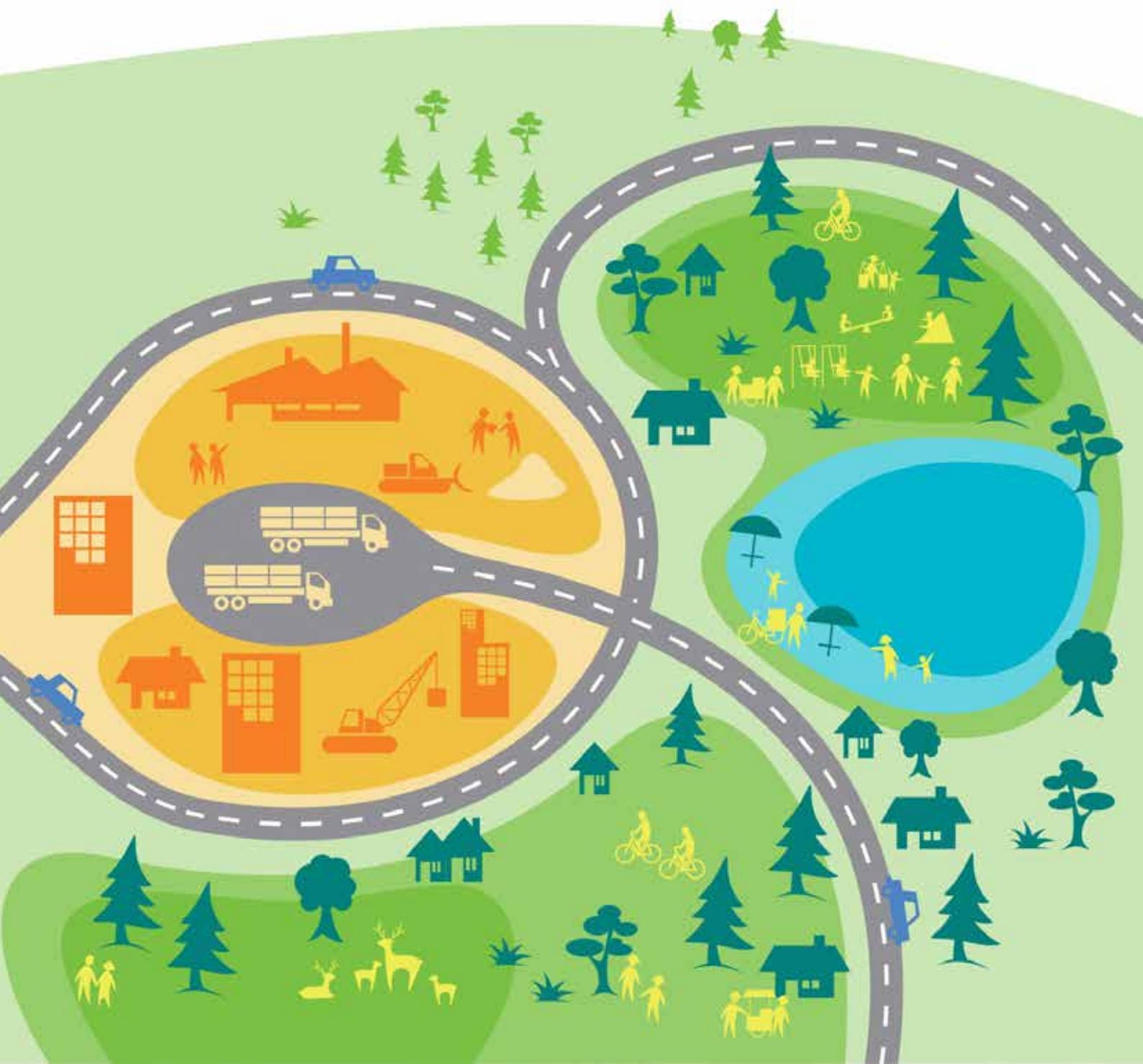


Unwavering Commitment



Pencapaian

Highlights

Ikhtisar Kinerja Keberlanjutan [G4-9] Summary of Sustainability Performance

	2015	2014	2013
Bagi Kehidupan For Life			
Produksi Nikel Nickel Production			
	81,177 MT	78,726 MT	75,802 MT
Cadangan Bijih Nikel Terbukti Nickel Ore Proven Reserves	96.93 Million tons	108.0 Million tons	94.2 Million tons
Nilai Ekonomi Distribusi Distributed Economic Value	734,297 million US\$	841,041 million US\$	846,185 million US\$
Laba Bersih Net Profit	50.50 million US\$	172.27 million US\$	38.65 million US\$
Untuk Berkarya For Work			
Total Pekerja Total Employees	3,103	3,122	3,183
Tingkat Kecelakaan Tercatat Recordable Injury Frequency Rate	0.67	0.81	1.38
Nilai Kontrak Pemasok Lokal Contract Value of Local Suppliers	21%	15%	15%
Bagi Lingkungan For Environment			
Energi Energy	122.47 GJ/ton	121.94 GJ/ton	120.98 GJ/ton
HSFO HSFO	21.34 Barrel/ton	20.89 Barrel/ton	30.75 Barrel/ton
Energi Sumber PLTA Energy from Hydroelectric Power Plant	9,117,242 GJ	9,109,116 GJ	8,709,538 GJ
Air Water	124,2 m ³ /ton	108.3 m ³ /ton	100.7 m ³ /ton
Untuk Kesejahteraan For Welfare			
Program Mitra Desa Mandiri Bidang Ekonomi Independent Village Partnership Program Economic Sector	116 program programs	197 program programs	Sosialisasi dan Pembentukan program Program dissemination and creation
Program Mitra Desa Mandiri Bidang Kesehatan Independent Village Partnership Program Health Sector	102 program programs	206 program programs	Sosialisasi dan Pembentukan program Program dissemination and creation
Program Mitra Desa Mandiri Bidang Pendidikan Independent Village Partnership Program Education Sector	62 program programs	0 program programs	Sosialisasi dan Pembentukan program Program dissemination and creation
Program Mitra Desa Mandiri Bidang Pengembangan Kapasitas Masyarakat Independent Village Partnership Program Community Capacity Building	103 program programs	116 program programs	Sosialisasi dan Pembentukan program Program dissemination and creation
Pusat Pembelajaran Pertanian Berkelanjutan Sustainable Agriculture Learning Centre	305 peserta petani participating farmers	500 peserta petani participating farmers	6,500 total target peserta petani target total participating farmers



Biru | Blue

Capaian PROPER
PROPER Achievement



Aditama

Penghargaan diraih
untuk kedua kalinya
Award won for the
second time



8% ↓
Beban pokok
pendapatan
Decrease in cost of
revenue

8% ↓
Pengurangan emisi SO₂ per ton
produksi
Reduction of SO₂ emissions per
tonne of production



100%
Menggunakan biodiesel terpasang untuk mengurangi
emisi, melanjutkan penggunaan B10 sejak Q4 2014, dan
mulai menggunakan B15 sejak Q3 2015
Use of installed biodiesel to reduce emissions, continuing the
use of B10 since Q4 2014, and began using B15 since Q3 2015

DAFTAR ISI Contents

24	BAGI KEHIDUPAN For Life
38	UNTUK BERKARYA For Work
57	BAGI LINGKUNGAN For Environment
78	UNTUK KESEJAHTERAAN For Welfare
98	ANTI-KORUPSI DAN TATA KELOLA KEBERLANJUTAN Anti-Corruption and Sustainable Governance

01	PENCAPAIAN Highlights
04	VISI, MISI, DAN NILAI-NILAI Vision, Mission, and Values
05	SEKILAS PT VALE INDONESIA, TBK PT Vale Indonesia, Tbk at a Glance
06	PESAN PRESIDEN DIREKTUR Message from President Director
10	TENTANG LAPORAN KEBERLANJUTAN About the Sustainability Report
12	INDEPENDENT ASSURANCE OPINION STATEMENT
16	MATERIALITAS LAPORAN Report Materiality
105	INDEKS ISI GRI 4.0 DAN SUPLEMEN SEKTOR TAMBANG & LOGAM GRI 4.0 Index and Metal & Mining Supplement
111	DAFTAR SINGKATAN Abbreviations List
112	LEMBAR UMPAN BALIK Feedback Form

UNWAVERING COMMITMENT

Kami siap menghadapi tantangan dengan meningkatkan kualitas produksi dan efisiensi. Terus berinovasi dan berkomitmen untuk menjaga kinerja kami dalam aspek ekonomi, sosial dan lingkungan, serta menegakkan praktik tata kelola yang berkelanjutan. Oleh karena itu, komitmen kami tidak luntur. Walaupun tantangan semakin besar, kami justru mempererat gandengan tangan untuk melanjutkan perjalanan dan mempertahankan keberlanjutan.

We are ready to face the challenges by improving production quality and efficiency. We continue to innovate and are committed to maintaining our economic, social and environmental performance, as well as enforcing sustainable governance practices. Therefore, our commitment will not fade. Despite the greater challenge, we actually join hands to continue the journey and maintain sustainability.



Visi, Misi, dan Nilai-nilai [G4-56]

Vision, Mission and Values

Kami mengimplementasikan Nilai-Nilai Perusahaan tanpa terkecuali untuk mencapai Misi dan Visi Perusahaan.

We implement Corporate Values without exception in order to achieve the Mission and Vision of the Company.

Visi | Vision

Menjadi perusahaan sumber daya alam nomor satu di Indonesia yang menggunakan standar global dalam menciptakan nilai jangka panjang, melalui keunggulan kinerja dan kepedulian terhadap manusia dan alam.
To be Indonesia's number one global natural resources company in creating long term value, through excellence and passion for people and the planet

Misi | Mission

Mengubah sumber daya alam menjadi sumber kemakmuran dan pembangunan yang berkelanjutan.
To transform natural resources into source of prosperity and sustainable development.

Nilai-nilai | Values

Kepedulian Terhadap Manusia | Passion for People

- Kehidupan adalah hal yang terpenting | Life matters most
Keselamatan jiwa lebih penting daripada keuntungan semata
Life is more important than results and material goods
- Menghargai karyawan | Value our people
Membimbing dan membuka peluang bagi perkembangan individu, memberikan penghargaan kepada seseorang tanpa memandang latar belakang mereka, mendukung keberagaman, mengakui aspirasi serta kebutuhan individu
Nurture and enable personal growth, reward accomplishments regardless of individual background, promote diversity, recognize individual aspirations and needs
- Menjaga kelestarian bumi | Prize our planet
Komitmen terhadap perkembangan masyarakat, lingkungan dan ekonomi dalam berbagai keputusan bisnis
Commitment to social, environmental and economic development in business decisions

Kesempurnaan | Excellence

- Melakukan hal yang benar | Do what is right
Mendukung kepercayaan yang didasarkan pada komunikasi yang terbuka dan jelas, bertindak adil, penuh integritas dan tunduk terhadap aturan hukum
Promote trust-based, open and clear communication, acting fairly, with integrity and in compliance with the law
- Bersama-sama menjadi lebih baik | Improve together
Berjuang untuk terjadinya kerjasama, peningkatan dan inovasi yang terus menerus, penegakan disiplin kerja untuk meningkatkan nilai-nilai jangka panjang
Strive for collaboration, continuous improvement, innovation and discipline in the way we work to generate long-term value
- Mewujudkan tujuan | Make it happen
Suka tantangan, kemampuan beradaptasi, bangga atas prestasi dan apa yang telah dilakukan dalam membentuk dunia
Thrill for challenges, ability to adapt, pride in results and shaping the world

Kami melakukan sosialisasi Nilai, Visi dan Misi Perusahaan melalui beberapa *internal campaign*. Nilai, Visi dan Misi Perusahaan juga diingatkan di setiap management meeting dan saat *rollout* beberapa inisiatif terkait nilai-nilai tersebut.

We disseminate Values, Vision and Mission of the Company through several internal campaigns. Values, Vision and Mission of the Company are also reminded at every management meeting and rollout of several initiatives related to the values.

