi B) atau puas.

To ensure the benefits and impacts of community development programs implementation, the Company conducts survey on the Community Satisfaction Index, especially program beneficiaries and evaluates the sustainability of program. The Community Satisfaction Index results of community development program at Business Unit Tuban in eight Ring 1 villages, was 65.6 with conversion B (Good). The Community Satisfaction Index assessment is divided into four indicators, namely people 73.75 (conversion B), delivery process 60.88 (conversion B), output 75.8 (conversion A), and impact 54.78 (conversion B). PT Semen Tonasa also carried out the survey in 2017 on five CSR pillars, namely Tonasa Mandiri with an index of 73.59, Tonasa Cerdas with 72.83, Tonasa Sehat of 71.90, Tonasa Bersahaja at 72.90, and Tonasa Hijau with 364.12. Overall, the community satisfaction index for the CSR program was 72.82 (Conversion B) or satisfied.

MENCIPTAKAN DAMPAK SOSIAL EKONOMI

— **CREATING SOCIO-ECONOMIC IMPACT** [413-1]

Perseroan menjalankan program pengembangan masyarakat secara berkesinambungan sesuai dengan rencana strategis yang tertuang dalam cetak biru CSR. Inovasi dan penyempurnaan dilakukan seiring pelaksanaan program, agar dapat direplikasi dengan beberapa penyesuaian di daerah lainnya dan memberikan dampak signifikan terhadap sosial-ekonomi masyarakat sekitar.

The Company conducts community development program continuously in accordance with the strategic plan contained in the CSR blueprint, specifically on the CSR pillar of SI Peduli. Innovations and improvements are made in line with the program implementation, in order to be replicated with some adjustments in other regions and provide significant impact on the socio-economic conditions of the surrounding community.



Program Ternak Kokoh merupakan salah satu replikasi Program Desa Perkasa (Produktif, Kokoh & Sejahtera) dan program FMK (Forum Masyarakat Kokoh) yang diinisiasi Business Unit Tuban pada tahun 2015. Program ini terdiri dari dua kelompok ternak domba secara fattening (penggemukan) di kawasan Ring 2, yaitu Desa Sekardadi dan Desa Jenggolo, Kecamatan Jenu. Pada tahun 2018, masing-masing kelompok beranggotakan sepuluh orang peternak mendapatkan total bantuan kambing sebanyak 20 ekor.

Dalam kurun waktu satu tahun terakhir, Program Ternak Kokoh telah menghasilkan dampak signifikan. Bantuan kambing dari perusahaan melalui program FMK telah berkembang biak, sehingga bertambah menjadi 40 ekor. Kapasitas peternak juga meningkat dengan adanya indikasi kemampuan menerapkan pengetahuan yang diberikan, seperti membuat pakan konsentrat, mencukur bulu domba, pencatatan pertumbuhan domba, dan mengolah limbah kotoran ternak menjadi Pupuk Organik Cair dan Bokashi. Selain itu, tambahan pendapatan ekonomi peternak bersumber dari hasil penjualan ternak dan produk sampingan. Pada tahun 2018, Business Unit Tuban juga mengembangkan program ternak kokoh hingga menyasar eks-penggarap lahan PT Semen Indonesia Pabrik Tuban melalui alih profesi dari petani menjadi peternak. Terdapat 55 orang peternak yang menjadi penerima manfaat program ini, dimana masing-masing orang mendapatkan empat ekor kambing dengan nilai investasi sebesar Rp264 juta.

Selain Program Ternak Kokoh, Program Pemberdayaan Kelompok Usaha Nagari (KUN) yang diinisiasi PT Semen Padang telah menghasilkan dampak pengembangan usaha produktif, peningkatan pendapatan, serta menjaga keberlangsungan usaha kelompok menuju kemandirian. KUN merupakan kelompok dari berbagai jenis usaha Rumah Tangga Miskin (RTM) yang dilaksanakan di tujuh kelurahan di Kecamatan Lubuk Kilangan (Ring 1), dua kelurahan di Kecamatan Pauh dan satu kelurahan di Kecamatan Lubuk Begalung. Pada tahun 2016, Perusahaan memberikan modal awal Rp735.625.000 untuk dikelola dengan sistem simpan pinjam dan pelatihan untuk peningkatan usaha kepada 49 KUN (323 RTM). Pada tahun 2017, rata-rata peningkatan pendapatan KUN sebesar 33% dan jumlah tenaga kerja sebanyak 341 orang, sedangkan pada tahun 2018 rata-rata peningkatan pendapatan sebesar 40% dan jumlah tenaga kerja sebanyak 400 orang.

The Sturdy Livestock Program is one of the replications of the Perkasa (Productive, Sturdy & Prosperous) Program and FMK (Sturdy Community Forum) program initiated by Business Unit Tuban in 2015. The program consists of two sheep groups in fattening in the Ring area 2, namely Sekardadi Village and Jenggolo Village, Jenu District. In 2018, each group consisting of ten farmers received a total of 20 goats.

In the past one year, the Sturdy Livestock Program has had a significant impact. Aid from goats from companies through the FMK program has multiplied, increasing to 40. The capacity of farmers also increases with an indication of the ability to apply the knowledge provided, such as making concentrate feed, shearing sheep fur, recording sheep growth, and processing livestock manure into Liquid Organic Fertilizer and Bokashi. In addition, the additional economic income of farmers comes from the sale of livestock and by-products. In 2018, Tuban Business Unit also developed a solid cattle program to target ex-cultivators of PT Semen Indonesia Tuban Plant through the transfer of professions from farmers to farmers. There are 55 farmers who are beneficiaries of this program, where each person gets four goats with an investment value of Rp264 million.

In addition to the Sturdy Livestock Program, the Nagari Business Group Empowerment Program (KUN) initiated by PT Semen Padang has resulted in the development of productive businesses, increased income, and maintaining the sustainability of the group's business towards independence. KUN is a group of various types of Poor Household (RTM) businesses that are carried out in seven kelurahan in Lubuk Kilangan District (Ring 1), two kelurahan in Pauh District and one kelurahan in Lubuk Begalung District. In 2016, the Company provided an initial capital of Rp735,625,000 to be managed with a savings and loan system and training for business development to 49 KUN (323 RTM). In 2017, the average increase in KUN income was 33% and the number of workers was 341 people, while in 2018 the average income was 40% and the workforce was 400 people.

Setiap tahunnya tim CSR PT Semen Tonasa juga melakukan bakti sosial melalui kegiatan Sunatan Massal kepada anak-anak warga sekitar lingkungan perusahaan. Kegiatan ini dilakukan bekerjasama dengan tim Klinik Semen Tonasa Medical Center dan Kerukunan Istri Karyawan Semen Tonasa (Ibu KIKst). Pada tahun 2018, terdapat 500 orang anak yang terlibat dalam program Sunatan Massal.

Every year the CSR team of PT Semen Tonasa also conducts social services through mass circumcision activity for the children in the surrounding area of the company. This activity was conducted in collaboration with Semen Tonasa Medical Center Clinic team and Kerukunan Istri Karyawan Semen Tonasa (Ibu KIKst), a group of PT Semen Tonasa employees' wives. In 2018, there were 500 children participated in the Mass Circumcision program.

PT Semen Tonasa juga memiliki program unggulan Koperasi Wanita yang merupakan bagian dari program Tonasa Park dan Geopark. Koperasi Wanita telah memberikan dampak sosial ekonomi bagi masyarakat sekitar, terutama kelompok perempuan yang sebelumnya pernah berdemo meminta program pemberdayaan masyarakat pada tahun 2012. Kelompok ini melakukan demonstrasi dengan cara menutup jalan (akses utama) dari dan menuju perusahaan dengan cara memasak di tengah jalan sehingga mengakibatkan distribusi semen lumpuh total. Pada akhirnya, Perusahaan berhasil membina masyarakat membangun koperasi berbadan hukum dengan memberikan modal awal sebesar Rp25 juta sebagai dana operasionalnya. Koperasi ini menawarkan jasa kebersihan lingkungan pabrik dan kantor pusat, dan secara bersamaan mengelolah sampah non-B3 menjadi kompos. Saat ini, anggota koperasi sudah mencapai 60 orang dari awalnya hanya enam orang. Omzet koperasi sudah mencapai Rp180 juta per tahun.

PT Semen Tonasa also has a flagship program of Women's Cooperative which is part of the Tonasa Park and Geopark programs. The Women's Cooperative has made a socio-economic impact to the surrounding community, especially women groups who have previously staged demonstrations demanding community empowerment programs in 2012. The group rallied by closing main access road to and from the company by cooking in the middle of the road that paralyzed the distribution of cement. In the end, the Company succeeded in fostering the community by building a cooperative as legal entity by providing initial capital of Rp25 million as its operational fund. The cooperative offers cleaning services for plant environment and head office, as well as processes non-B3 waste into compost. At present, the cooperative have had 60 members from initially only six people. The cooperative's income has reached Rp180 million per year.



Belajar dari keberhasilan program pengembangan masyarakat yang dijalankan Grup Semen Indonesia, PT Semen Gresik Pabrik Rembang yang mulai beroperasi tahun 2017 membangun Badan Usaha Milik Desa (BUMDesa) pada Juli 2018 di sejumlah desa sekitar area operasi. Desa Tegaldowo berdiri usaha pengelolaan cafe, tenaga keamanan, dan tenaga penghijauan. Adapun usaha penataan taman didirikan di Desa Kajar dan Desa Kadiwono. Saat ini, BUMDesa dikelola 53 orang melalui perencanaan parsipatif yang diintegrasikan dengan dana desa dan mengacu pada peraturan yang berlaku, khususnya UU Desa No.6 Tahun 2014. Pengelolaan BUMDesa diharapkan dapat meningkatkan pelayanan umum dan kesejahteraan penerima manfaat.

Learning from the success of the community development program run by Semen Indonesia Group, PT Semen Gresik Rembang Plant which began operations in 2017 built a Village Owned Enterprise (BUMDesa) in July 2018 in a number of villages around the operating area. Tegaldowo Village has established businesses in managing cafes, security guards, and greening workers. Meanwhile, garden planning business was established in Kajar and Kadiwono villages. At present, BUMDesa is managed by 53 people through participatory planning that is integrated with village funds and in compliance with applicable regulations, specifically Law No. 6 of 2014. Management of BUMDesa is expected to improve public services and welfare for beneficiaries.

MENCERDASKAN KEHIDUPAN BANGSA

EDUCATION FOR THE NATION

Pilar CSR Si Cerdas dalam cetak Biru CSR Perseroan menekankan program pengembangan kapasitas masyarakat berbasis pendidikan dan pelatihan berkelanjutan untuk meningkatkan prestasi dan *life-skill* komunitas lokal.

Si Cerdas pillar in the Company's CSR Blueprint emphasizes sustainable education and training based community capacity building programs to improve the achievements and life-skills of local communities

Business Unit Tuban memiliki inisiatif menjawab permasalahan pendidikan masyarakat sekitar melalui Program Beasiswa Prasejahtera Berprestasi (BEST). Pada tahun 2017, perusahaan intensif memberikan bimbingan belajar (Bimbel) bagi 40 pelajar dengan tutor guru terbaik di Kabupaten Tuban. Selanjutnya pada tahun 2018, sebanyak 10 mahasiswa dari keluarga prasejahtera di area sekitar perusahaan mendapatkan kesempatan melanjutkan pendidikan ke Perguruan Tinggi Negeri terbaik Indonesia. Total alokasi anggaran program BEST pada tahun 2017 dan 2018 sebesar Rp1.014 juta. Beasiswa ini mencakup biaya kuliah 10 mahasiswa mulai dari awal perkuliahan hingga lulus. Setiap mahasiswa memperoleh biaya pendidikan Rp2.500.000/mahasiswa/bulan Selain Program BEST, Perusahaan memiliki Program Magang Vokasional berbasis Industri dan Program Kelas Kemitraan Industri di SMKN 3 Tuban. Program ini merupakan upaya meningkatkan kompetensi vokasional siswa/siswi SMKN 3 Tuban sesuai dengan standar kompetensi dan meningkatkan kapasitas sarana-prasana pembelajaran. Pada tahun 2017 dan 2018, dana CSR yang dialokasikan untuk program magang ini, yaitu Rp387 juta.

Business Unit Tuban has the initiative to answer the education problems of the surrounding community through the Achievement of the Underprivileged Scholarship Program (BEST). In 2017, the intensive company provides tutoring (Bimbel) for 40 students with the best teacher tutors in Tuban Regency. Furthermore, in 2018, as many as 10 students from underprivileged families in the surrounding area of the company get the opportunity to continue their education to the best Indonesian State Universities. The total budget allocation for the BEST program in 2017 and 2018 is IDR 1,014 million. In addition to the BEST Program, the Company has an Industrial-based Vocational Internship Program and Industrial Partnership Class Program at 3 Vocational Schools in Tuban. This program is an effort to improve the vocational competence of students of 3 Tuban Vocational High Schools in accordance with competency standards and to increase the capacity of learning facilities. In 2017 and 2018, CSR funds are allocated for this internship program, which is IDR 387 million.



PT Semen Padang juga memiliki program beasiswa berprestasi dengan alokasi anggaran pendidikan sebesar Rp780 juta pada tahun 2018. Sebanyak 1.100 pelajar mulai dari tingkat SD sampai Perguruan Tinggi mendapatkan kesempatan untuk menerima bantuan beasiswa.

Program beasiswa PT Semen Tonasa tahun 2018 merupakan bagian dari pilar Tonasa Cerdas berhasil menjangkau 483 pelajar SD, SMP, & SMA untuk sekolah yang berada di Kabupaten Pangkep dan di sekitar *Packing Plant* luar Sulawesi Selatan, seperti Cel Bawang, Kendari, Ambon, dan Ternate. Sementara beasiswa untuk mahasiswa diberikan kepada 148 mahasiswa Kabupaten Pangkep. Beasiswa ini diberikan khusus kepada siswa dan mahasiswa yang berprestasi. Total dana yang dialokasikan perusahaan untuk program pendidikan sebesar Rp952 juta.

PT Semen Padang also has a scholarship program that achieves with an education budget allocation of Rp780 million in 2018. A total of 1,100 students from elementary to tertiary levels have the opportunity to receive scholarship assistance.

The PT Semen Tonasa scholarship program in 2018 is part of the Tonasa Cerdas pillar which has successfully captured 333 elementary, middle and high school students for schools in Pangkep Regency and around Packing Plants outside South Sulawesi, such as Cel Bawang, Kendari, Ambon, and Ternate. While scholarships for students are given to 148 Pangkep Regency students. The total funds allocated by the company for educational programs amounted to Rp. 952 million.

PROGRAM KEMITRAAN: MENINGKATAN PENDAPATAN EKONOMI

PARTNERSHIP PROGRAM: INCREASING INCOME

Program Kemitraan merupakan upaya Perseroan sebagai BUMN meningkatkan pendapatan ekonomi masyarakat melalui pembinaan usaha kecil, baik terkait atau tidak dengan bisnis perusahaan. Penyaluran dana kemitraan dan pembinaan usaha kecil mengedepankan aspek pemerataan, kemandirian, profesionalisme, dan etika.

The Partnership Program is an effort by the Company as an SOE to increase the economic income of the community through developing small businesses, either related or not with the company's business. Distribution of partnership funds and developing small businesses promotes aspects of equality, independence, professionalism and ethics.

Realisasi Program Kemitraan

Partnership Program Realization

Grup Semen Indonesia Semen Indonesia Group	Jumlah Mitra Binaan Number of SME Partners			Realisasi Anggaran Mitra Binaan (Rp) Realization of SME Partners Budget (IDR)		
	2018	2017	2016	2018	2017	2016
Business Unit Tuban dan PT Semen Gresik	20,409	19,277	17,953	54,809,390,000	55,512,530,000	56,976,500,000
PT Semen Padang	7,090	6,799	6,466	9,485,443,325	9,148,184,000	9,172,500,000
PT Semen Tonasa	12,076	11,536	10,902	13,239,000,000	12,965,067,000	12,709,000,000
Total	39,575	37,612	35,321	77,533,833,325	77,625,781,000	78,858,000,000



MEKANISME PENGADUAN SOSIAL DAN LINGKUNGAN

SOCIAL AND ENVIRONMENTAL COMPLAINT MECHANISM

Perseroan membuka jalur komunikasi bagi masyarakat untuk melakukan pengaduan terkait isu sosial dan lingkungan di sekitar wilayah operasi. Setiap pengaduan akan ditindaklanjuti fungsi Humas sesuai dengan mekanisme *standard operating procedure* (SOP) penyelesaian konflik, mulai dari penerimaan dan pencatatan keluhan sesuai dengan klasifikasi (lingkungan, keamanan, hukum, sosial), koordinasi dengan Unit Kerja terkait untuk membuat rencana tindak lanjut dan menyampaikan jawaban kepada pihak luar, hingga proses memverifikasi kebenaran keluhan dengan kunjungan dan pendekatan persuasif. Pengadu/masyarakat diminta mengisi lembar penyelesaian apabila keluhan dianggap selesai dan jika gagal dilimpahkan ke pihak berwenang.

The company opens a communication channel for the community to file complaints over social and environmental issues around the operating area. Each complaint will be followed up by the Public Relations function in accordance with standard operating procedure (SOP) of conflict resolution, starting from receiving and recording complaints based on classification (environment, security, legal, social), coordination with relevant Work Unit to plan follow-up and respond to external parties, up to the verification to ascertain the truth of complaints through visits and persuasive approaches. The complainant/community is asked to fill in the resolution form if the complaint is deemed resolved and if it fails to be resolved, then it is handed over to the authorities.

STANDAR PROSEDUR OPERASI PENYELESAIAN KONFLIK

Conflict Resolution Standard Operating Procedure



Status Penyelesaian Keluhan Sosial dan Lingkungan Tahun 2018

Status of Social and Environmental Complaint Resolution of 2018

Grup Semen Indonesia Semen Indonesia Group	Keluhan yang Diterima Incoming Complaints	Keluhan yang Diterima Resolution Status
Business Unit Tuban	3	Sudah diselesaikan Resolved
PT Semen Padang	3	Sudah diselesaikan Resolved
PT Semen Tonasa	1	Sudah diselesaikan Resolved
PT Semen Gresik	21	5 pengaduan masih dalam proses & 16 pengaduan dengan status berulang 5 complaints are still in process & 16 complaints with recurring status
Total	28	

PEMBANGUNAN DAERAH

Regional Development [203-2]

Keberadaan Grup Semen Indonesia memberikan dampak ekonomi tidak langsung pada pembangunan daerah, terutama di sekitar area operasi. Selama proses pembangunan, Perusahaan melibatkan pemerintah daerah, masyarakat setempat, dan mitra kerja sebagai pelaksana.

Pembangunan infrastruktur publik menjadi prioritas Perseroan, terdiri dari infrastruktur pendidikan, kesehatan, ekonomi, agama, dan berbagai jenis infrastruktur lainnya. Infrastruktur publik mendukung masyarakat untuk mengakses layanan tertentu dan membantu meningkatkan kapasitas dan kualitas hidupnya.

Pada tahun 2018, Grup Semen Indonesia mengeluarkan investasi infrastruktur secara probono, di antaranya pembangunan drainase, jalan, fasilitas pendidikan dan olahraga, serta tempat ibadah. Total biaya investasi infrastruktur Business Unit Tuban tahun 2018 sebesar Rp3.875.059.000, PT Semen Padang sebesar Rp2.150.868.429, PT Semen Tonasa sebesar Rp499.500.000, dan PT Semen Gresik sebesar Rp5.738.526.824.

The existence of Semen Indonesia Group has an indirect economic impact on regional development, especially around the operating area. During the development process, the Company involved local governments, local communities, and partners as implementing parties.