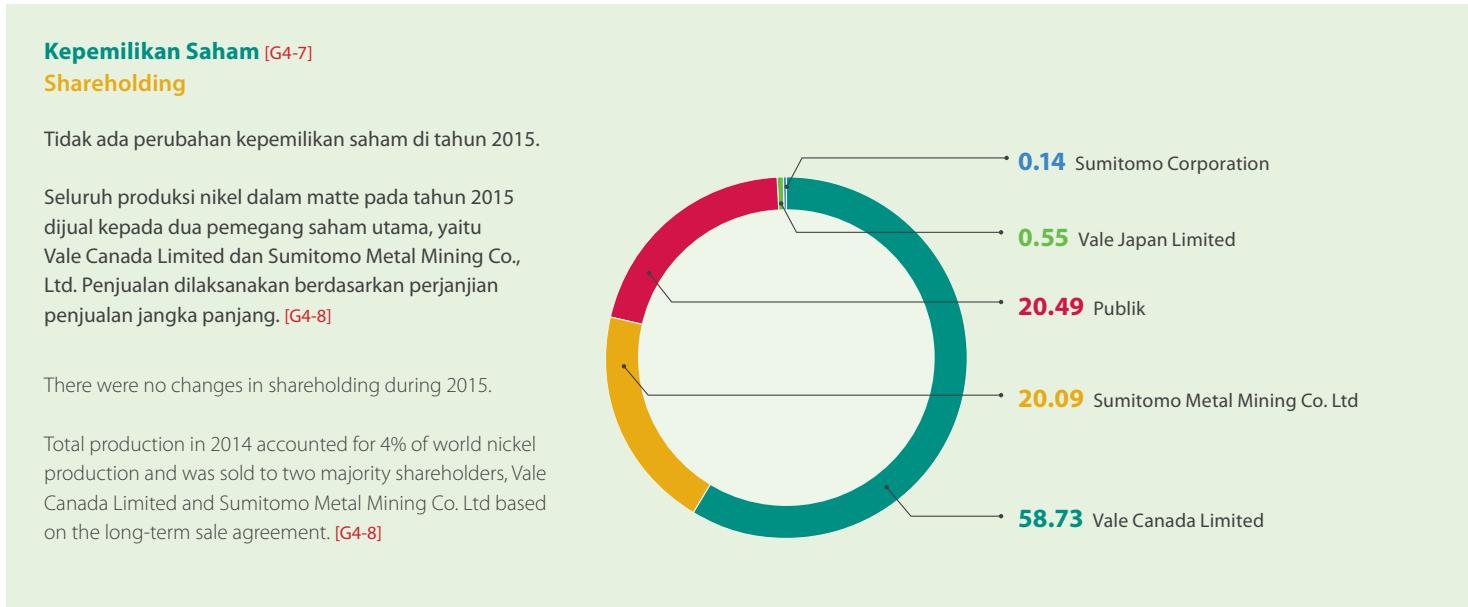
Sekilas PT Vale Indonesia, Tbk. [G4-3]

PT Vale Indonesia, Tbk at a Glance

Tahun Pendirian Year of Establishment	1968
Produk Dihasilkan [G4-4] Product	Nikel dalam <i>matte</i> Nickel in matte
Bentuk Legal [G4-7] Legal Form	Perusahaan Terbatas Terbuka Terdaftar di Bursa Efek Indonesia (BEI) pada 16 Mei 1990. Kode saham BEI: INCO
Kantor Pusat Head Office [G4-5]	Efektif 1 April 2016 Starting April 1st, 2016
Plaza Bapindo, Citibank Tower Lt.22 Jalan Jenderal Sudirman Kav. 54-55 Jakarta 12190, Indonesia Telepon: +62-021-524900 Faksimili: +62-021-5249020 www.vale.com/indonesia	The Energy Building, 31 st Floor Jl. Jenderal Sudirman Kav. 52-53 Jakarta 12190, Indonesia Tel: +62 21 524 9000 Fax: +62 21 524 9020

Wilayah Kontrak Karya [G4-6] Contract of Work Area	2015
Wilayah operasional Operational Areas	118,435 Ha
Sulawesi Selatan South Sulawesi	59.9 %
Sulawesi Tengah Central Sulawesi	19.2 %
Sulawesi Tenggara Southeast Sulawesi	20.9 %

Skala Organisasi [G4-9] Scale of Organization	2015	2014	2013
Jumlah Pekerja Number of Workforce	3,103 orang people	3,122 orang people	3,183 orang people
Jumlah Produksi Total Production	81,177 Tons	78,726 Tons	75,802 Tons
Cadangan Bijih Terbukti Proven Mineral Reserves	96.93 Million Tons	108 Million Tons	94.2 Million Tons
Jumlah Laba Bersih Total Net Revenue	50.50 Million US\$	172.27 Million US\$	38.65 Million US\$
Total Aset Total Assets	2,289.1 Million US\$	2,334.19 Million US\$	2,281.11 Million US\$



Pesan Presiden Direktur [G4-1] [G4-2]

Message from President Director



Setiap perbaikan selalu didampingi tantangan. Namun, hal yang tidak akan pernah berubah, adalah komitmen kami menjaga keberlanjutan dan efisiensi energi.

Every improvement has its own challenge. However, there are things that will never change, which is our commitment to maintain the sustainability and conserve energy.

Di saat persaingan yang semakin ketat di industri nikel, kami semakin mengutamakan keberlanjutan dalam kegiatan yang kami lakukan. Ini merupakan salah satu pembeda utama kami, dan membuat kami bangga menjadi yang terdepan dalam bidang penambangan berkelanjutan dan pengolahan nikel di Indonesia. Meskipun kondisi ekonomi global kurang menguntungkan, kami tetap memiliki komitmen yang kuat atas keberlanjutan dan berupaya untuk menjadi pemimpin dalam industri ini.

Tahun 2015 merupakan tahun yang sangat penting bagi industri nikel di Indonesia. Satu tahun sejak pembatasan ekspor bijih nikel mentah, banyak proyek nikel baru yang sedang dalam pengembangan, termasuk beberapa yang sudah berproduksi. Namun, semua ini terjadi di saat pasar komoditi nikel menurun. Nikel merupakan jenis logam dengan kinerja terburuk pada tahun 2015, yang telah memberikan tekanan besar bagi semua perusahaan pertambangan dan pemangku kepentingan.

At a time of increasing competition in the nickel industry, sustainability is more and more at the forefront of what we do. It is one of our key differentiators, and we take great pride in leading the field in sustainable nickel mining and processing in Indonesia. Despite the adverse global economic conditions, we maintain our unwavering commitment to sustainability, striving to be a leader in our industry.

2015 was a very important year for Indonesia's nickel industry. One year on from the restrictions on unprocessed nickel ore exports, there have been many new nickel projects under development, including some already in production. However, this has occurred during a significant downturn in the nickel market. Nickel was the worst performing metal in 2015, which has placed great pressure on the all mining companies and stakeholders.

Pada saat yang penting dalam industri nikel global ini, khususnya di industri nikel Indonesia, kami berupaya mencari cara untuk lebih meningkatkan kinerja keberlanjutan kami yang telah baik selama ini. Seperti yang akan kami sajikan dalam laporan ini, kami tetap melakukan perbaikan berkesinambungan. Kami terus mengembangkan praktik-praktik produksi nikel dan pengelolaan sumber daya mineral yang berkelanjutan.

Dengan demikian, strategi keberlanjutan kami adalah untuk memimpin industri kami di Indonesia. Kami ingin menjadi contoh bagi praktik-praktik berkelanjutan bagi produsen nikel di Indonesia.

Sejak tahun 1968, kami dipercaya oleh pemerintah untuk mengelola sumber daya nikel secara berkelanjutan dalam wilayah Kontrak Karya kami untuk memberikan manfaat yang optimal bagi para pemangku kepentingan, terutama pemegang saham, pemerintah dan masyarakat. "Pengelolaan sumber daya nikel berkelanjutan" merupakan hal yang kompleks dan melibatkan berbagai isu, termasuk konservasi mineral, penilaian lingkungan dan sosial dalam tahap perencanaan, praktik-praktik produksi yang berwawasan lingkungan, manajemen kesehatan dan keselamatan, tata kelola perusahaan yang baik dan memastikan bahwa masyarakat setempat memiliki kesempatan untuk mendapatkan manfaat dari kegiatan kami.

Nikel, seperti mineral lainnya, merupakan sumber daya yang tidak terbarukan. Indonesia memiliki nikel yang berlimpah, tetapi hingga batas tertentu. Nikel memiliki potensi untuk berperan dalam pembangunan Indonesia, khususnya di Sulawesi dan Halmahera, tempat terkandungnya sebagian besar nikel di Indonesia. Besarnya jumlah sumber daya nikel yang sudah ditambang dan dieksport dari Indonesia, maka semakin dibutuhkan kehati-hatian dalam mengelola sumber daya Indonesia yang masih ada.

Kami menyadari besarnya kepercayaan yang diberikan Pemerintah dalam mengijinkan kami merawat sumber daya yang berharga ini. Tugas kami adalah memastikan keberlanjutan dalam

At this important juncture in the global nickel industry, and particularly in Indonesia's nickel industry, we have sought ways to further enhance our already strong sustainability performance. As we will show throughout this report, we are always seeking continuous improvement. We are advancing sustainable nickel production practices and the sustainable management of mineral resources.

Thus, our sustainability strategy is to lead the field within our industry in Indonesia. We want to be an example of sustainable practices for nickel producers in Indonesia.

Since 1968, we have been entrusted by the Government to sustainably manage the nickel resources within our Contract of Work area to provide the optimum benefit to our stakeholders, particularly our shareholders, the government and the community. The "sustainable management of nickel resources" is a complex term and involves a wide range of issues, including mineral conservation, environmental and social assessment in the planning stage, environmentally-sound production practices, health and safety management, good corporate governance and ensuring that local communities have the good opportunities to benefit from our activities.

Nickel, like other minerals, is a non-renewable resource. Indonesia has abundant nickel, but there is a finite limit. Nickel has the potential to play a decisive role in the development of Indonesia, particularly in Sulawesi and Halmahera, where most of Indonesia's nickel is located. With a significant amount of Indonesia's recoverable nickel resources already mined and exported, there is an increasing need to carefully manage the Indonesia's remaining resources.

We recognize the great trust shown by the Government in allowing us to care for this valuable resource. Our duty is to ensure sustainability is embedded in all that we do,

Tantangan Challenges 2015

**Penurunan
harga nikel**
Decline in nickel
price

**Perubahan
regulasi**
Regulation
change

El Nino Effect

semua kegiatan yang kami lakukan, untuk memastikan sumber daya ini membawa manfaat yang berkelanjutan kepada para pemegang saham dan seluruh pemangku kepentingan kami.

Penurunan harga nikel yang tajam memberikan dampak langsung dan mengkhawatirkan kegiatan operasi kami. Maka, banyak inisiatif yang tidak terlalu mendasar, yang harus ditunda untuk mempertahankan arus kas agar tetap positif. Kami juga terus mengamati perubahan peraturan yang cepat. Ini berarti kami terus menyelaraskan program keberlanjutan kami untuk memenuhi harapan para pemangku kepentingan dan peraturan-peraturan yang ada. Secara khusus, Pemerintah terus berupaya menerapkan peraturan dari Undang-undang tahun 2009 tentang perlindungan dan pengelolaan lingkungan hidup, dan juga berbagai persiapan telah dilakukan untuk mengatur kegiatan pengembangan masyarakat. Penyesuaian yang dilakukan dalam memenuhi ketentuan-ketentuan baru ini menjadi tantangan utama yang akan berlanjut di tahun-tahun mendatang.

Pada tahun 2015, kami juga mengalami kondisi kemarau yang sangat kering, yang disebabkan oleh El Nino. Faktor ini mempengaruhi operasi kami dalam dua hal. Pertama, keadaan kemarau mengganggu aliran air melalui fasilitas pembangkit listrik tenaga air yang kami miliki. Kedua, kondisi kemarau disertai kegiatan pertanian masyarakat yang menggunakan teknik tebang dan bakar telah menyebabkan kebakaran hutan di wilayah tempat kami beroperasi.

Meskipun demikian, kami mampu meraih beberapa prestasi penting pada tahun 2015 dalam hal keberlanjutan. Kami berhasil memulai sistem pengolahan air perintis yang menggunakan teknologi lamella gravity settler. Kami juga melanjutkan perubahan paradigma dalam melaksanakan program sosial, dengan melakukan kemitraan tiga sektor yaitu perusahaan, pemerintah daerah dan perwakilan masyarakat. Kegiatan ini dilakukan dalam bentuk program PTPM, yang juga meluncurkan Sistem Intensifikasi sebagai bagian dari pertanian berkelanjutan. Kami meraih peringkat audit PROPER biru dari Pemerintah, dalam tiga tahun

to ensure these precious resources bring lasting benefits to our shareholders and all our stakeholders.