Public infrastructure development is the Company's priority, consisting of education, health, economic, religious, and various other types of infrastructure. Public infrastructure supports the community to access particular services and helps increase their capacity and quality of life.

In 2018, the Semen Indonesia Group issued infrastructure investments on probono, including the construction of drainage, roads, education and sports facilities, and places of worship. The total investment costs of 2018 Business Unit Tuban infrastructure are Rp. 4,871,630,364, PT Padang Padang is Rp. 1,099,018,400, PT Semen Tonasa is Rp.449,500,000, and PT Semen Gresik is Rp.5,738,526,824.



DATA DAN INFORMASI PENDUKUNG

Supporting Data and Information





Independent Assurance Statement

The 2018 Sustainability Report of PT Semen Indonesia (Persero), Tbk

Number : 004/000-174/IV/2019/SR-Asia/Indonesia

Type : 1

Level : Moderate

PT Semen Indonesia (Persero), Tbk ("the Reporting Organisation" or "the Company") is an Indonesian state-owned enterprise and listed company operating in Portland cement production. The Company has developed its **2018 Sustainability Report** ("the Report") where its content development follows:

- a) the Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards); and
- b) the Regulation of Indonesia Financial Services Authority No.51/POJK.03/2017 on the Implementation of Sustainable Finance for the Financial Services Organisations and the Listed and Public Companies (POJK 51).

As agreed by the Management¹, **Social Responsibility Asia** ("SR Asia") has been engaged to assure the Report and come up with recommendations as well as an independent assurance statement, while presentation of the Report content is sole responsibility of the Reporting Organisation. SR Asia states that this independent assurance statement does NOT indicate our endorsement on the Report, but it describes our opinion based on the assurance procedures referring to certain principles, standards and regulations. An assurance statement also does NOT indicate the Company's overall sustainability performance, except for the areas included in the scope of assurance. SR Asia is only responsible to the Reporting Organisation and does NOT accept or assume any responsibility for any other purpose or to any other person or organisation. Thus, any dependence that third party has placed on the Report or this independent assurance statement is entirely on its own risk.

Scope and Limitation of Assurance

1. Visit the Company's office in Tuban, East Java, to identify and trace back supporting documents and evidence, and also to conduct site visit to an Integrated Cement Plant in the area.
2. Asses the seven material topics, which are economic performance, energy, occupational health and safety, indirect economic impact, emissions, local community, as well as effluent and waste, which has been identified by the Management as relevant, significant, and priority topics to the Company.
3. Review, NOT to investigate or audit, the Report containing sustainability performance data, information, and disclosures as presented in the Report content, from the period of 1st of January up to 31st of December 2018.
4. SR Asia assumes that the Company or independent parties or other parties associated to the Company have verified and/or audited any data and information related to financial statements. Therefore, presentation of financial data, information, and figures in the Report is NOT within the scope of our responsibility as per assurance procedure is taken.

¹ The Management refers to the management of the Reporting Organization

Exclusion in Assurance

1. Data and information outside the reporting period, or in the public domain but not included in the Report, or from Company's documents other than those mentioned in the Report, or not relevant to the discussions in the Report.
2. Analysis on the Report content based on the standards and indicators other than those mentioned under the methodology section.
3. Stakeholders' engagement, which may be involved in developing the Report, except for the engagement to identify material topics as discussed in the Report.
4. Statements, claims, and expression of opinion, belief, expectation, advertisement, and future planning of the Company, as described in the Report.

Type and Level of Assurance

1. Type 1 of assurance service on the report content in respect to the AA1000AS (2008) Assurance Standard and AA1000AP (2018) AccountAbility Principles.
2. A moderate level of assurance procedure on the Report content and evidence, where **the risk of information and conclusions of the Report being error is reduced to low, but not to very low and not zero.**

Methodology

1. Conduct initial assessment of the Report by an Assurance Team that was appointed by SR Asia through its official partner in Indonesia.
2. Visit the Company's office in Tuban to meet representatives from several departments and subsidiaries of the Company to discuss the Report content and disclosures of sustainability performance data and information, to trace back data and information to the sources, and to review the evidence documents, especially of those related to the material topics.
3. Visit to and observe the actual operations in an Integrated Cement Plant in Tuban, East Java.
4. Evaluate the adherence of Report content, disclosures, and presentation against the standards, principles, and indicators of AA1000AS (2008) and AA1000AP (2018) AccountAbility, GRI Standards, and POJK 51.
5. Evaluate system and process that the Company has in place in developing the Report based on the reporting principles and standards.

Adherence to AA1000AP (2018) and GRI Standards

Inclusivity – The Company indicates commitment to engage stakeholders through a wide range of mechanisms, such as employee engagement survey, customer satisfaction survey, as well as whistle blowing system. However, the Government as regulator and key stakeholder is not included in the Report, leading to less adherence of the Report content to inclusiveness principle. At practical level, the Government, through the Ministry of Forestry and Environment and the Ministry of Energy and Mineral Resources, is significantly concerned about environmental impacts of cement industry sector and, by regulation, the Company is mandatory to conduct energy management.

Materiality – The Assurance Team concluded that the seven material topics in the Report are relevant and significant to the sustainability context of the Company. However, the absence of biodiversity or ecological impacts as one of material topics has made the Report content inadequate in terms of its adherence to materiality principle.

Responsiveness – In terms of energy management, utilisation of Waste Heat Recovery Power Generation (WHRPG) demonstrates the Company's responsiveness to utilise clean energy, reduce emissions and energy cost, as well as to increase its economic performance. However, the Company has less responsiveness in environmental issues as the Report scope and boundary does not include mining operations and environmental impacts from mining activities.

Impact – The Report indicates the Company's efforts to reduce carbon emissions in cement productions, such as utilisation of WHRPG, biomass and municipal solid waste to generate cleaner energy. However, since mining activities and impacts on biodiversity is not included, the Company's data and information in the Report cannot describe the whole picture of sustainability context and impacts from the Company's decisions and actions.

In "Accordance" with Core or Comprehensive Option – As per assurance procedure is taken, in terms of reporting methodology and approach, the Assurance Team has concluded that **the Report content follows the core option of GRI Standards**. In general, Disclosure of Management Approach (DMA) of the seven material topics is also moderately presented following the GRI Standards requirements.

GRI Standards Principles – Due to lack of evidence documents presented by the Company's subsidiaries during the assurance work, the data and information related to sustainability data and performance in the Report has less accuracy and reliability. The Report needs improvement in terms of adherence to stakeholder inclusiveness, sustainability context, and materiality principle due to the absence of data and information about mining operations and their ecological impacts.

Recommendation

1. Utilise the AA1000SES (2015) Stakeholder Engagement Standard to improve the Company's stakeholder mapping and analysis as the basis for materiality assessment of sustainability topics.
2. Enhance stakeholder inclusiveness, sustainability context, and materiality of future reporting through an inclusive scope and boundary covering mining activities and ecological impacts. In the next sustainability report, the Company is expected to discuss more about its strategy to manage social and environmental impacts from mining operations.
3. During assurance process, prepare and present adequate evidence documents to increase accuracy and reliability of the next report content.
4. Develop adequate management system in collecting, compiling and maintaining data and information from subsidiaries and business units to minimise errors and make evidence documents available for assurance.

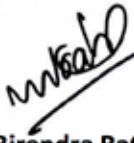
Statement of Competency, Independency and Impartiality

SR Asia is comprised of respectable Asian professionals and organisations. The main objective of SR Asia is to support companies and other stakeholders in adopting sustainability and social responsibility principles, standards, and best practices through different activities; e.g. policy studies and advocacies, CSR studies, reporting developments, capacity building programs, researches, and assurance services.

SR Asia's Assurance Team members have experience in writing and reviewing sustainability reports and integrated reports of organisations from different industries. The experts are familiar with different reporting and assurance standards, such as GRI Standards, SASB reporting standard, International Integrated Reporting (IR) Framework, and AA1000 AccountAbility Standard series.

SR Asia ensures adequate mechanism is well implemented in both SR Asia organization and partner in order to make the Assurance Team members independent and free from bias. SR Asia also confirms that the applied assurance procedure is able to prevent the Company influencing the ability of the Assurance Team members to develop an objective and truthful assurance statement.

Jakarta, 04th of April 2019



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REFERENSI SILANG INDEKS ISI STANDAR GRI DAN POJK [413, 203]

/ Cross-Reference of GRI Standard Content Index
and Financial Service Authority Regulation

GRI Standards	Pengungkapan <i>Disclosure</i>	Halaman dan/ laman <i>Page numbers &/URLs</i>	POJK 51/ OJK.03/2017
GRI 101: Dasar 2016 <i>GRI 101: Foundation 2016</i>			Pengungkapan Nomor <i>Disclosures Number</i>
Pengungkapan Umum <i>General Disclosures</i>			
GRI 102: Pengungkapan Umum 2016 <i>GRI 102: General Disclosures 2016</i>	102-1 Nama organisasi <i>Name of the organization</i>	14	3.b
	102-2 Kegiatan, merek, produk, dan jasa <i>Activities, brands, products, and services</i>	18	3.d
	102-3 Lokasi kantor pusat <i>Location of headquarters</i>	45	3.b
	102-4 Lokasi operasi <i>Location of operations</i>	22	3.c.4
	102-5 Kepemilikan dan bentuk hukum <i>Ownership and legal form</i>	20	3.c.3
	102-6 Pasar yang dilayani <i>Markets served</i>	21	
	102-7 Skala organisasi <i>Scale of the organization</i>	20	3.c.1 3.c.2
	102-8 Informasi mengenai karyawan <i>Information on employees</i>	26	3.c.2
	102-9 Rantai pasokan <i>Supply chain</i>	24	
	102-10 Perubahan signifikan <i>Significant changes</i>	24	3.f
	102-11 Pendekatan atau Prinsip Pencegahan <i>Precautionary Principle or approach</i>	35	
	102-12 Inisiatif eksternal <i>External initiatives</i>	19	
	102-13 Keanggotaan asosiasi <i>Membership of associations</i>	21	3.e
	102-14 Pernyataan dari pembuat keputusan senior <i>Statement from senior decision-maker</i>	8	1 4.a 4.b 4.c 6.a
	102-16 Nilai, prinsip, standar, dan norma perilaku <i>Values, principles, standards, and norms of behavior</i>	16	3.a
	102-18 Struktur tata kelola <i>Governance structure</i>	30	5.a
	102-40 Daftar kelompok pemangku kepentingan <i>List of stakeholder groups</i>	44	5.d.1 5.d.2
	102-41 Perjanjian perundingan kolektif <i>Collective bargaining agreements</i>		
	102-42 Mengidentifikasi dan memilih pemangku kepentingan <i>Identifying and selecting stakeholders</i>	43	5.d.1
	102-43 Pendekatan terhadap keterlibatan pemangku kepentingan <i>Approach to stakeholder engagement</i>	44	5.d.2
	102-44 Topik utama dan masalah <i>Key topics and concerns</i>	44	5.e
	102-45 Entitas yang termasuk dalam laporan keuangan dikonsolidasi <i>Entities included in the consolidated financial statements</i>	37	