Several important challenges and risks have emerged in 2015. The severe decline in the nickel price has had an immediate and dire effect on our operations, meaning that many non-essential initiatives have had to be deferred to maintain positive cash flow. We have also continued to observe rapid regulatory change. This means we are constantly realigning our sustainability programs to meet stakeholder and regulatory expectations. Specifically, the Government has continued to pursue implementing regulations from the 2009 law on environmental protection and management, and also preparations have been made to regulate community development activities. Adjusting to meet these new requirements has been a major challenge and will continue in the coming years.

In 2015, we also endured a very dry year, caused by the El Niño effect. This has affected our operations in two ways. First, the dry conditions affected water flows through our hydro-electricity generation facilities. Second, the dry conditions combined with the community farming activities using slash and burn techniques have caused several forest fires in the region where we operate.

Nonetheless, we have been able to make several important achievements in 2015 in regard to sustainability. Our pioneering water treatment system, using lamella gravity settler technology, was successfully commissioned. We also continued our change in paradigm of implementing social program, by conducting three sector partnership from the company, local government and the community representatives in the form of PTPM program, which also launch System of Rice Intensification as part of the road to sustainable farming. Our blue PROPER audit rating from the Government, for the third straight year, along with our "best of the best"

berturut-turut, serta penghargaan Aditama "best of the best" untuk kinerja lingkungan. Kedua hal ini merupakan pengakuan penting dari Pemerintah di antara beberapa lainnya terkait dengan kinerja keberlanjutan kami.

Ke depan, kami bersiap untuk menghadapi lagi masa yang penuh tantangan di tahun 2016, karena harga nikel masih berada pada posisi yang sangat rendah. Kami juga mengantisipasi peraturan-peraturan baru yang akan terus diluncurkan pemerintah, yang akan mempengaruhi operasi kami. Dengan harapan yang tetap tinggi, kami percaya bahwa strategi untuk menjadi pemimpin akan menjadi keunggulan dalam jangka panjang, yang memungkinkan kami untuk tetap menjadi yang terdepan.

Prospek jangka menengah untuk lima tahun ke depan merupakan periode dengan permintaan nikel yang melemah. Dalam pengelolaan lingkungan, kami berharap untuk terus fokus pada perubahan iklim sebagai penggerak utama perubahan. Akhirnya, program-program sosial kami akan terus berkembang dengan penekanan pada kerjasama dan keterlibatan dengan pemerintah daerah dan masyarakat setempat berdasarkan Rencana Pengelolaan Sosial (RPS) lima tahunan. PT Vale telah mengantisipasi dinamika yang terus berlangsung, yang menjadi pendorong utama untuk mengejar tujuan sebagai pemimpin di bidang ini dalam hal keberlanjutan.

Kami berterima kasih kepada semua karyawan untuk berbagi visi ini dan menjunjung tinggi komitmen bersama untuk masa depan yang berkelanjutan. Kami juga mengucapkan terima kasih kepada para pemangku kepentingan atas kepercayaan yang luar biasa yang telah ditunjukkan kepada kami selama ini.

environmental performance Aditama award, are just two important recognitions from the Government relating to our sustainability performance.

Looking forward, we anticipate another very challenging year in 2016, with the nickel price still at an extremely low position. We also anticipate that the Government will continue to roll out new regulations, which will affect our operations. With ever-increasing expectations, we believe our strategy to be a leader will be strongly to our advantage in the long-term, by enabling us to stay ahead of the curve.

The medium-term outlook for the next five years is for a sustained period of weaker demand for nickel. In environmental management, we expect to see a continued focus on climate change as a major driver for change. Finally, our social programs will continue to evolve with an emphasis on collaboration and engagement with local Government and local communities based on our five years Social Management Plan (RPS). PT Vale has anticipated this continued dynamic, which is a key driver for us to pursue our goal of leading our field in sustainability.

We would like to thank all our employees for sharing this vision, and upholding our shared commitment to a sustainable future. We would also like to thank our stakeholders for the tremendous trust you have shown to us over these many years.

Maret 2016 | March, 2016

Nico Kanter

Presiden Direktur | President Director

Pencapaian Achievement 2015

Inovasi gravity settler technology
Innovation of gravity settler technology

Pengenalan System of Rice Intensification untuk pertanian berkelanjutan
Introducing System of Rice Intensification for sustainable agriculture

Tentang Laporan Keberlanjutan

About the Sustainability Report

Bagi kami, Laporan Keberlanjutan adalah tempat menyampaikan informasi kinerja, komitmen, dan strategi dalam menjaga keberlangsungan perusahaan bagi semua pemangku kepentingan. Arti keberlanjutan yang kami yakini adalah penciptaan nilai yang lebih untuk seluruh pemangku kepentingan melalui kinerja ekonomi, sosial dan lingkungan yang unggul.

Komitmen kami menyampaikan laporan keberlanjutan ini setiap tahun dan tepat waktu bersamaan dengan RUPS. Laporan keberlanjutan merupakan satu kesatuan yang komprehensif dengan Laporan Tahunan. Laporan Keberlanjutan sebelumnya diterbitkan pada 20 Maret 2015. [G4-29, G4-30]

Periode pelaporan mencakup kurun waktu 1 Januari-31 Desember 2015 dan informasi keuangan bersifat konsolidasi bagi seluruh kegiatan Perusahaan di Indonesia. Tidak ada perubahan ruang lingkup pelaporan karena seluruh informasi masih berasal dari PT Vale Indonesia Tbk. Tidak ada informasi dari kelompok usaha Vale Canada Limited maupun kontraktor. [G4-23, G4-28, G4-17]

Kami memilih opsi pelaporan *in accordance-core* dan melakukan proses penjaminan (*assurance*). Penjaminan dilaksanakan oleh pihak independen, yaitu PT SGS Indonesia, setelah melalui pertimbangan manajemen, untuk memastikan tidak adanya benturan kepentingan. Keputusan ini dilakukan dalam diskusi internal pada 12 Januari 2016. Proses *assurance* dilaksanakan di Kantor Jakarta selama 3 hari, pada tanggal 16 hingga 18 Februari 2016. Tim internal PT Vale menyiapkan semua dokumen

For us, Sustainability Report is the place to deliver information on our performance, commitment and strategy to maintain the company's sustainability to all stakeholders. Sustainability meaning that we believe is to create more value for all stakeholders through the performance of the economic, social and environmental excellence.

Our commitment is to publish sustainability report annually and in conjunction with the GMS. Sustainability Report is a comprehensive integral report with the Annual Report. The previous Sustainability Report was published on March 20, 2015. [G4-29, G4-30]

The reporting period covers the period January 1 to December 31, 2015 and financial information is consolidated for all of the Company's activities in Indonesia. There is no change in the scope of reporting because all the information is still collected from PT Vale Indonesia Tbk. No information on the business group Vale Canada Limited and contractors. [G4-23, G4-28, G4-17]

We chose the reporting option of *in accordance-core* and processed the assurance. The assurance was performed by an independent party, PT SGS Indonesia, after management consideration to avoid conflict of interest. This decision was made in an internal discussion on January 12, 2016. The assurance process was conducted in the Jakarta Office for 3 days, from February 16 to February 18, 2016. The internal team of PT Vale prepared all the documents that have been verified based on samples requested by the assurance

yang sudah diverifikasi berdasarkan sampel yang diminta pihak *assurance* dan memberikan klarifikasi jawaban atas pernyataan yang disajikan dalam Laporan. Proses ini dipantau langsung oleh Senior Manajer Komunikasi. [G4-32, G4-33]

party and provided answers for clarification on statements presented in the report. This process was monitored by the Senior Manager of Communications. [G4-32, G4-33]

Informasi lain terkait laporan ini dapat ditujukan kepada: [G4-31]

Other information related to this report can be addressed to: [G4-31]

Basrie Kamba

Direktur Communications and External Affairs

Director of Communications and External Affairs

Email: ptvicomunications@vale.com

PT Vale Indonesia Tbk

The Energy Building, 31st Floor

Jl. Jenderal Sudirman Kav. 52-53

Jakarta 12190, Indonesia

Tel: +62 21 524 9000

Fax: +62 21 524 9020



Independent Assurance Opinion Statement



ASSURANCE STATEMENT

SGS INDONESIA'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE PT VALE INDONESIA Tbk SUSTAINABILITY REPORT 2015

NATURE AND SCOPE OF THE ASSURANCE/ VERIFICATION

PT SGS Indonesia was commissioned by PT Vale Indonesia Tbk to conduct an independent assurance of the Sustainability Report 2015. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables, contained in this report.

The information in the Sustainability Report of PT Vale Indonesia Tbk and its presentation are the responsibility of the Directors or Governing Body and the management of PT Vale Indonesia Tbk. PT SGS Indonesia has not been involved in the preparation of any of the material included in the Sustainability Report 2015.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all PT Vale Indonesia Tbk stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (2013) for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured at a moderate level of scrutiny using our protocols for:

- evaluation of content veracity;
- AA1000 Assurance Standard (2008) Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008);
- evaluation of the report against the Global Reporting Initiative Sustainability Reporting Guidelines G4 – 2013 and Mining and Metal Sector Supplement version 4.0.

The assurance comprised a combination of pre-assurance research and interviews with relevant accountable managers and employees at the Head Office of PT Vale Indonesia Tbk at Jakarta.

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world's leading inspection, verification, testing and certification company operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. PT SGS Indonesia affirms our independence from PT Vale Indonesia Tbk, being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with International Register of Certificated Auditors (IRCA), Environmental Management System (EMS) Lead Auditor, Quality Management System (QMS) Lead Auditor, Occupational Health and Safety Assessment Series (OHSAS) Lead Auditor, IRCA Corporate Responsibility Training Programme and have some experiences auditing at Mining and Manufacturing Industries.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within Sustainability Report 2015 verified is accurate, reliable and provides a fair and balanced representation of PT Vale Indonesia Tbk sustainability activities in 2015. Some statements and data within the scope were not assured due to lack of accessible records during the timescale allowed for assurance, i.e Financial data. We have done assurance at Head Office only, meanwhile operational sites were not visited.

The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders. We believe that the organization has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

PT Vale Indonesia Tbk has made a commitment to be accountable to those on whom it has an impact or who have an impact on it as stated in Company's Vision, Company's Mission, Company's Value. Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability. The process of stakeholders engagement and participation provides comprehensive and balanced involvement. This process results in strategies, plan, action and outcomes that addresses and responds to social and environmental issues and impacts, in an accountable way.

Materiality

PT Vale Indonesia Tbk has identified stakeholders and those issues that are material and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders. In order to establish material aspects and its boundaries, PT Vale Indonesia conducted Focus Group Discussion on 12th and 22nd January 2016. Focus Group Discussion was conducted internally and externally. These aspects are deemed material due to the significant impacts over the company activities and influence on the decision making of stakeholders.

The internal parties are individuals within the PT Vale Indonesia Tbk, with relevant authority in concerning the implementation of the social responsibility and environmental responsibility, whereas the external parties come from Local Government (Kabupaten, Kecamatan and Desa), Community Leader.

Responsiveness

PT Vale Indonesia Tbk has responded to stakeholders issues that affect to its sustainability performance and is released through decisions, actions and performance, as well as communication with stakeholders. Periodical meeting with stakeholders to discuss some issues which are significant has been conducted and it is effective.

GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES G4 2013 CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

In our opinion, the PT Vale Indonesia Tbk's Sustainability Report 2015 is presented in accordance with the core option for GRI G4 and Mining and Metal Sector Supplement version 4.0. and fulfills all the required content and quality criteria.

Principles

In our opinion, the content and quality of the report adheres to the ten GRI Report Content Principles of Materiality, Stakeholder Inclusiveness, Sustainability Context and Completeness, and the six GRI Report Quality Principles of Balance, Comparability, Accuracy, Timeliness, Clarity and Reliability.

General Standard Disclosures

All the standard disclosures required for reporting in accordance with the core option for GRI G4 are included or referenced in the report.

Specific Standard Disclosures

Disclosure Management Approach (DMA) for each materiality aspects and at least one indicator have been disclosed in the report in accordance with the core option for GRI G4.

Recommendation

Further opportunities were identified during the assurance for consideration to ensure continual improvement in next report, including the following :

- Some policies related with sustainability were not shown in the report. Example: Sustainability Policies, Environmental Policy.
- To ensure that all material aspect is completed with DMA (Disclosure Management Approach), for example material aspect for "Procurement Practice".
- Consideration should be given to present comparability data performance in the same industry for benchmarking. Example: Compared with Environmental, Health and Safety Guidelines for Mining sector Issued by International Finance Corporation (World Bank Group).
- To ensure accuracy of data, visit to operation sites could be considered in next assurance engagement.

Signed:

For and on behalf of SGS Indonesia



Guy Escarail
Managing Director
Jakarta, Indonesia
March 2016

WWW.SGS.COM



AA1000
Licensed Assurance Provider
000-8



Sebuah truk pengangkut melintas membawa ore ▶

A haul truck passing
transporting ore

Laporan Materialitas

Materiality Report

Dalam menentukan isi laporan ini, kami melibatkan pemangku kepentingan internal dan eksternal.

In defining the content of this report, we involve internal and external stakeholders.

Pelibatan pemangku kepentingan (*stakeholder inclusiveness*) dilakukan melalui kegiatan *focus group discussion* (FGD) dan survei *face to face*. Melalui kegiatan ini, kami mengidentifikasi semua topik dalam konteks keberlanjutan (*sustainability context*) yang relevan dengan keberadaan PT Vale. [G4-26]

Selanjutnya, kami menentukan prioritas topik melalui uji materialitas (*materiality test*) yang melibatkan pemangku kepentingan internal. Kami memastikan bahwa informasi yang tersaji dalam laporan ini lengkap (*complete*) dan relevan sehingga dapat membantu pemangku kepentingan dalam mengambil keputusan.

Keterlibatan Pemangku Kepentingan Internal [G4-18] [G4-26]

Proses eksplorasi informasi material dengan pelibatan pemangku kepentingan internal dilakukan melalui 2 kali *focus group discussion* (FGD).

Stakeholder inclusiveness is implemented through focus group discussion (FGD) and face to face surveys. Through these activities, we identified the topics in the sustainability context that is relevant to PT Vale. [G4-26]

Then, we determine the priority topics through the materiality test involving internal stakeholders. We ensure that the information presented in this report is complete and relevant, which may help stakeholders in making decisions.

Internal Stakeholder Inclusiveness [G4-18] [G4-26]

The material information exploration process with the involvement of internal stakeholders was carried out through 2 sessions of focus group discussion (FGD).



Pelatihan anti-korupsi untuk pemangku kepentingan internal di Jakarta, April 2015
Anti-corruption training for internal stakeholders in Jakarta, April 2015



FGD I: 12 January 2016

Kantor Jakarta | Jakarta Office

Hadir 5 orang | Attended by 5 people:

1. Director of Communications and External Affairs
2. Senior Manager of Investor Relations & Corporate Office
3. Senior Manager of Business Development & Corporate Specialist
4. Senior Manager of Communications
5. Senior Coordinator Publications, Reporting & PR



Dihadiri oleh | Attended by:

1. President Director (via teleconference)
2. CFO, Director of Finance
3. Senior Manager of Business Development & Corporate Specialist
4. Senior Manager of Communications

Via video conference

1. Vice President; Director of Human Resources & Corporate Services
2. Director of Corporate Services
3. Director of Engineering & Construction
4. Director of Environment, Health & Safety (Chief of Mine Engineering & Deputy COO)
5. Director of Maintenance & Utilities
6. Director of Mines & Exploration
7. Senior Manager of Environment
8. Senior Manager of Security Services
9. Senior Manager of Smelter Furnace
10. Senior Manager of Social Development Program
11. Senior Coordinator of Publications, Reporting & PR

FGD II: 22 January 2016

Kantor Jakarta & Kantor Sorowako
Jakarta Office & Sorowako Office

Keterlibatan Pemangku Kepentingan Eksternal [G4-18] [G4-26]

External Stakeholder Inclusiveness [G4-18]
[G4-26]



8 aspek material kategori ‘tinggi’
8 material aspects in ‘high’ category



Survei Temu Muka Face to Face Survey

Sorowako, 20 January - 2 February 2016

Hadir 17 orang

1. Satuan kerja perangkat daerah (SKPD) Kabupaten
2. Camat
3. Kepala Desa
4. Tokoh masyarakat
5. Tokoh pemuda

Attended by 17 people

1. Regional Apparatus Work Unit (SKPD)
2. District Head
3. Village Chief
4. Community figures
5. Youth leaders

Uji Materialitas

Uji materialitas dilakukan untuk menentukan aspek material akhir hasil dari FGD internal dan survei eksternal.

Materiality Test

Uji materialitas dilakukan untuk menentukan aspek material akhir hasil dari FGD internal dan survei eksternal.



FGD Internal

Internal FGD

9 aspek material
9 material aspects



Survey Pemangku Kepentingan Eksternal

External Stakeholder Survey

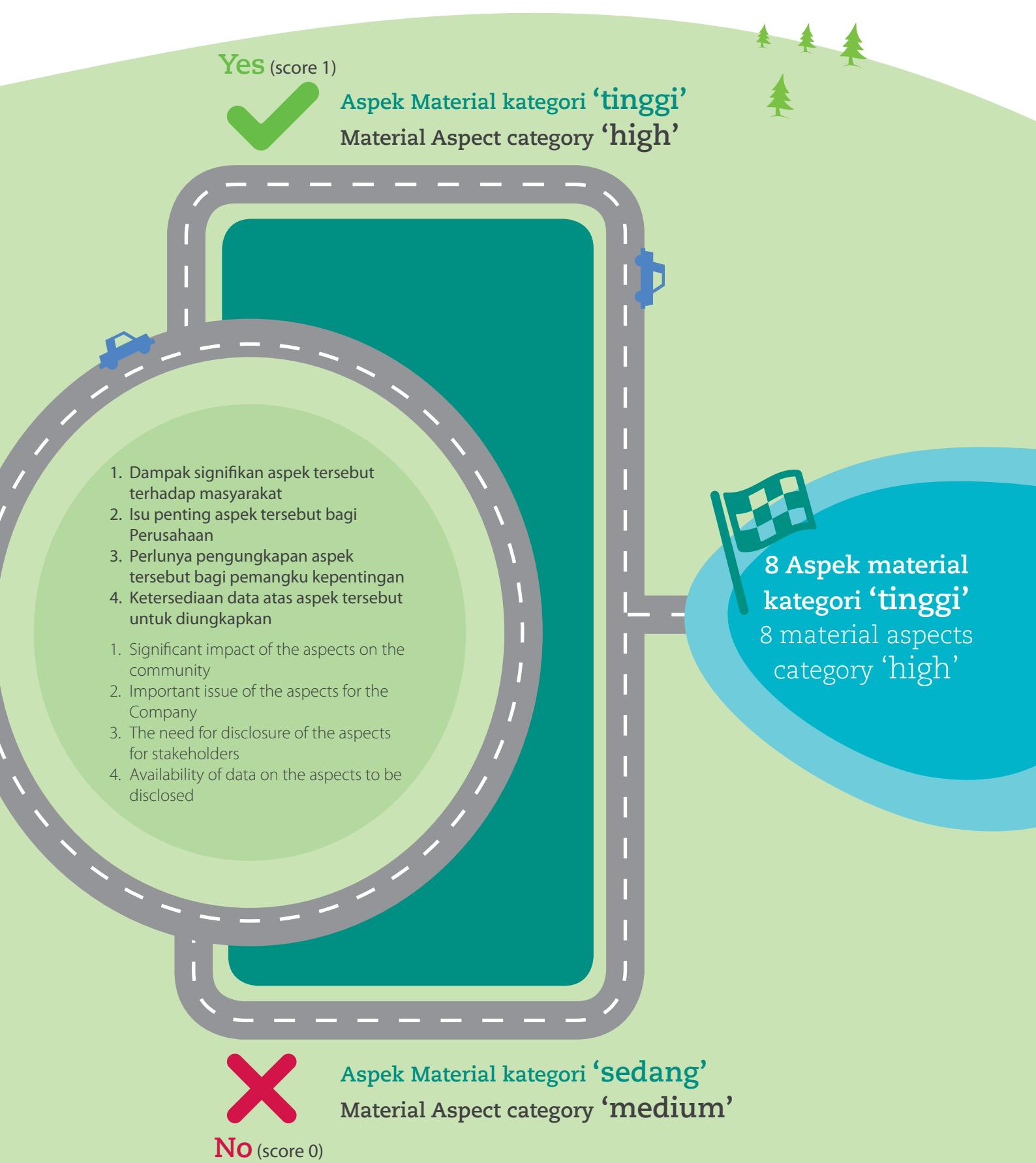
8 aspek material
8 material aspects



Uji Materialitas | Materiality Test

Jakarta Office, February 3, 2016

1. Director of Communications and External Affairs
2. Senior Manager Communications
3. Senior Manager Business Dev & Corporate Specialist
4. Senior Coordinator Publications, Reporting & PR



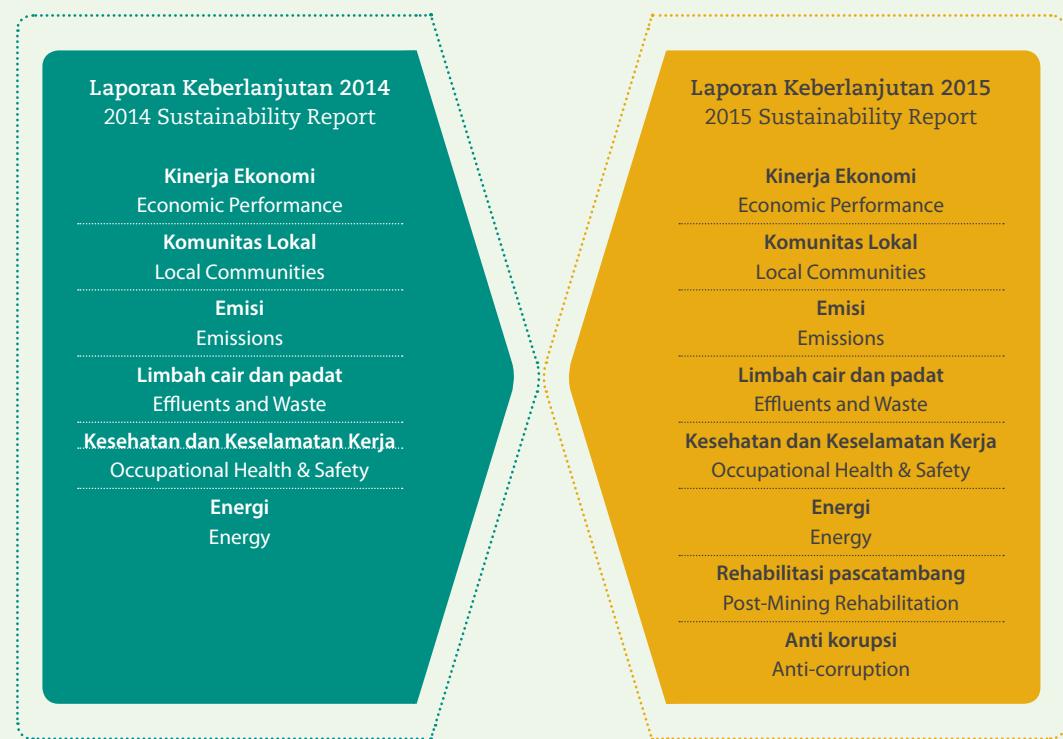
Perubahan Aspek Material [G4-22, G4-23]

Pada tahun 2014, Laporan keberlanjutan menyampaikan enam aspek material kategori ‘tinggi’ sesuai dengan kondisi yang dihadapi PT Vale pada saat itu. Identifikasi aspek material di tahun 2015 ditingkatkan dengan eksplorasi isu keberlanjutan yang lebih mendalam. Di samping itu, tidak ada pernyataan yang perlu dinyatakan kembali (*restatement*) atas penyajian informasi pada laporan keberlanjutan tahun sebelumnya.

Material Aspect Changes [G4-22, G4-23]

In 2014, the Sustainability Report presented six material aspects of ‘high’ category in accordance with the conditions faced by PT Vale at the time. Identification of the material aspects enhanced in 2015 with deeper exploration of sustainability issues. In addition, there was no restatement for the information disclosure in the sustainability report last year.