GRI Standards	Pengungkapan Disclosure	Halaman dan/ laman Page numbers &/URLs	POJK 51/ OJK.03/2017
GRI 101: Dasar 2016 <i>GRI 101: Foundation 2016</i>			Pengungkapan Nomor <i>Disclosures Number</i>
Pengungkapan Umum <i>General Disclosures</i>			
GRI 102: Pengungkapan Umum 2016 <i>GRI 102: General Disclosures 2016</i>	102-46 Menetapkan isi laporan dan Batasan topik <i>Defining report content and topic boundaries</i>	38	
	102-47 Daftar topik material <i>List of material topics</i>	39, 40	
	102-48 Penyajian kembali informasi <i>Restatements of information</i>	37	
	102-49 Perubahan dalam pelaporan <i>Changes in reporting</i>	39	
	102-50 Periode pelaporan <i>Reporting period</i>	37	
	102-51 Tanggal laporan terbaru <i>Date of most recent report</i>	37	
	102-52 Siklus pelaporan <i>Reporting cycle</i>	37	
	102-53 Kontak <i>Contact</i>	45	
	102-54 Kesesuaian dengan Standar GR <i>In accordance with the GRI Standards</i>	38	
	102-55 Indeks isi GRI <i>GRI content index</i>	110	
	102-56 Assurance oleh pihak eksternal <i>External assurance</i>	37	
Topik Material <i>Material Topics</i>			Pengungkapan Nomor <i>Disclosures Number</i>
Kinerja Ekonomi dan Perubahan Iklim <i>Economic Performance and Climate Change</i>			
GRI 103: Pendekatan Manajemen 2016 <i>GRI 103: Management Approach 2016</i>	103-1 Penjelasan topik material dan Batasannya <i>Explanation of the material topics</i>	48	
	103-2 Pendekatan manajemen dan komponennya <i>The management approach and its components</i>	48, 49	
	103-3 Evaluasi pendekatan manajemen <i>Evaluation of the management approach</i>	50	
GRI 201: Kinerja Ekonomi 2016 <i>GRI 201: Economic Performance 2016</i>	201-1 Nilai ekonomi langsung yang dihasilkan dan didistribusikan <i>Direct economic value generated and distributed</i>	49, 50	
Dampak Ekonomi Tidak Langsung <i>Indirect Economic Impacts</i>			
GRI 103: Pendekatan Manajemen 2016 <i>GRI 103: Management Approach 2016</i>	103-1 Penjelasan topik material dan Batasannya <i>Explanation of the material topics</i>	88	
	103-2 Pendekatan manajemen dan komponennya <i>The management approach and its components</i>	88	
	103-3 Evaluasi pendekatan manajemen <i>Evaluation of the management approach</i>	90	
GRI 203: Dampak Ekonomi Tidak Langsung 2016 <i>GRI 203: Indirect Economic Impacts 2016</i>	203-2 Dampak Ekonomi Tidak Langsung yang Signifikan <i>Significant indirect economic impacts</i>	103	

GRI Standards	Pengungkapan Disclosure	Halaman dan/ laman Page numbers &/URLs	POJK 51/ OJK.03/2017
Topik Material Material Topics			Pengungkapan Nomor Disclosures Number
Energi Energy			
GRI 103: Pendekatan Manajemen 2016 GRI 103: Management Approach 2016	103-1 Penjelasan topik material dan Batasannya Explanation of the material topics	64	
	103-2 Pendekatan manajemen dan komponennya The management approach and its components	64, 66	
	103-3 Evaluasi pendekatan manajemen Evaluation of the management approach	65, 66	
GRI 302: Energi 2016 GRI 302: Energy 2016	302-3 Intensitas Energi Energy Intensity	68, 70	6.d.3.1
	302-4 Pengurangan Konsumsi Energi Reduction of energy consumption	71	6.d.3.2
Emisi Emission			
GRI 103: Pendekatan Manajemen 2016 GRI 103: Management Approach 2016	103-1 Penjelasan topik material dan Batasannya Explanation of the material topics	64	
	103-2 Pendekatan manajemen dan komponennya The management approach and its components	71, 72	
	103-3 Evaluasi pendekatan manajemen Evaluation of the management approach	71, 72	
GRI 305: Emisi 2016 GRI 305: Emissions 2016	305-4 Intensitas emisi GRK GHG emissions intensity	74	6.e.4.a
	305-5 Pengurangan emisi GRK Reduction of GHG emissions	75	6.e.4.b
	305-7 Nitrogen oksida (NOX), sulfur oksida (SOX), dan emisi udara yang signifikan lainnya Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	75	
Efluen dan Limbah Effluent and Waste			
GRI 103: Pendekatan Manajemen 2016 GRI 103: Management Approach 2016	103-1 Penjelasan topik material dan Batasannya Explanation of the material topics	64	
	103-2 Pendekatan manajemen dan komponennya The management approach and its components	78	
	103-3 Evaluasi pendekatan manajemen Evaluation of the management approach	78	
GRI 306: Efluen dan Limbah 2016 GRI 306: Effluent and Waste 2016	306-1 Pelepasan air berdasarkan mutu dan tujuan Water discharge by quality and destination	83	
	306-2 Limbah berdasarkan jenis dan metode pembuangan Waste by type and disposal method	80	

GRI Standards	Pengungkapan <i>Disclosure</i>	Halaman dan/ laman <i>Page numbers &/URLs</i>	POJK 51/ OJK.03/2017
Topik Material <i>Material Topics</i>			Pengungkapan Nomor <i>Disclosures Number</i>
Kesehatan dan Keselamatan Kerja <i>Occupational Health & Safety</i>			
GRI 103: Pendekatan Manajemen 2016 <i>GRI 103: Management Approach 2016</i>	103-1 Penjelasan topik material dan Batasannya <i>Explanation of the material topics</i>	56	
	103-2 Pendekatan manajemen dan komponennya <i>The management approach and its components</i>	56	
	103-3 Evaluasi pendekatan manajemen <i>Evaluation of the management approach</i>	57	
GRI 403: Kesehatan dan Keselamatan Kerja 2016 <i>GRI 403: Occupational Health & Safety 2016</i>	403-1 Perwakilan pekerja dalam komite resmi gabungan manajemen pekerja untuk kesehatan dan keselamatan <i>Workers representation in formal joint management-worker health and safety committees</i>	59	
	403-4 Topik kesehatan dan keselamatan yang tercakup dalam perjanjian resmi dengan serikat buruh <i>Health and safety topics covered in formal agreements with trade unions</i>	58	
	403-9 Kecelakaan Kerja <i>Work-related injuries</i>	60	
Masyarakat Lokal <i>Local Communities</i>			
GRI 103: Pendekatan Manajemen 2016 <i>GRI 103: Management Approach 2016</i>	103-1 Penjelasan topik material dan Batasannya <i>Explanation of the material topics</i>	88	
	103-2 Pendekatan manajemen dan komponennya <i>The management approach and its components</i>	88	
	103-3 Evaluasi pendekatan manajemen <i>Evaluation of the management approach</i>	90	
GRI 413: Masyarakat Lokal 2016 <i>GRI 413: Local Communities 2016</i>	413-1 Operasi dengan keterlibatan masyarakat lokal, penilaian dampak, dan program pengembangan <i>Operations with local community engagement, impact assessments, and development programs</i>	97	