Perubahan Aspek Material kategori ‘Tinggi’ Material Aspect Changes in ‘High’ category



Selain aspek material dalam kategori ‘tinggi’ ada 3 aspek material lainnya dalam kategori ‘sedang’, yaitu:

1. Mekanisme Pengaduan (sosial)
2. Bahan Baku
3. Praktek Pengadaan

In addition to the material aspects of ‘high’ category, there are three other material aspects in ‘medium’ category, namely:

1. Grievance mechanism (social)
2. Material
3. Procurement practices

Matrik Hasil Uji Materialitas

Matrix of Materiality Test Results

- 1** Kinerja Ekonomi
Economic Performance
- 2** Komunitas Lokal
Local Communities
- 3** Kesehatan dan keselamatan kerja
Occupational Health & Safety
- 4** Emisi
Emissions
- 5** Limbah cair dan padat
Effluents and Waste
- 6** Energi
Energy
- 7** Rehabilitasi Pascatambang
Post-Mining Rehabilitation
- 8** Anti Korupsi
Anti-corruption



Proses Penetapan Isi Laporan

Penetapan konten laporan didasarkan pada Pedoman Penulisan Laporan Keberlanjutan (*Sustainability Reporting Guidelines*) GRI G4, dengan proses sebagai berikut:

- 1. Langkah pertama**, mengidentifikasi aspek-aspek keberlanjutan yang relevan dengan karakteristik bisnis Vale dan menentukan batasan ruang lingkup (*boundary*) masing-masing aspek.
- 2. Langkah kedua**, membuat prioritas atas aspek-aspek keberlanjutan yang akan dilaporkan.
- 3. Langkah ketiga**, melakukan validasi atas aspek material yang telah menjadi prioritas tersebut. Validasi mendapat pengesahan dari Direksi, selaku pejabat tata kelola Perusahaan yang bertanggung jawab atas penyusunan dan penerbitan laporan ini. [G4-48]

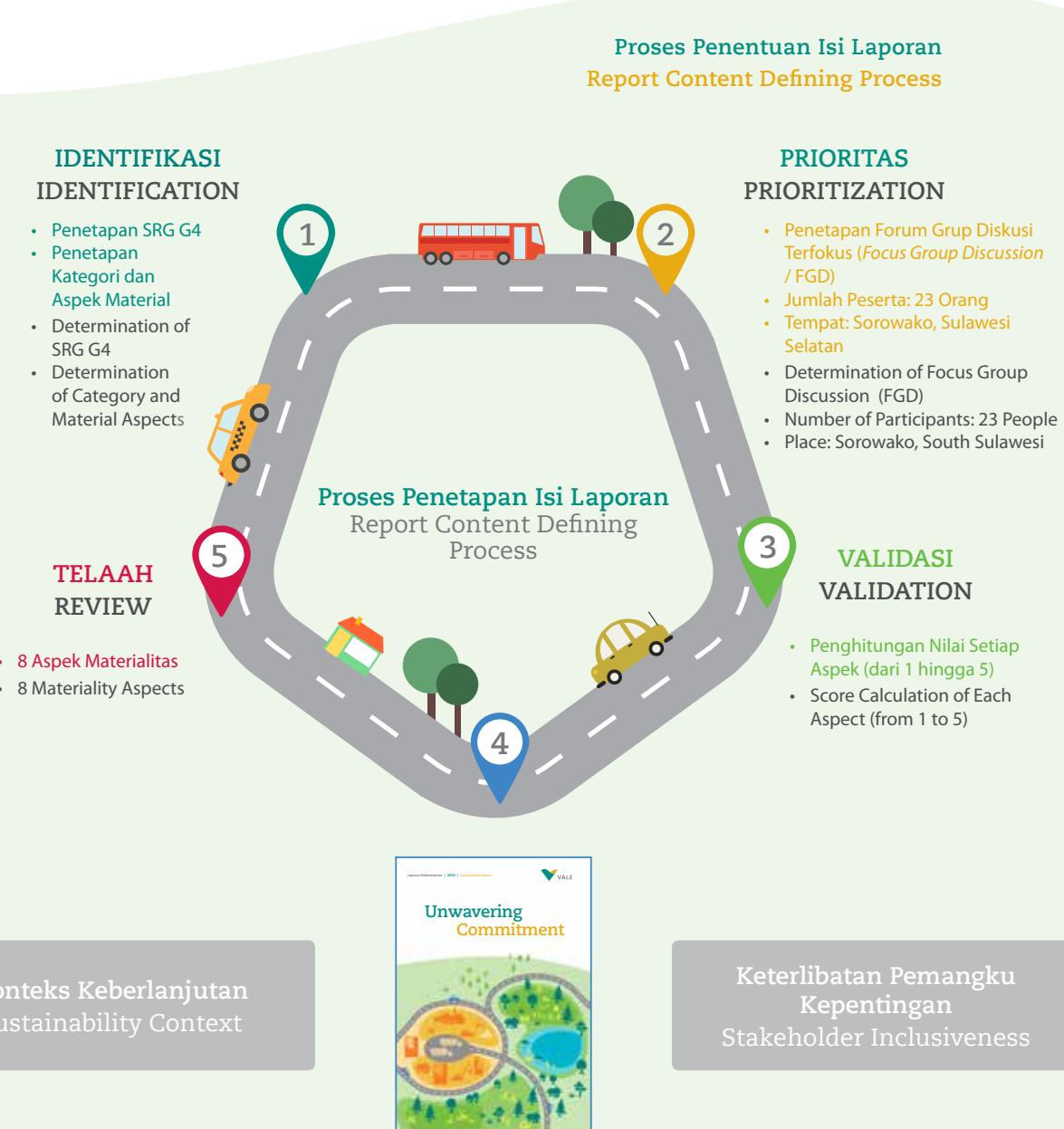
Report Content Defining Process

Report content defining is based on the Sustainability Reporting Guidelines GRI G4, with the following process:

- 1. The first step** is to identify sustainability aspects that are relevant to Vale's business characteristics and determine the boundary, in which each aspect takes place.
- 2. The second step** is to make priorities of sustainability aspects that will be reported.
- 3. The third step** is to validate the material aspects that have become priorities. The validation is approved by the Board of Directors as the Company's governance officials responsible for the preparation and publication of this report. [G4-48]

4. **Langkah keempat**, melakukan kajian ulang atas laporan tahun sebelumnya dengan memasukkan saran dari pemangku kepentingan. Salah satu saran yang disampaikan adalah meningkatkan reliabilitas laporan dengan menggunakan penjamin (*assurance*). Saran ini diterima dan oleh karenanya Laporan Keberlanjutan 2015 untuk pertama kalinya menyertakan pernyataan hasil laporan *assurance* dari pihak ke tiga.

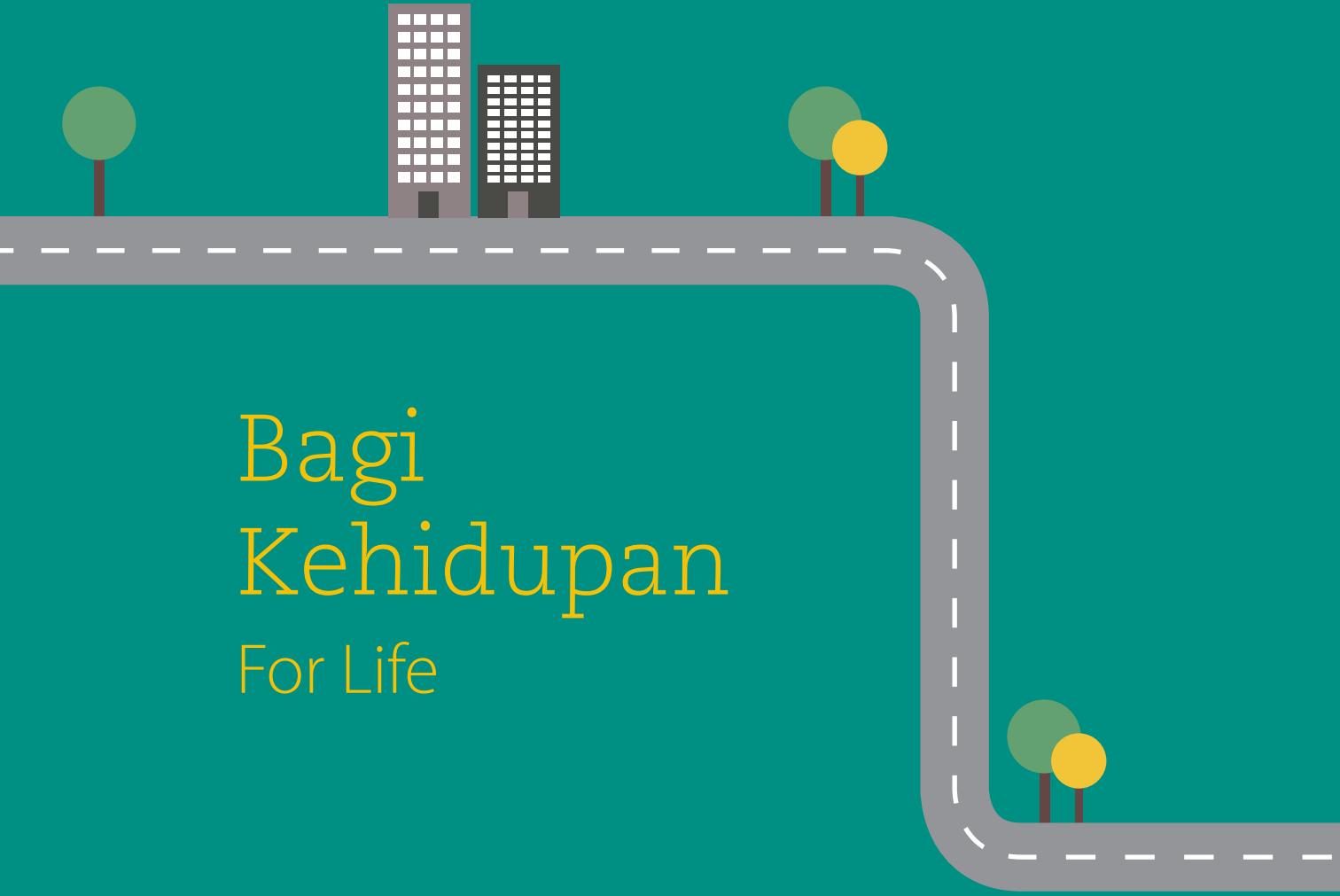
4. **The fourth step** is to review the previous year's report by including suggestions from stakeholders. One of the suggestions is to improve the report reliability by using the service of assurance agency. The suggestion was accepted hence the 2015 Sustainability Report becomes the first one with assurance report statement from a third party.



Batasan Aspek Material dan Dampak Pada Pemangku Kepentingan [G4-19, G4-20, G4-21]

Materiality Aspect Boundary and Impact on Stakeholders

No	Aspek Material Material Aspect	Lingkup Pelaporan Scope of the Report			Dampak Pada Pemangku Kepentingan Impact on Stakeholders	
		Kantor Pusat Jakarta Jakarta Head Office	Kantor Pusat Sorowako Sorowako Head Office	Kontraktor Contractor	Internal Internal	Eksternal External
1	Kinerja Ekonomi Economic Performance	✓	✓			
2	Energi Energy		✓		Pekerja, Petinggi, Kontraktor	Sektor swasta dan publik, Komunitas
3	Emisi Emission		✓		Employees, Leaders, Contractors	Private and public sectors, Community
4	Limbah Cair dan Padat Effluent and Waste		✓			
5	Kesehatan dan Keselamatan Kerja Occupational Health and Safety	✓	✓	✓	Pekerja, Pemimpin, Kontraktor, Keluarga Pekerja Employees, Leaders, Contractors, Family of the Employees	Sektor swasta dan publik, Serikat pekerja Private and public sectors, Workers union
6	Komunitas Lokal Local Community		✓			Sektor swasta dan publik, Komunitas, Lembaga penelitian Private and public sectors, Community, Research institution
7	Rehabilitasi Pascatambang Post-mining Rehabilitation		✓		Pekerja, Petinggi, Kontraktor	Sektor swasta dan publik, Komunitas, Masyarakat Private and public sectors, Community, Public
8	Anti Korupsi Anti-corruption	✓	✓	✓	Employees, Leaders, Contractors	Sektor swasta dan publik, Komunitas Private and public sectors, Community
9	Praktik Pengadaan Procurement Practices	✓	✓	✓		Sektor swasta dan publik, Komunitas, Masyarakat Private and public sectors, Community, Public



Bagi
Kehidupan
For Life

8%

penurunan beban pokok pendapatan yang dilakukan oleh perusahaan dalam efisiensi operasional dan optimalisasi produksi sepanjang tahun 2015.

decrease in cost of revenue by the company in the operational efficiency and production optimization during 2015.

We are an efficient nickel producer, supported by high-grade ore reserves, skilled manpower and hydroelectric power facilities.

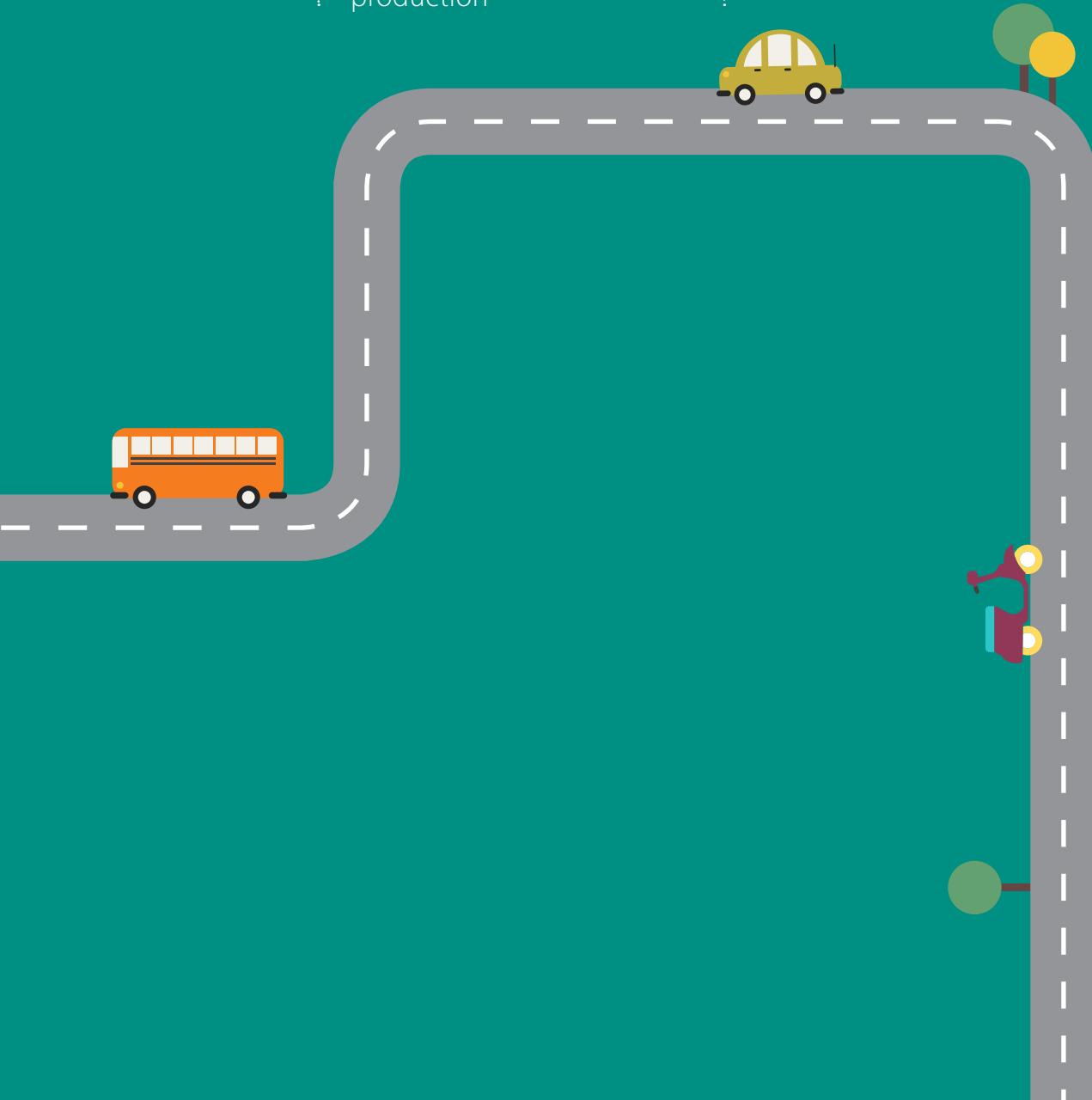
81,177 MT

Pencapaian produksi tertinggi
Highest record of production



50.50
million USD

Laba bersih
Net profit



Nikel Untuk Kehidupan

Nikel adalah salah satu unsur kimia berbentuk logam yang diperoleh dengan cara ditambang. Pemanfaatan nikel dilakukan dengan cara diolah serta dipadukan dan dicampurkan logam lain. Sangat banyak manfaat nikel bagi manusia dalam menunjang kehidupan sehari-hari.

Nickel For Living

Nickel is one of the chemical elements in the form of metal recovered through mining. Nickel exploitation is done by processing as well as combining and blending it with other metals. There are many benefits of nickel for people in supporting our daily life.

Campuran besi nirkarat (stainless steel)

Stainless steel mixture

- Peralatan makan, seperti sendok, garpu dan pisau
- Peralatan sanitasi
- Cutlery, such as spoons, forks and knives
- Sanitaryware



Baterai isi ulang

Rechargeable Battery

Berbagai jenis baterai isi ulang
Various types of rechargeable battery



Katalis

Catalyst

Proses hidrogenasi lemak
Fat hydrogenation process



Campuran pada besi baja

Mixture in steel

- Konstruksi jembatan dan gedung
- Rel kereta api
- Bridge and building constructions
- Railway tracks



Bahan uang koin

Coin material

Uang pecahan koin
Coins



Penggunaan Nikel

Nickel Uses [G4-PR1]



Pelapis luar logam

Metal coating

- Suku cadang otomotif
- Plating komponen elektronik
- Automotive spare parts
- Electrical component plating



Pembuatan monel, yakni campuran dari nikel dan tembaga

Making of monel, which is a mixture of nickel and copper

- Baling – baling kapal laut
- Aksesoris
- Ship propellers
- Accessories



Kawat nirkarat

Stainless wire

Turbin mesin jet
Jet engine turbines



Pelapis CD, DVD, Computer Hard Drives

CD, DVD, Computer Hard Drives upholstery

PT Vale Untuk Semua

Perusahaan melakukan efisiensi operasional dan optimalisasi produksi sepanjang tahun 2015. Proses kegiatan efisiensi produksi diawasi langsung oleh Dewan Direksi. Hasilnya, kami mencatat adanya penurunan beban pokok pendapatan sebesar 8%. Tingkat efisiensi ini akan terus dioptimalkan pada tahun mendatang.

PT Vale For All

The company has been conducting operational efficiency and optimizing production throughout 2015. The process of production efficiency activities was directly supervised by Board of Director. As a result, we recorded a decrease in cost of revenue by 8%. The efficiency rate will continue to be optimized in the coming years.

Nilai Ekonomi Didapat dan Didistribusikan (US\$ ribuan) [G4-EC1]

Economic Value Gained and Distributed (US\$ thousand)

Uraian Description	2015	2014	2013
Nilai Ekonomi yang Dihasilkan Economic Value Generated			
Pendapatan Revenue	789,745	1,038,082	921,638
Pendapatan Lain Other Income	1,357	913	455
Total Pendapatan Total Income	791,102	1,038,995	922,093
Distribusi Nilai Ekonomi Economic Value Distribution			
Biaya Operasi Operating Expenses	(505,408)	(529,910)	(591,611)
Gaji Karyawan Employee Salaries	(76,167)	(86,965)	(100,607)
Pembayaran kepada Penyandang Dana Payment to Financing Providers	(6,080)	(106,883)	(58,506)
Pembayaran kepada Pemerintah Payment to Government	(152,653)	(95,336)	(90,540)
Investasi untuk Komunitas Investment for Community	(4,298)	(3,747)	(4,921)
Total Distribusi Nilai Ekonomi Total Distributed Economic Value	(744,606)	(822,841)	(846,185)
Nilai Ekonomi Ditahan Retained Economic Value			
Total	46,496	216,154	75,908

Laporan Keuangan dapat dilihat di:
Financial Statement can be found at

<http://www.vale.com/indonesia/bh/aboutvale/news/id/pages/pt-vale-bukukan-hasil-produksi-tertinggi-sepanjang-sejarah.aspx>



Kontribusi Terhadap Negara [G4-EC1]

Contribution to the State

Uraian Description	2015	2014	2013
Komponen Penerimaan Negara Bukan Pajak (PNBP) (000 US\$) Components of Non-tax State Revenue (PBNP) (US\$ 000)			
Iuran Produksi Production Royalty	22,344.32	11,696.53	6,297.29
Iuran Tetap Wilayah Kontrak Karya Land Rent	544.23	324.93	285.77
PNBP Lainnya Other Non-Tax State Revenues	57.02	40.73	39.62
Jumlah Total	22,945.57	12,062.19	6,622.68
Komponen Pajak dan Retribusi (000 US\$) Components of Tax and Retribution (US\$ 000)			
Pajak Pertambahan Nilai Value Added Tax	1,328.36	1,329.32	1,636.97
Pajak Bumi dan Bangunan Land and Building Tax	2,484.95	2,420.73	1,938.97
Pajak Penghasilan Karyawan Employee Income Tax	9,839.25	12,462.70	13,088.10
Pajak Penghasilan Badan Corporate Income Tax	90,149.36	40,391.43	38,423.62
Pajak, Retribusi,dan Hibah Daerah Regional Taxes, Retribution and Grants	18,100.67	19,146.56	18,446.15
Pemotongan Pajak Penghasilan Pihak Ketiga Third Party Income Tax Withholding	7,628.09	7,273.09	10,129.12
Bea Masuk Duty	176.82	250.03	254.78
Jumlah Total	129,708.03	83,273.86	83,917.70
PNBP + Komponen Pajak dan Retribusi (000 US\$)			
Total	152,653.60	95,336.05	90,540.38

Salah satu bentuk distribusi kepada masyarakat pada tahun 2015 disalurkan melalui Pemerintah Daerah Kabupaten Kolaka sebesar Rp9,6 miliar (dua proses hibah AS\$ 500,000 atau setara Rp6,6 miliar dan Rp3 miliar). Dana ini dimanfaatkan untuk bantuan pembangunan infrastruktur sarana kesehatan, pendidikan, sosial, ekonomi dan kesejahteraan, serta perlindungan hukum dan HAM bagi masyarakat kurang mampu dan diambil dari dana *Corporate Social Responsibility* (CSR).

Salah satu bentuk realisasi dari pajak, retribusi, dan hibah daerah adalah pembayaran pajak air permukaan ke Kas Daerah Pemerintah Provinsi Sulawesi Selatan. Total pembayaran dari PT Vale pada tahun 2015 mencapai 6,6 juta AS\$, terkait pemanfaatan air untuk tiga unit Pembangkit Listrik Tenaga Air (PLTA) di Larona, Balambano dan Karebbe. Selain itu, PT Vale juga berkontribusi dalam bentuk hibah dana listrik sejumlah Rp40,2 miliar ke Pemerintah Kabupaten Luwu Timur, melalui PLN untuk menyalurkan listrik ke masyarakat.

One of distribution channels to the community in 2015 was through Kolaka Regency Government amounted to Rp9.6 billion (two grants of US\$500,000 or equivalent Rp6.6 billion and Rp3 billion). The funds were derived from Corporate Social Responsibility (CSR) funds and were used to support the development of infrastructure of health facilities, education, social, economic and welfare, as well as legal and human rights protection for the poor.

Realized payment of regional taxes, levies and grants included surface water tax payments to the Treasury of South Sulawesi Provincial Government. Total payments from PT Vale in 2015 reached US\$6.6 million, on the use of water for three hydro-electric power plants in Larona, Balambano and Karebbe. Besides, PT Vale also donated Rp40.2 billion to the Regency of Luwu Timur, through PLN in supplying electricity to the society.

Menjaga Tingkat Produksi

Penyempurnaan dalam pelaksanaan praktik-praktik penambangan yang baik juga telah mendukung peningkatan signifikan produksi bijih nikel dan nikel dalam matte pada Semester II tahun 2015. Total realisasi produksi tahun 2015 sebesar 81.177 MT mencapai 101,47% dari target 80.000 MT.

Maintaining Level of Production

Improvement of the good mining practices has also contributed to a significant increase in the production of nickel ore and nickel in matte in the second half of 2015. Total production in 2015 was 81,177 MT, or 101.47% of the target of 80,000 MT.

Total Produksi Nikel Dalam Matte (MT)

Total Production of Nickel in Matte (MT)



2015	2014	2013	Δ 1:2	Δ 2:3
1	2	3		
81,177	78,726	75,802	3.1%	4%
Target	Realisasi Realization			%
	Vale Canada Limited	66,331		80%
80,000	Sumitomo Metal Mining Co.,Ltd	16,576		20%
	Total	82,907		100%

Total Penjualan Nikel Dalam Matte (MT)

Total Sales of Nickel in Matte (MT)



2015	2014	2013	Δ 1:2	Δ 2:3
1	2	3		
82,907	79,477	77,189	4%	3%

Penjualan produk nikel dalam matte kepada Vale Canada Limited maupun Sumitomo Metal Mining Co.,Ltd. dalam kontrak khusus jangka panjang. Perusahaan tidak melakukan promosi maupun bentuk komunikasi pemasaran lain, sehingga tidak ada pelanggaran atas komunikasi pemasaran.