REFERENSI POJK

/ Reference of Financial Service
Authority Regulation

POJK 51/ OJK.03/2017	Pengungkapan Disclosure	Halaman dan/ laman Page numbers &/URLs
2	Ikhtisar kinerja aspek keberlanjutan <i>An overview of the sustainability performance aspect</i>	7
5.b	Penjelasan mengenai pengembangan kompetensi yang dilaksanakan terhadap anggota Direksi, anggota Dewan Komisaris, pegawai, pejabat dan/atau unit kerja yang menjadi penanggung jawab penerapan Keuangan Berkelanjutan <i>Explanation of competence development carried out on the members of the Board of Directors, members of the Board of Commissioners, employees, officers and / or work units responsible for the implementation of Sustainable Finance</i>	6, 29
5.c	Penjelasan mengenai prosedur Perusahaan Publik dalam risiko keberlanjutan <i>Company procedures in controlling the risk of sustainability</i>	4
5.e	Permasalahan terkait kinerja keberlanjutan <i>Issues related to sustainability performance</i>	6
6.b.1	Perbandingan target dan kinerja produksi, portofolio, target pembiayaan, atau investasi, pendapatan dan laba rugi <i>Comparison between production target and performance, portfolio funding or investment target, revenue and profit/loss</i>	20, 21, 50
6.b	Perbandingan target dan kinerja portofolio, target pembiayaan, atau investasi pada instrumen keuangan atau proyek yang sejalan dengan penerapan Keuangan Berkelanjutan <i>Comparison between portfolio target and performance, funding or investment target on financial instruments or projects in line with the implementation of Sustainable Finance</i>	20, 21, 50
6.c.1	Komitmen Perusahaan untuk memberikan produk dan/atau jasa <i>The Company's commitment to provide products and/ or services equivalent to consumers</i>	52
6.c.2.a	Kesetaraan kesempatan bekerja dan ada atau tidaknya tenaga kerja paksa dan tenaga kerja anak <i>Equality of employment opportunities and the presence or absence of forced labor and child labor</i>	29
6.c.2.b	Persentase remunerasi pegawai tetap di tingkat terendah terhadap upah minimum regional <i>Percentage of permanent employee remuneration at the lowest level against the regional minimum wage</i>	29
6.c.2.c	Lingkungan bekerja yang layak dan aman <i>Decent and safe working Environment</i>	56
6.c.2.d	Pelatihan dan pengembangan kemampuan pegawai <i>Training and education for employees</i>	29
6.c.3.a	Informasi kegiatan atau wilayah operasional yang menghasilkan dampak positif dan dampak negatif terhadap masyarakat sekitar <i>Information on activities or operational areas that generate positive impacts and negative impacts on local communities</i>	64, 96
6.c.3.b	Mekanisme dan jumlah pengaduan masyarakat yang diterima dan ditindaklanjuti <i>The mechanism and number of public complaints received and acted upon</i>	102
6.c.3.c	TJSL pada tujuan pembangunan berkelanjutan meliputi jenis dan capaian kegiatan program pemberdayaan masyarakat <i>Social and environmental responsibility on sustainable development objectives includes the types and achievements of community empowerment program activities</i>	96
6.d.1	Biaya Lingkungan Hidup yang dikeluarkan <i>Environmental costs incurred</i>	50, 96
6.d.2	Penggunaan material yang ramah lingkungan <i>Use of environmentally friendly materials</i>	5, 81

POJK 51/ OJK.03/2017	Pengungkapan Disclosure	Halaman dan/ laman Page numbers &/URLs
6.e	6.e.1 Kinerja sebagaimana dimaksud dalam huruf d <i>Performance as meant in letter d</i>	
	6.e.2 Kegiatan atau wilayah operasional yang menghasilkan dampak lingkungan hidup <i>Activities or operational areas that have an impact to the surrounding environment</i>	64
	6.e.3.a Dampak dari wilayah operasional yang dekat atau berada di daerah konservasi <i>Impacts of operational areas that are near or in conservation area</i>	84
	6.e.3.b Upaya konservasi keanekaragaman hayati <i>Efforts to conserve biodiversity</i>	80
	6.e.5.a Jumlah limbah dan efluen yang dihasilkan berdasarkan jenis <i>The amount of waste and effluent produced by type</i>	118, 119
	6.e.5.b Mekanisme pengelolaan limbah dan efluen <i>Waste and effluent management mechanisms</i>	78, 80
	6.e.5.c Tumpahan yang terjadi (jika ada) <i>Spills that occurred (if any)</i>	N/A
	6.e.6 Jumlah dan materi pengaduan Lingkungan Hidup yang diterima dan diselesaikan <i>Number and material of the environment complaints received and completed</i>	102
6.f	6.f.1 Inovasi dan pengembangan Produk Berkelanjutan <i>Innovation and development of Sustainable Products</i>	72
	6.f.2 Jumlah dan persentase produk dan jasa yang sudah dievaluasi keamanannya bagi pelanggan <i>Number and percentage of products and services that have been evaluated for the customer's safety</i>	52
	6.f.3 Dampak positif dan dampak negatif yang ditimbulkan dari Produk dan/atau Jasa dan proses distribusi <i>Positive and negative impact of Product and / or Services and distribution process</i>	37
	6.f.4 Jumlah produk yang ditarik kembali dan alasannya <i>Number of products withdrawn and the reason</i>	52
	6.f.5 Survei kepuasan pelanggan <i>Survey of customer satisfaction</i>	7, 51, 53, 97

Lampiran 1

Daftar Sertifikasi Semen Indonesia, Anak Perusahaan, dan Business Unit Tahun 2018

Appendix 1: List of Certifications of Semen Indonesia, Subsidiaries and Business Units in 2018

Sertifikat Certificate	Keterangan Description	Masa Berlaku Validity
PT Semen Indonesia (Persero) BU Tuban		
ISO 9001:2015	Sistem Manajemen Mutu Quality Management System	20 Oktober 2021 October 20, 2021
ISO 14001:2015	Sistem Manajemen Lingkungan Environmental Management System	14 Oktober 2021 October 14, 2021
OHSAS 18001:2007	Sistem Pengelolaan Keselamatan dan Kesehatan Kerja Occupational Health and Safety Management System	12 Maret 2021 March 12, 2021
SMK3	Sistem Manajemen K3 OHS Management System	14 Juli 2020 July 14, 2021
ISO/IEC 17025:2008	Sistem Manajemen Laboratorium Laboratory Management System	24 Maret 2019 March 24, 2019
PT Semen Gresik		
ISO 9001:2015	Sistem Manajemen Mutu	24 Oktober 2016-23 Oktober 2019
SPPT SNI OPC	Produk Pengguna Tanda SNI	3 November 2016-2 November 2020
SPPT SNI PPC	Produk Pengguna Tanda SNI	3 November 2016-2 November 2020
SPPT SNI PCC	Produk Pengguna Tanda SNI	16 Maret 2018-15 Maret 2022
PT Semen Padang		
ISO 9001:2015	Sistem Manajemen Mutu Quality management system	8 Oktober 2018 – 7 Oktober 2021 October 8, 2018 - October 7, 2021
ISO 14001:2015	Sistem Manajemen Lingkungan Environmental Management System	8 Oktober 2018 – 7 Oktober 2021 October 8, 2018 - October 7, 2021
OHSAS 18001:2007	Sistem Pengelolaan Keselamatan dan Kesehatan Kerja Occupational Health and Safety Management System	11 Agustus 2017 – 10 Agustus 2020 August 11, 2017 - August 10, 2020
SMK3	Sistem Manajemen K3 OHS Management System	14 Juli 2017 – 13 Juli 2020 July 14, 2017 - July 13, 2020
ISO/IEC 17025:2008	Sistem Manajemen Laboratorium Laboratory Management System	16 September 2018 (Menunggu keluarnya sertifikat akreditasi terbaru) September 16, 2018 (Awaiting the issuance of the latest accreditation certificate)
SPPT SNI	Produk Pengguna Tanda SNI SNI Label User Product	13 September 2017 - 12 September 2021 September 13, 2017 - September 12, 2021
Sertifikat Pernyataan Pemenuhan Keamanan Fasilitas Pelabuhan Certificate of Statement for Port Facility Safety	ISPS Code - Pelabuhan Dumai	17 November 2015 – 16 November 2020 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	
Sertifikat Kearsipan PT Semen Padang	Akreditasi A	17 Juni 2015 - 16 Juni 2020
Sertifikat Akreditasi	Laboratorium Penguji ISO/IEC 17025/2005	2014-2018
Sertifikat API Monogram	Sertifikat API Monogram	30 Agustus 2018 – 06 Maret 2020
Sertifikat Tanda Sah Capaian TKDN		27 Agustus 2015 – 26 Agustus 2018
Sertifikat Tanda Sah Capaian TKDN Semen OWC		2016-2019

Sertifikat Certificate	Keterangan Description	Masa Berlaku Validity
PT Semen Tonasa		
Sertifikat SNI ISO 140001 :2015	Environmental Management System	17 Mei 2018-16 Mei 2021
Sertifikat Integrasi Sistem	SNI ISO 9001:2015 SNI ISO 14001:2015 OHSAS 18001:2007	17 Mei 2018-16 Mei 2021
Sertifikat OHSAS 18001	Occupational Health and Safety Management System	17 Mei 2018-16 Mei 2021
Sertifikat SNI ISO 9001: 2015	Quality Management System	17 Mei 2018-16 Mei 2021

Lampiran 2**Penghargaan di Tahun 2018***Appendix 2: Awards in 2018*

No.	Nama Penghargaan Name of Award	Penyelenggara Organizer	Tanggal Date
PT Semen Indonesia (Persero)			
1.	Penghargaan Industri Hijau peringkat 5	Kementerian Perindustrian	12 Desember 2018
2.	Indonesia Corporate Secretary Award 2018	Warta Ekonomi	26 Oktober 2018
3.	Penghargaan Padmamitra	Kementerian Sosial	25 Oktober 2018
4.	Penghargaan Living Legend Brand	Majalah SWA	11 Oktober
5.	Penghargaan Subroto	Kementerian Energi dan Sumber Daya Mineral	29 September 2018
6.	Penghargaan BPJS Ketenagakerjaan	BPJS Ketenagakerjaan	19 September 2018
7.	Penghargaan Indonesia Champion for ASEAN 2018	Mark Plus	6 September 2018
8.	Top Brand Award	Frontier Consulting Group	27 Juli 2018
9.	Radar Kudus Award sebagai Perusahaan Terbaik Peduli Sosial dan Pendidikan	Radar Kudus	13 Juli 2018
10.	Penghargaan Indonesia Green Company Achievement (IGCA)	Majalah SWA dan Yayasan SRI KEHATI	11 Juli 2018
11.	Penghargaan Emas (Aditama) untuk Kategori Perlindungan Lingkungan	Kementerian Energi dan Sumber Daya Mineral	8 Mei 2018
12.	Penghargaan Indonesia's Best Employers	Human Resources Indonesia	4 Mei 2018
13.	Public Relation Indonesia Award (PRIA) untuk kategori Media Cetak Internal BUMN dan media sosial BUMN memperoleh penghargaan bronze dan	Public Relation Indonesia	30 Maret 2018
14.	Finalis Best Community Reporting Award, Best Carbon Disclosure Award dan Best Environmental Reporting Award.	Asia Sustainability Reporting Award (ASRA)	6 Februari 2018
15.	UPZ Semen Gresik Penyeter ZIS Terbesar di Tuban	Baznas Kabupaten Tuban	17 Januari 2018
Business Unit Tuban			
1.	Penghargaan PROPER Hijau 2018	Kementerian Lingkungan Hidup dan Kehutanan	27 Desember 2018
2.	Piagam Penghargaan Perumahan Award Terbaik: Kategori CSR dalam Rangka Pelaksanaan Inovasi Terbaik AJIPLAH 2018	Bupati Tuban	22 Desember 2018
3.	Penghargaan Industri Hijau Tahun 2018 Level 5	Kementerian Perindustrian	12 Desember 2018
4.	Penghargaan Subroto dalam Bidang Konservasi dan Efisiensi Energi	Kementerian Energi dan Sumber Daya Mineral	1 Oktober 2018
5.	Piagam Penghargaan sebagai Perusahaan yang Telah Melaksanakan Komitmen dan Implementasi Pemberdayaan Masyarakat Tuban dengan Baik	Bupati Tuban	16 Agustus 2018
6.	Penghargaan Pengelolaan Lingkungan Pertambangan dengan Peringkat Emas (Aditama)	Kementerian Energi dan Sumber Daya Mineral	8 Mei 2018
7.	Piagam Penghargaan: UPZ Perusahaan Teroptimal Tahun 2018	Badan Amil Zakat National	16 Januari 2018