Sales of nickel in matte product to Vale Canada Limited and Sumitomo Metal Mining Co., Ltd., were under specific long-term contracts. The Company did not conduct any promotions or other forms of marketing communication, thus there was no violation of the marketing communication.

PT Vale memastikan kegiatan pengiriman produk tepat waktu dan kualitas senantiasa terjaga demi menjaga kepuasan pelanggan. Perusahaan memiliki mekanisme agar pelanggan dapat menyampaikan keluhan maupun pengaduan. Selama tahun 2015 tercatat tidak ada keluhan/pengaduan yang disampaikan pelanggan. [G4-PR4]

PT Vale ensured timely shipping of products and has always maintained their quality in order to retain customer satisfaction. The Company has a mechanism for the customers to express their complaints or grievances. During 2015, there were no complaints/grievances filed by customers. [G4-PR4]

Proses pengapalan nikel matte di Pelabuhan Balantang milik Perseroan yang berlokasi di Malili, Kabupaten Luwu Timur.
Nickel shipment process in company-owned Balantang Port in Malili, Luwu Timur.



Pelibatan Pemasok Lokal [G4-DMA][G4-12]

Perusahaan memastikan hanya perusahaan yang telah memenuhi persyaratan administrasi maupun teknis yang terdaftar sebagai pemasok lokal.

Sesuai dengan Permen ESDM no. 24 tahun 2012 tentang Penyelenggaraan Usaha Jasa Pertambangan Mineral dan Batubara, semua pemasok PT Vale melalui proses tender dan evaluasi berdasarkan kinerja, harga, dan purnajual. Hingga akhir tahun 2015 tercatat ada 253 perusahaan yang terdaftar sebagai pemasok.

Promote National Interest (PNI) dan Local Business Initiative (LBI)

PT Vale berkomitmen untuk turut serta dalam pemberdayaan masyarakat lokal dan dalam negeri melalui *Promote National Interest* (PNI) dan *Local Business Initiative* (LBI). PNI merupakan komitmen perusahaan untuk menaikkan porsi penggunaan produk dalam negeri melalui rantai pasokan perusahaan. LBI merupakan inisiatif perusahaan untuk meningkatkan kesempatan berusaha dan menaikkan kompetensi pengusaha lokal secara profesional.

Local suppliers Involvement [G4-DMA][G4-12]

The Company ensured that only companies that meet administrative and technical requirements are registered as local suppliers.

According to the Regulation of Energy and Mineral Resources Minister No. 24 of 2012 on the Business Operation of Mineral and Coal Mining Services, all suppliers of PT Vale are selected through tender process and evaluation based on performance, price, and after-sales service. By the end of 2015, there were 253 companies registered as suppliers.

Promote National Interest (PNI) and Local Business Initiative (LBI)

PT Vale is committed to participate in the empowerment of local communities and the country through Promote National Interest (PNI) and Local Business Initiative (LBI). PNI is PT Vale's commitment to increase the use of domestic products through supply chain. LBI is PT Vale's initiative to improve the opportunity to work and professionally improve local suppliers' competencies.

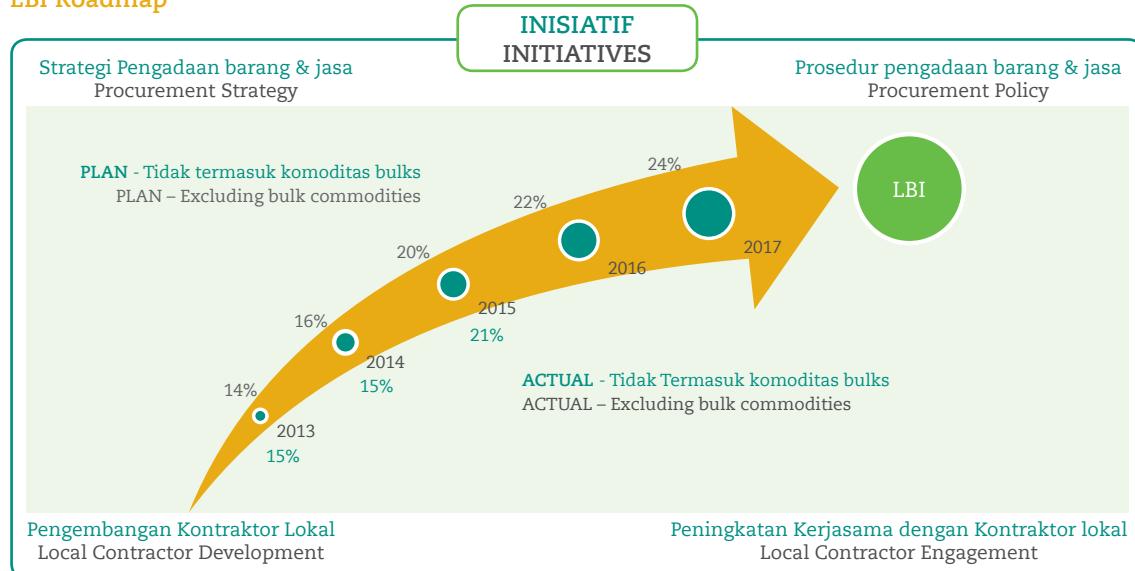
Perusahaan mendefinisikan perusahaan lokal sebagai:

- Perusahaan yang didirikan dan/atau berdomisili di empat wilayah pemberdayaan, meliputi Kecamatan Nuha, Towuti, Wosuponda dan Malili.
- Perusahaan yang dimiliki perseorangan yang telah berdomisili di wilayah pemberdayaan selama sekurang-kurangnya 10 tahun.

The Company defines a local company as:

- A company established and/or domiciled in four areas of empowerment, covering Nuha, Towuti, Wosuponda and Malili districts.
- A privately owned company that has been domiciled in the areas of empowerment for at least 10 years.

Peta Jalan Local Business Initiative (LBI) LBI Roadmap



Note:
Initiatives to support the enhancement of local contractor empowerment

Hingga akhir tahun 2015, pelaksanaan LBI memasuki tahapan implementasi dan hasilnya adalah terdapat 21% pemasok lokal dari total keseluruhan pembelian diluar komoditas strategis.

By the end of 2015, the LBI initiative entered the stage of implementation and resulted in 21% of local suppliers of total purchases outside of strategic commodities.



◀ Kegiatan di gudang penerimaan barang milik PT Vale di Sorowako, Luwu Timur
Activity at PT Vale's warehouse in Sorowako, Luwu Timur

Program Pengembangan Pemasok Lokal [G4-EC9]
Local Supplier Development Program

Kegiatan Activity	Jumlah Peserta Participants	Waktu Pelaksanaan Schedule
BPJS Ketenagakerjaan BPJS for Manpower	121	Januari January 2015
Perpajakan Taxation	223	Maret March 2015
BPJS Kesehatan BPJS for Health	149	April April 2015
Pra kualifikasi pemasok Supplier pre-qualification	308	Mei May 2015
<i>Invoicing process</i>	205	Mei May 2015

Proporsi Pelibatan Pemasok Jasa [G4-EC9]
Proportion of Service Provider Engagement

Jenis Pemasok Type of Supplier	2015			2014		
	Jumlah Total	Nilai Kontrak (AS\$) Contract Value (US\$)	%	Jumlah Total	Nilai Kontrak (AS\$) Contract Value (US\$)	%
Lokal Local	110	42,204,959.53	32%	132	32,748,569.54	19%
Nasional National	209	81,789,124.69	61%	221	119,514,736.41	71%
Internasional International	21	9,041,407.15	7%	20	15,950,243.14	9%
Jumlah Total	340	133,035,491.37	100%	373	168,213,549.09	100%

Proporsi Pelibatan Pemasok Barang [G4-EC9]
Proportion of Goods Supplier Engagement

Jenis Pemasok Type of Supplier	2015			2014		
	Jumlah Total	Nilai Kontrak (AS\$) Contract Value (US\$)	%	Jumlah Total	Nilai Kontrak (AS\$) Contract Value (US\$)	%
Lokal Local	143	16,532,315.14	10%	146	19,810,096.09	12%
Nasional National	211	67,736,210.25	42%	324	98,038,272.79	60%
Internasional International	148	78,389,171.69	48%	212	46,420,389.35	28%
Jumlah Total	502	162,657,697.08	100%	682	164,268,758.23	100%



► Sebuah shovel dengan dua truk pengangkut di area penambangan Perseroan di Konde, Sorowako, Luwu Timur

A shovel with two haul trucks in a mining area in Konde, Sorowako, Luwu Timur

Pelibatan perusahaan lokal sebagai pemasok telah membantu menyediakan lapangan kerja bagi masyarakat setempat. Hingga tahun 2015 diperkirakan ada sekitar 4.171 tenaga kerja terserap oleh perusahaan lokal. [G4-12, G4-EC8, G4-EC9]

The engagement of local companies as suppliers have helped provide jobs for local communities. Until 2015 there were an estimated 4,171 workers employed by local companies. [G4-12, G4-EC8, G4-EC9]

Jumlah Pemasok [G4-LA14, G4-EN32, G4-SO9]

Total Suppliers

Pengawasan Pemasok (Baru) PQ 2013 Menggunakan Kriteria Ketenagakerjaan Tahun 2015

Supplier Supervision (New) PQ 2013 Using Employment Criteria in 2015

Wilayah Operasi Operation Area	Jumlah Pemasok Total Suppliers	Jumlah Pemasok yang Dievaluasi Total Suppliers Evaluated	Jumlah Pemasok Lulus Dievaluasi Total Suppliers Passed the Evaluation	Percentase Percentage
Sulawesi	5	2	2	100 %
Luar Sulawesi Outside Sulawesi	54	54	51	94 %
Luwu Timur	270	270	253	94%

Pengawasan Pemasok (Baru) PQ 2013 Menggunakan Kriteria Lingkungan Tahun 2015

Supplier Supervision (New) PQ 2013 Using Environmental Criteria in 2015

Wilayah Operasi Operation Area	Jumlah Pemasok Total Suppliers	Jumlah Pemasok yang Dievaluasi Total Suppliers Evaluated	Jumlah Pemasok Lulus Dievaluasi Total Suppliers Passed the Evaluation	Percentase Percentage
Lokal Local	270	270	253	94%
Nasional National	152	152	38	25%
Internasional International	0	0	0	0

Pengawasan Pemasok (Baru) PQ 2013 Menggunakan Kriteria Dampak terhadap Masyarakat Tahun 2015

Supplier Supervision (New) PQ 2013 Using Impact on the Community Criteria in 2015

Wilayah Operasi Operation Area	Jumlah Pemasok Total Suppliers	Jumlah Pemasok yang Dievaluasi Total Suppliers Evaluated	Jumlah Pemasok Lulus Dievaluasi Total Suppliers Passed the Evaluation	Percentase Percentage
Sorowako – Towuti	199	199	188	94%
Wasuponda- Malili	71	71	65	92%

Note :

PQ 2015 dalam tahap evaluasi dengan jumlah pendaftar 361 vendor
PQ 2015 in the evaluation stage with 361 vendors as applicants

Pelibatan pemasok lokal juga disertai pengawasan untuk memastikan kepatuhan pada seluruh regulasi ketenagakerjaan. Selama tahun 2015 ada beberapa pemasok lokal yang dijatuhi sanksi karena terbukti melakukan pelanggaran terkait ketenagakerjaan. [G4-LA14]

The engagement of local suppliers are also supervised to ensure compliance with all labor regulations. During 2015 there were a number local suppliers were given penalties for committing violations of labor regulations. [G4-LA14]

Sanksi Terhadap Pemasok [G4-LA15]

Penalties on Suppliers

Bentuk Sanksi	Form of Penalty	Jumlah	Total	Penjelasan	Remarks
Sanksi terhadap Pemasok (Baru) Jasa Tidak Lulus Evaluasi Menggunakan Kriteria Ketenagakerjaan tahun 2015 Penalties on Service Providers (New) Failed the Evaluation Using Employment Criteria in 2015					
Peringatan Reminder		19		<i>Admonition*1 & Reminder 1</i>	
Peringatan keras Admonition		29		<i>Admonition 2</i>	
Pemutusan kontrak Contract termination		1		<i>Fatality Safety</i>	
Sanksi terhadap Pemasok (Baru) Barang Tidak Lulus Evaluasi Menggunakan Kriteria Ketenagakerjaan tahun 2015 Penalties on Goods Suppliers (New) Failed the Evaluation Using Employment Criteria in 2015					
Peringatan Reminder		231		<i>Admonition 1</i>	
Peringatan keras Admonition		47		<i>Admonition 2</i>	
Pemutusan kontrak Contract termination		0		<i>N/A</i>	
Sanksi lain Other penalty		0		<i>N/A</i>	

*Keterangan | Note: Admonition adalah surat peringatan | Admonition is in the form of warning letter

Pada tahun 2015 juga terjadi unjuk rasa yang berhubungan dengan pengupahan karyawan kontraktor, kesempatan berusaha, dan lapangan pekerjaan yang terjadi di daerah wilayah operasi Luwu Timur. Unjuk rasa ini terjadi tidak lebih dari seminggu. [MM4]

In 2015, there were rallies over contractor employee wages, business opportunities and jobs that took place in the Luwu Timur operating area. The rallies did not last for more than a week. [MM4]

Tindakan-tindakan yang dilakukan oleh PT Vale dalam menindaklanjuti peristiwa tersebut adalah: [G4-LA16]

1. Koordinasi dengan dinas terkait pemerintah daerah,
2. Koordinasi dengan asosiasi pengusaha lokal untuk menjalin kerjasama dengan semangat persaingan yang sehat,
3. Membuka kesempatan kepada masyarakat Luwu Timur yang dikoordinir oleh pemasok.