No.	Nama Penghargaan Name of Award	Penyelenggara Organizer	Tanggal Date
PT Semen Gresik			
1.	Indonesia Living Legend Brand 2018	Majalah SWA INDONESIA	11 Oktober 2018
2.	Plakat /Piala / Sertifikat SGIA 2018	Direktur Utama Semen Gresik	20 September 2018
3.	Plakat/Piala/Sertifikat SMIIA 2018	Direktur Hukum & SDM Semen Indonesia	15 Agustus 2018
4.	Excellent Brand Awards 2018 : Regional Consumer's Choice	TATV Semarang	1 Agustus 2018
5.	Jawa Pos Radar Kudus Awards 2018 : Perusahaan Terbaik Peduli Sosial & Lingkungan	Jawa Pos	13 Juli 2018
PT Semen Padang			
1.	Penghargaan PROPER Biru 2018	Kementerian Lingkungan Hidup dan Kehutanan	27 Desember 2018
2.	Penghargaan Industri Hijau (Level 5)	Kementerian Perindustrian	12 Desember 2018
3.	Padmamitra Award	Kementrian Sosial RI	15 - 16 Agustus 2018
4.	International Convention On Quality Control Circles (ICQCC): Gold, Tim Profesor "Pengurangan Biaya Pelumas di PT Semen Padang dengan Metode Pengecekan Pelumas Baru"	International Convention On Quality Control Circles (ICQCC)	25 Oktober 2018
5.	International Convention On Quality Control Circles (ICQCC): Gold, Tim Priority "Optimalisasi Pemeliharaan dengan Menyusun MPI (Maintenance Priority Index)	International Convention On Quality Control Circles (ICQCC)	25 Oktober 2018
6.	Top CSR 2018: Kategori TOP Leader on CSR Commitment	Top Business	04 Oktober 2018
7.	Top CSR 2018: Kategoti Program Kelembagaan Sosial Ekonomi	Top Business	04 Oktober 2018
8.	Top CSR 2018: Kategori Program Pengelolaan dan Pengembangan Lingkungan Hidup	Top Business	04 Oktober 2018
9.	Baznas Award 2018: Unit Pengumpul Zakat Baznas Terbaik	Baznas Pusat	7 September 2018
10.	Gathering Mitra Strategis: Platinum Award, Kepatuhan dan Dukungan Keselamatan Kerja (K3)	BPJS Ketenagakerjaan Sumbar – Riau	18 September 2018
11.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 1, Proyek Kendali Mutu oleh Tim Smart JPF V (Ind 5)	Semen Indonesia	15 - 16 Agustus 2018
12.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 1, Sistem Saran oleh Tim Gravitasi (Sarana Umum)	Semen Indonesia	15 - 16 Agustus 2018
13.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 1, TPP Tambang Rawmill oleh Tim Startek QCX (Ind 5)	Semen Indonesia	15 - 16 Agustus 2018
14.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 2, 5P diwakili oleh Tim Berlian (ITC)	Semen Indonesia	15 - 16 Agustus 2018
15.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 2, Produk Bahan Baku oleh Tim One Day (Labor Proses)	Semen Indonesia	15 - 16 Agustus 2018
16.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 3, Gugus Kendali Mutu oleh Tim Cooler 23 (Ind 23)	Semen Indonesia	15 - 16 Agustus 2018
17.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 3, TPP Tambang Ranwill oleh Tim Bridge (Ind 5)	Semen Indonesia	15 - 16 Agustus 2018
18.	Semen Indonesia Innovation Award (SMI-IA) 2018: Juara 3, TPP Kiln Packer	Semen Indonesia	15 - 16 Agustus 2018
19.	Semen Indonesia Innovation Award (SMI-IA) 2018: Silver, Anak usaha BUMN bidang Kanal Digital	Semen Indonesia	15 - 16 Agustus 2018
20.	Public Relation Indonesian Award 2018	Serikat Perusahaan Pers	30 Maret 2018
PT Semen Tonasa			
1.	PROPER Hijau	Kementerian Lingkungan Hidup dan Kehutanan	27 Desember 2018
2.	Program Tonasa Hijau	Kementerian Lingkungan Hidup dan Kehutanan	13 Desember 2018
3.	Industri Hijau Level 5	Kementerian Perindustrian	12 Desember 2018

Lampiran 3

Pendidikan dan Pelatihan 2018
Appendix 3: Education and Training 2018

Topik Pelatihan Training Topic	Jumlah Peserta (Orang) Total Participants	Total Jam Pelatihan Hours of Training	Rerata Jam Pelatihan/Karyawan Average of Training Hours/ Employee
PT Semen Indonesia (Persero)			
Core (Personal Mastery)	233	3,480	14.9
Functional (Business Mastery)	1,580	29,374	18.5
Leadership Mastery	279	7,183	25.7
Others	66	1,570	23.8
Core (Personal Mastery)	233	3,480	14.9
Business Unit Tuban			
Core (Personal Mastery)	206	4,660	22.6
Functional (Business Mastery)	893	17,156	19.2
Leadership Mastery	124	3,194	25.7
Others	18	604	33.5
Core (Personal Mastery)	206	4,660	22.6
PT Semen Gresik			
Leadership	42	999	5.40
Personal	36	996	5.38
Technical	146	8,264	44.67
Others	316	5,687	30.74
PT Semen Padang			
Personal Mastery (Kopetensi Inti)	158	2,832	1.82
Leadership Mastery (Kopetensi Kepemimpinan)	371	8,308	5.41
Business Mastery (Kopetensi Technical)	2,438	40,265	25.95
Other (Kopetensi Lainnya)	37	1,176	0.78
PT Semen Tonasa			
Leadership	499	7,296	19.96
Personal	532	5,220	35.46
Business	308	2,360	12.83
Technical	3,823	39,054	15.47
Others	154	2,624	11.00
Thang Long Cement			
Nuclear radiation safety	6	96	16
Traning port security	0	0	0
Tranning ISO	1	40	40
Training fire prevention for employees	36	2,016	56
Safety training	135	4,320	32

Lampiran 4
Penyakit Dominan dan Upaya Tindakan Medis Tahun 2018
Appendix 4: Dominant Diseases and Medical Actions in 2018

No.	Diagnosa	Jumlah		Tindakan Medis
		Kasus	Kunjungan	
Business Unit Tuban				
1.	Febris Observasi (R509)	139	147	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
2.	Ispa [Acute Upper Respiratory Infection,Unspecified] (J069)	106	114	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
3.	Gastroenteritis,Unspecified (A090)	97	101	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
4.	Gastritis,Unspecified (K297)	61	65	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
5.	Vertigo (H819)	54	54	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
6	Diabetes Melitus,Unspecified (E140)	33	45	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
7.	Hipertensi Sekunder,Unspecified (I159)	40	43	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
8.	Pjk (Peny.Jantung Koroner/Coronary Disease) (I251)	34	32	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
9.	Cephalgia (R510)	30	28	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
10.	Hnp (Intervertebra Disc. Displacement) (M512)	13	21	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
PT Semen Gresik				
1.	Ispa	113	113	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
2.	Dermatitis	30	30	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
3.	Gea	28	28	Konsul dokter <i>Doctor Consul</i>
4.	Konjungtivitis	15	15	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
5.	Cephalgia	12	12	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
6.	Vertigo	12	12	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
7.	Myalgia	12	12	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
8.	Febris	10	10	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
9.	Pulpitis	8	8	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>
10.	Colic Abdomen	4	4	Konsul dokter, rawat jalan, rawat inap <i>Doctor Consul, outpatient care, hospitalization</i>

No.	Diagnosa	Jumlah		Tindakan Medis
		Kasus	Kunjungan	
PT Semen Padang				
1.	Acute pharyngitis, unspecified (J029)	735	1,215	Rawat Jalan Outpatient Care
2.	During injection or immunization (Y603)	361	731	Rawat Jalan Outpatient Care
3.	Supervision of normal pregnancy, unspecified (Z349)	204	731	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
4.	Acute nasopharyngitis [common cold] (J00.)	351	465	Rawat Jalan Outpatient Care
5.	Supervision of other high-risk pregnancies (Z358)	120	373	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
6	Astigmatism (H522)	334	346	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
7.	Bronchopneumonia, unspecified (J180)	261	337	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
8.	Acute tonsillitis, unspecified (J039)	206	265	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
9.	Dyspepsia (K30.)	161	247	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
10.	Gastroenteritis and colitis of unspecified origin (A099)	199	241	Konsul dokter spesialis, rawat Jalan Doctor Consul, Outpatient Care
PT Semen Tonasa				
1.	Acute Nasopharyngitis (Common Cold)	2,450	2,541	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
2.	Essential (Primary) Hipertension	150	761	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
3.	Dyspepsia	461	600	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
4.	Pure Hypercholesterolaemia	579	597	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
5.	Necrosis of Pulp	101	513	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
6	Acute upper respiratory infection	470	503	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
7.	Allergic contact dermatitis	433	488	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
8.	Caries of Dentine	178	451	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
9.	Abdominal Pregnancy	112	413	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist
10.	Diarrhe and gastroentritis of presumed infection	384	390	Pengobatan di Klinik STMC, dan/atau Rujuk ke Spesialistik Treatment at STMC Clinic, and/or Refer to Specialist

Jenis dan Volume Limbah B3 yang Didatangkan oleh Business Unit Tuban

Type and Volume of B3 Waste from External Source by Business Unit Tuban

Jenis Limbah B3 B3 Waste Type	Volume Didatangkan (Ton) Volume from External Source (Ton)			Asal Origin
	2018	2017	2016	
Copper Slag	228,291	198,477	246,265	PT Smelting Gresik
Fly ash	172,745	110,850	140,114	PLTU Paiton, Probolinggo
Bottom Ash	161,383	157,634	42,153	PLTU Tanjung Jati Jepara, TLI, Triata, Amako
Paper Sludge	0	3,042	0	Jawa Pos, Gresik
Spent Earth	15,207	1,699	0	PT Megasurya Mas, TLI, Triata
Filter Aid	0	0	0	PT Sorini Agro Asia, Pasuruan
Blast furnace slag	313,164	203,615	7,406	PT Krakatau Semen Indonesia
COCS (tanah terkontaminasi) (contaminated soil)	28,071	14,169	0	Pertamina Balikpapan
Total	920,707	689,486	435,938	

Jenis dan Volume Limbah B3 yang Didatangkan oleh PT Semen Padang

Type and Volume of B3 Waste from External Source by PT Semen Padang

Jenis Limbah B3 B3 Waste Type	Volume Didatangkan (Ton) Volume from External Source (Ton)			Asal Origin
	2018	2017	2016	
Copper Slag	85,207.00	54,400.92**	84,818.84**	PT Smelting Gresik
Fly ash	30,976.25	24,689.57**	6,327.44**	PLTU Teluk Siri, PLTU Sijantang
Bottom Ash	8,663.23	6,091.59**	792.43**	Indofood CBP
COCS (tanah terkontaminasi) (contaminated soil)	2,003.84	58,790.57**	105,850.54**	PT Chevron
Drilling Cutting Cement (DCC)	0	0	726	PT Petrochina International
Total	126.850,32	143.972,65	198.515,25	

**Restatement Cooper Slag, Fly Ash, Bottom Ash, dan COCS di tahun 2017 dan 2016 dikarenakan menggunakan metode perhitungan yang berbeda

** Copper Slag's restatements in 2017 and 2016 due to different calculation method.

** Fly Ash restatement in 2017 and 2016 due to different calculation method

** Bottom Ash restatement in 2017 and 2016 due to due to different calculation method

** COCS restatement in 2017 and 2016 due to different calculation method

Jenis dan Volume Limbah B3 yang Didatangkan oleh PT Semen Tonasa

Type and Volume of B3 Waste from External Source by PT Semen Tonasa

Jenis Limbah B3 B3 Waste Type	Volume Didatangkan (Ton) Volume from External Source (Ton)			Asal Origin
	2018	2017	2016	
Copper Slag	23,072,72	25,590	28,026	PT Smelting Gresik
Fly ash	3.200	5,200	33,394	PT Makassar Tene, PT Tanjung Sarana Lestari
Bottom Ash	1800	994	8,476	PT Makassar Tene, PT Megah Putra Sejahtera
Sludge IPAL	2,43	0	5	PT KIMA
Total	28.075,15	31,784	69,901	

Jenis dan Volume Limbah B3 yang Didatangkan oleh PT Semen Gresik - Pabrik Rembang [306-2]

Type and Volume of B3 Waste imported by PT Semen Gresik - Rembang Factory

Jenis Limbah B3 B3 Waste Type	Volume Didatangkan (Ton) Volume from External Source (Ton)		Asal Origin
	2018	2017	
Copper Slag	0	N/A	-
Fly ash	0	N/A	-
Bottom Ash	0	N/A	-
COCS (tanah terkontaminasi) (contaminated soil)	0	N/A	-
Drilling Cutting Cement (DCC)	0	N/A	-
Total	0	N/A	

Lampiran 6
Material Digunakan dan Material Hasil Daur Ulang (dalam Ton)
Appendix 6: Used Materials and Recycled Materials (in Tons)

Material Materials	Uraian Description	Business Unit Tuban		PT Semen Padang		PT Semen Tonasa		PT Semen Gresik - Pabrk Rembang
		2018	2017	2018	2017	2018	2017	2018
Batuan kapur <i>Limestone</i>	Bahan baku, tak bisa diperbarui <i>Raw materials, unrenewable</i>	14,402,692.49	13,064,575.33	9,218,346	9,346,692	8,582,633	664,338	2,202,793
Tanah liat <i>Clay</i>	Bahan baku, tak bisa diperbarui <i>Raw materials, unrenewable</i>	3,191,087.93	3,331,615.41	482,528	496,327	2,073,720	2,296,396	419,893
Pasir silica <i>Silica sand</i>	Bahan pembantu, tak bisa diperbarui <i>Supporting materials, unrenewable</i>	353,341.96	145,252.63	1,132,534	947,007	130,209.37	66,453**	66,45 3
Copper slag & steel slag	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	230,260.50	182,039.54	82,403	81,175	12.647,76	21,335.15	0
Pasir besi <i>Steel grit</i>	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	78,359.41	55,622.64	72,730	113,154	0	0	47,677
Batu kapur filler <i>Limestone filler</i>	Bahan baku, tak bisa diperbarui <i>Raw materials, unrenewable</i>	582,858.11	697,758.80	820,529	289,662	804.831,92	0	99,804
Gypsum	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	467,066.65	82,381.89	257,535	628,139	198.380,78	146,663	55,439
Trass	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	724,258.29	1,297,717.31	861,132	24,069	367,028.75	50,936	176,600
Fly ash	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	127,745.24	471,207.23	36,933	70,203	20,815.82	43,684	0
Limbah B3 (bottom ash, spent earth, Granular Blast Furnace Slag, dan lainnya) <i>B3 waste (bottom ash, spent earth, and others)</i>	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	557,382.63	333,854.11	36,861	0	26,438	7,253	0
Return dust	Bahan pembantu, hasil daur ulang <i>Supporting materials, recycled results</i>	18,042.58	14,232,807.42	0	289,662	0	0	0
Total		20,733,095.79	33,894,832.31	13.001.531	12.286.090.	12,216,705.4	3,297,058.15	3,086,659

**Restatement pasir silica PT Semen Tonasa di tahun 2017 dikarenakan perbedaan metode perhitungan

** PT Semen Tonasa silica sand restatement in 2017 due to different calculation method

Lampiran 7

Lokasi dan Luas Area Operasi
Appendix 7: Location and Area of Operation

Grup Semen Indonesia <i>Semen Indonesia Group</i>	Lokasi Tambang <i>Mine location</i>	Luas Area (Ha) <i>Area (Ha)</i>
Business Unit Tuban	Kuari Batu Kapur, Temandang <i>Limestone Quarry, Temandang</i>	752
	Kuari Tanah Liat, Mliwang <i>Clay Quarry, Mliwang</i>	201.6
	Kuari Tanah Liat, Telogowaru <i>Clay Quarry, Telogowaru</i>	120
PT Semen Padang	Tambang Batu Kapur <i>Limestone Mine</i>	752.64
	Tambang Tanah Liat <i>Clay Quarry</i>	235.44
	Tambang Batu Silika <i>Silica Stone Mine</i>	198.40
	Tambang Batu Kapur <i>Limestone Mine</i>	412.03
PT Semen Tonasa	Kuari Tanah Liat, Bontoa-Kalabirang <i>Clay Quarry, Bontoa-Kalabirang</i>	214.56
	Kuari Tanah Liat, Tonasa 1 <i>Clay Quarry, Tonasa 1</i>	280
	Kuari Tanah Liat, Bulu Tellue <i>Clay Quarry, Bulu Tellue</i>	45.7
	Kuari Tanah Liat, Tabo-Tabo <i>Clay Quarry, Tabo-tabo</i>	14
	Kuari Tanah Liat, Bontoa-Kalabirang <i>Clay Quarry, Bontoa-Kalabirang</i>	22.10
PT Semen Gresik	Kuari Batugamping <i>Limestone Quarry</i>	293.9
	Kuari Tanah Liat <i>Clay Quarry</i>	98.9

Lampiran 8

Luas Kawasan yang Direhabilitasi Appendix 8: Area of Rehabilitated Area

Grup Semen Indonesia Semen Indonesia Group	Kawasan Konservasi alam dan Perlindungan Keanekaragaman Hayati Nature Conservation Areas and Protection of Biodiversity	Luas Area (Ha) Area (Ha)		
		2018	2017	2016
Business Unit Tuban	Kawasan Greenbelt, Greenbarrier di sekitar Pabrik Tuban <i>Greenbelt, Greenbarrier Area around Tuban Plant</i>	105.33	98.60**	76.22
	Kawasan Reklamasi Tambang <i>Mine Reclamation Area</i>	121.93	109.37**	99.55**
	Kawasan Mangrove Center di pesisir Jenu Kabupaten Tuban <i>Mangrove Center area on Jenu coast, Tuban Regency</i>	56	56	56
	Kawasan Mangrove Center II (Green Sucorejo) di pesisir pantai Desa Sucorejo, Tuban <i>Mangrove Center II (Green Sucorejo) area on Sucorejo Village coast, Tuban</i>	7	7	6
	Kawasan Pusat Konservasi Flora dan Fauna di lokasi Pabrik Tuban <i>Flora and Fauna Conservation Center at Tuban Plant site</i>	4.40	4	3
	Total wilayah yang dipulihkan <i>Total Rehabilitated Area</i>	294.66	274.97	240.77
PT Semen Padang	Lubuk Paraku	0	94.83	N/A
	Batu Busuk	0	106.68	N/A
	Kawasan Konservasi Keanekaragaman hayati di lokasi bekas tambang clay. <i>Biodiversity Conservation Area at former clay mine site</i>	0	47.6	N/A
	Total wilayah yang dipulihkan <i>Total Rehabilitated Area</i>		299.11	N/A
PT Semen Tonasa	Kawasan bekas tambang Batu Kapur Biring Ere <i>Former Limestone mine area, Biring Ere</i>	12.85	11.85	10.85
	Kawasan bekas tambang Tanah Liat Bontoa-Kalabirang Bontoa <i>Former Clay Mine area, Bontoa-Kalabirang Bontoa</i>	69.40	66.10	63.90
	Kawasan bekas tambang Tanah Liat Tonasa 1 <i>Former Clay mine area, Tonasa 1</i>	1.40	0.80	0
	Kawasan bekas tambang Tanah Liat Bulu Tellue <i>Former Clay Mine area, Bulu Tellue</i>	0.60	0.20	0
	Kawasan bekas tambang Tanah Liat Tabo-Tabo <i>Former Clay mine area, Tabo-Tabo</i>	0.70	0.30	0
	Total wilayah yang dipulihkan <i>Total Rehabilitated Area</i>	85.65	79.25**	74.75**
PT Semen Gresik - Pabrik Rembang	Kawasan Greenbelt, Greenbarrier (Revegetasi) Kuari Batugamping <i>Greenbelt area, Greenbarrier (revegetation) on Limestone Quarry</i>	12.48	4.76	
	Kawasan Greenbelt, Greenbarrier (Revegetasi) Kuari Tanah Liat <i>Greenbelt area, Greenbarrier (revegetation) on Clay Quarry</i>	21.15	9.3	

**Restatement di kawasan greenbelt, greenbarrier Business Unit Tuban pada tahun 2017 dikarenakan metode perhitungan yang berbeda

**Restatement di kawasan reklamasi tambang Business Unit Tuban pada tahun 2017 dan 2016 dikarenakan metode perhitungan yang berbeda

**Restatement di kawasan reklamasi tambang PT Semen Tonasa pada tahun 2017 dan 2016 dikarenakan jenis lahan reklamasi yang ditampilkan berbeda

** Restatement in the Greenbelt area, Greenbarrier Business Unit Tuban in 2017 due to different calculation method

** Restatement in the Business Unit Tuban mine reclamation area in 2017 and 2016 due to different calculation method

** Restatement in the PT Semen Tonasa mine reclamation area in 2017 and 2016 due to different type of reclamation area presented

Lampiran 9

Jenis Fauna

Appendix 9: Fauna Species

Jenis Fauna Terlindungi di Kawasan Konservasi PT Semen Gresik

Protected Fauna Species at PT Semen Gresik Conservation Area

Nama Fauna Lokal dan Ilmiah Name of Local Fauna and Scientific Name	Status Menurut IUCN Status According to IUCN	Status Perlindungan Menurut UU No.5/1990 dan PP No.7/1999 Protection Status under Law No. 5/1990 and Government Regulation No. 7/1999
Rusa Timorensis <i>Cervus timorensis</i>	Vulnerable	Tidak Dilindungi Endemic, Protected
Cerek Jawa <i>Charadrius javanicus</i>	Near Threatened	Endemik, Dilindungi Endemic, Protected
Raja-udang biru <i>Alcedo coerulescens</i>	Least Concern	Endemik, Dilindungi Endemic, Protected
Cekakak sungai <i>Todiramphus chloris</i>	Least Concern	Tidak Dilindungi Unprotected
Kuntul kerbau <i>Bubulcus ibis</i>	Near Threatened	Endemik, Dilindungi Endemic, Protected
Cekakak Jawa <i>Halcyon cyanoventris</i>	Least Concern	Endemik, Dilindungi Endemic, Protected
Cekakak Australia <i>Todiramphus sanctus</i>	Near Threatened	Dilindungi Protected
Blekok sawah <i>Ardeola speciosa</i>	Least Concern	Dilindungi Protected
Kuntul kecil <i>Egretta garzetta</i>	Least Concern	Dilindungi Protected
Kipasan belang <i>Rhipidura javanica</i>	Least Concern	Dilindungi Protected
Burung madu sriganti <i>Cinnyris jugularis</i>	Least Concern	Dilindungi Protected
Dara laut kumis <i>Chlidonias hybrida</i>	Least Concern	Dilindungi Protected
Dara-laut kecil <i>Sterna albifrons</i>	Least Concern	Dilindungi Protected
Cangak besar <i>Ardea alba</i>	Least Concern	Dilindungi Protected
Gajahan Pengalah <i>Numenius phaeopus</i>	Least Concern	Dilindungi Protected

Jenis Fauna Terlindungi di Kawasan Konservasi PT Semen Padang [304-4]

Protected Fauna Species at PT Semen Padang Conservation Area

Nama Fauna Lokal dan Ilmiah Name of Local Fauna and Scientific Name	Status Menurut IUCN Status According to IUCN	Status Perlindungan Menurut UU No.5/1990 dan PP No.7/1999 Protection Status under Law No. 5/1990 and Government Regulation No. 7/1999
Elang Hitam <i>Ictinaetus malayensis</i>	Least Concern	Dilindungi Protected
Elang Ular Bido <i>Spilornis cheela</i>	Least Concern	Dilindungi Protected
Cekakak sungai <i>Halcyon cholris</i>	Least Concern	Dilindungi Protected
Raja Udang Meninting <i>Alcedo meninting</i>	Least Concern	Dilindungi Protected
Walet Sapi <i>Collocalia esculenta</i>	Least Concern	Dilindungi Protected
Kuntul Karang <i>Egretta sacra</i>	Least Concern	Dilindungi Protected
Burung Madu Polos <i>Anthreptes simplex</i>	Least Concern	Dilindungi Protected
Burung Madu Sriganti <i>Cinnyris jugularis</i>	Least Concern	Dilindungi Protected

Jenis Fauna Terlindungi di Kawasan Konservasi PT Semen Tonasa [304-4]

Protected Fauna Species at PT Semen Tonasa Conservation Area

Nama Fauna Lokal dan Ilmiah Name of Local Fauna and Scientific Name	Status Menurut IUCN Status According to IUCN	Status Perlindungan Menurut UU No.5/1990 dan PP No.7/1999 Protection Status under Law No. 5/1990 and Government Regulation No. 7/1999
Burung Madu Hitam <i>Nectarinia aspasia</i>	Least Concern	Endemik, Dilindungi Endemic, Protected
Alap-Alap <i>Elang Accipiter sp.</i>	Least Concern	Endemik, Dilindungi Endemic, Protected
Kuntul kecil <i>Egretta garzetta</i>	Least Concern	Dilindungi Protected
Raja Udang/Cekakak Sungai <i>Halcyon cholris</i>	Least Concern	Dilindungi Protected
Gajahan <i>Numenius phaeopus</i>	Least Concern	Dilindungi Protected
Dara Laut Benggala <i>Sterna bengalensis</i>	Least Concern	Dilindungi Protected
Cerek <i>Pluvialis fulva</i>	Least Concern	Dilindungi Protected
Pecuk Ular <i>Nectarinia aspasia</i>	Least Concern	Dilindungi Protected

LEMBAR UMPAN BALIK

Feedback Form

Kami mohon kesediaan para pemangku kepentingan untuk memberikan umpan balik setelah membaca Laporan Keberlanjutan ini dengan mengirim email atau mengirim formulir ini melalui fax/pos.

We would like to ask all stakeholders to kindly provide feedback after reading this Sustainability Report by sending email or this form by fax/mail.

Profil Anda / Your Profile

Nama (bila berkenan) | Name (if you please)

Institusi / Perusahaan | Institution / Company

Surel | Email

Tel / HP | Phone / Mobile

Golongan Pemangku Kepentingan / Stakeholders Group

☐ Pemerintah | Governance

☐ Industri | Industry

☐ Media | Media

☐ LSM | NGO

☐ Masyarakat | Community

☐ Lembaga Pendidikan
| Academic Group

☐ Perusahaan | Corporate

☐ Lain-lain, mohon sebutkan
| Other, please state

Mohon Pilih Jawaban Yang Paling Sesuai / Please choose the most appropriate answer

1. Laporan ini sudah menggambarkan kinerja Perusahaan dalam pembangunan berkelanjutan
This report describe Company's performance in sustainability development

☐ Tidak Setuju
Disagree

☐ Netral
Neutral

☐ Setuju
Agree

2. Laporan ini mudah dimengerti
This report is easy to understand

☐ Tidak Setuju
Disagree

☐ Netral
Neutral

☐ Setuju
Agree

3. Laporan ini meningkatkan kepercayaan Anda pada keberlanjutan Perusahaan
This report increase Your trust to the Company's sustainability

☐ Tidak Setuju
Disagree

☐ Netral
Neutral

☐ Setuju
Agree

4. Urutkan aspek material yang paling penting bagi anda:
(nilai 1=paling penting s/d 6=paling tidak penting)
Rating which material aspect (s) is (are) the most important to you:
(score 1=most important up to 6=Least important)

Kinerja Ekonomi | Economic Performance

(.....)

Emisi | Emissions

(.....)

Energi | Energy

(.....)

Keanekaragaman Hayati | Biodiversity

(.....)

Kesehatan dan Keselamatan Kerja | Occupational Health and Safety

(.....)

Kepatuhan | Compliance

(.....)

5. Mohon berikan saran/usul/komentar Anda atas laporan ini
Please advice/suggestion/comments on this report statements

.....

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.....

.....

Terima kasih atas partisipasi Anda.
Mohon agar lembar umpan balik ini dikirimkan kembali ke alamat:

Thank you for Your participation.
Kindly send this feedback form to address follows:



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