The actions undertaken by PT Vale in responding to the incidents were: [G4-LA16]

1. Coordinating with relevant agencies of regional government,
2. Coordinating with local business association to establish cooperation in the spirit of fair competition,
3. Providing opportunities to the residents of Luwu Timur under coordination of the suppliers.

Proyek Pertumbuhan Indonesia (IGP)

Sepanjang tahun 2015, PT Vale meneruskan pelaksanaan Proyek Pertumbuhan Indonesia atau *Indonesia Growth Project* (IGP). Proyek ini merupakan inisiatif dari Vale Global untuk meningkatkan pertumbuhan produksi di Sorowako. Selain itu PT Vale juga melanjutkan persiapan pengembangan di Blok Pomalaa di Kabupaten Kolaka, Sulawesi Tenggara, dan Blok Bahodopi di Kabupaten Morowali, Sulawesi Tengah. [G4-13]

Dua karyawan sedang melakukan penanaman benih dengan sistem hydro seeding di area rehabilitasi Solia, Sorowako, Luwu Timur

Two workers planting seeds using hydro seeding in rehabilitation area on Solia, Sorowako, Luwu Timur



Indonesia Growth Project (IGP)

Throughout 2015, PT Vale Indonesia continued to pursue the development of the Indonesia Growth Project (IGP). This project is Vale Global's initiative to increase production in our existing operations in Sorowako. In addition, PT Vale continues to pursue development opportunities in the Pomalaa Block in Kolaka, Southeast Sulawesi, and Bahodopi Block in Morowali Regency, Central Sulawesi. [G4-13]



Ekspansi Sorowako

Kegiatan awal dari proyek ekspansi Sorowako sudah dilakukan. Perbaikan operasional yang signifikan telah berkontribusi pada capaian rekor produksi tertinggi di 2015. Proyek ini akan dilanjutkan dengan beberapa perbaikan operasi dan peningkatan fasilitas dengan target mencapai produksi 90.000 ton dalam beberapa tahun kedepan.

Sorowako Expansion

Initial work is already underway on the Sorowako expansion project. Significant operational improvements have led to our record high production in 2015. This work will continue through various upgrades and improvements, with a goal of achieving 90,000 tonnes capacity in the coming years.

Pengembangan Blok Pomalaa:

- Luas area 20,286 hektar.
- Potensi sumber daya bijih nikel terukur, terunjuk dan tereka sebesar 33,5 juta ton DKP untuk Pomalaa saprolite.
- Potensi sumber daya bijih nikel terukur dan terunjuk sebesar 113,8 juta ton DKP untuk Pomalaa limonite.
- Teknologi proses produksi: HPAL dan hidrometalurgi.
- Kapasitas produksi: 40.000 ton per tahun nikel MSP.

Realisasi rencana pengembangan Blok Pomalaa pada tahun 2015 memasuki tahapan penyusunan Dokumen Analisis Mengenai Dampak Lingkungan (AMDAL). Di Blok Pomalaa, Perusahaan bermitra dengan Sumitomo Metal Mining Co.,Ltd. untuk mengembangkan pabrik pengolahan bijih nikel berteknologi *High Pressure Acid Leaching* (HPAL).

Fasilitas pengolahan akan memproses bijih nikel dan menghasilkan *Mixed Sulphide Precipitate* (MSP) dengan kandungan nikel lebih dari 45%, sehingga memenuhi syarat ekspor produk yang telah ditetapkan Pemerintah Indonesia. Proses produksi dilakukan secara hidrometalurgi dengan kapasitas sekitar 40.000 ton nikel per tahun.

Pengembangan Blok Bahodopi:

- Luas area 22,699 hektar.
- Potensi cadangan bijih nikel terbukti 12,4 juta ton DKP di Bahodopi block 1 yang masuk dalam Area Operasi Smelter Sorowako.
- Potensi sumberdaya bijih nikel tereka 47 juta tons DKP di Bahodopi block 1 yang masuk dalam Area Operasi Smelter Sorowako.
- Potensi sumber daya bijih nikel terunjuk dan tereka 42,8 Juta Tons DKP di Bahodopi block 2 dan 3.

Pengembangan Blok Bahodopi meliputi pengembangan kegiatan penambangan di Blok 1 yang akan memasok fasilitas pengolahan di Sorowako. Pengembangan ini sedang menunggu perizinan dari Pemerintah. Kemudian PT Vale sedang mengevaluasi kesempatan untuk mengembangkan kegiatan penambangan dan pengolahan untuk memanfaatkan sumber daya yang ada di blok 2 dan blok 3.

Pomalaa Block development:

- Site area of 20,286 hectares.
- Measured, indicated and inferred potential of nickel ore resources is 33.5 million tons DKP for Pomalaa saprolite.
- Measured, indicated and inferred potential of nickel ore resources is 113.8 million tons DKP for Pomalaa limonite.
- Production process technologies: HPAL and hydrometallurgy.
- Production capacity: 40,000 tons per year of nickel MSP.

In 2015, the Pomalaa Block development entered the environmental assessment stage by preparing and presenting an Analysis on Environmental Impact (AMDAL) document. In the Pomalaa Block, the Company is looking to partner with Sumitomo Metal Mining Co., Ltd. to develop a nickel ore processing plant using high pressure acid leaching (HPAL) technology.

The processing facility will process nickel ore and produce mixed sulphide precipitate (MSP) with nickel content of more than 45%, which meets the requirements for export of products set by the Government of Indonesia. The production process is done with hydrometallurgical technology and a capacity of about 40,000 tons of nickel per year.

Bahodopi Block development:

- Site area of 22,699 hectares.
- Proven potential of nickel ore reserves of 12.4 million tons DKP at Bahodopi Block 1 are included in Sorowako Smelter Operational Area.
- Inferred potential nickel resources of 47 million tons DKP at Bahodopi block 1 are included in Sorowako Smelter Operational Area.
- Indicated and inferred potential nickel ore resources of 42.8 million tons DKP at Bahodopi block 2 and 3.

Bahodopi Block development will include the development of a mining operation in Block 1 to feed our existing facilities in Sorowako. This development is currently awaiting permits from the government. Subsequently, PT Vale is evaluating opportunities to develop a mine and processing facility to utilize the resources in Bahodopi Block 2 and Block 3.



Untuk Berkarya
For Work

>80%

Pekerja tetap adalah masyarakat sekitar wilayah operasi

Permanent employees are the residents around the company site



Employee survey results found local employee initiatives, review on salary and benefit programs, as well as leadership development programs have made Vale a great place to work.

3,103

Jumlah Pekerja
Total Employees

0.67

Tingkat Kecelakaan
Tercatat
Recordable injury rate

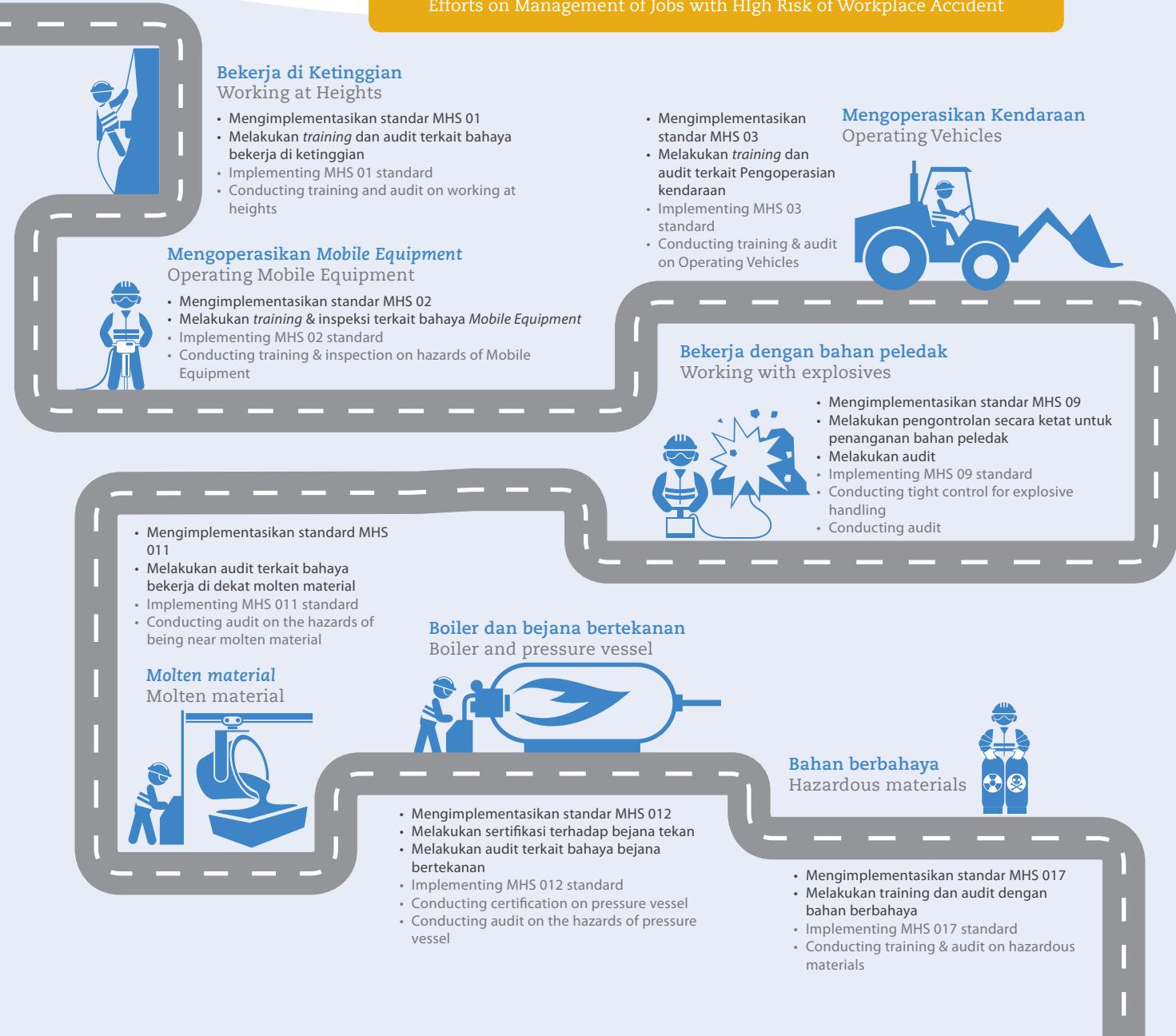


Kepatuhan Pada Kesehatan dan Keselamatan Kerja (K3) [G4-DMA]

Kepatuhan pada Kesehatan dan Keselamatan Kerja (K3) merupakan keharusan bagi PT Vale guna mewujudkan target nihil cedera (*zero-harm*). Para pekerja dituntut untuk menerapkan praktik-praktik terbaik K3 yang tercantum dalam Perjanjian Kerja Bersama (PKB), serta *Major Hazard Standard* (MHS) dan Aturan Baku (*Golden Rules*). Pelaksanaan K3 secara ketat diawasi oleh Divisi *Environment Health & Safety* di bawah Deputy COO, Direktur *Environment Health & Safety*, serta Kepala Teknik Tambang. [G4-36]

Kegiatan PT Vale meliputi penambangan bijih nikel laterit dan produksi sampai dengan pemurnian dalam bentuk nikel matte. Kondisi ini menjadikan pekerja pada lokasi tambang dan fasilitas produksi dihadapkan pada risiko tinggi terjadinya insiden maupun kecelakaan kerja.

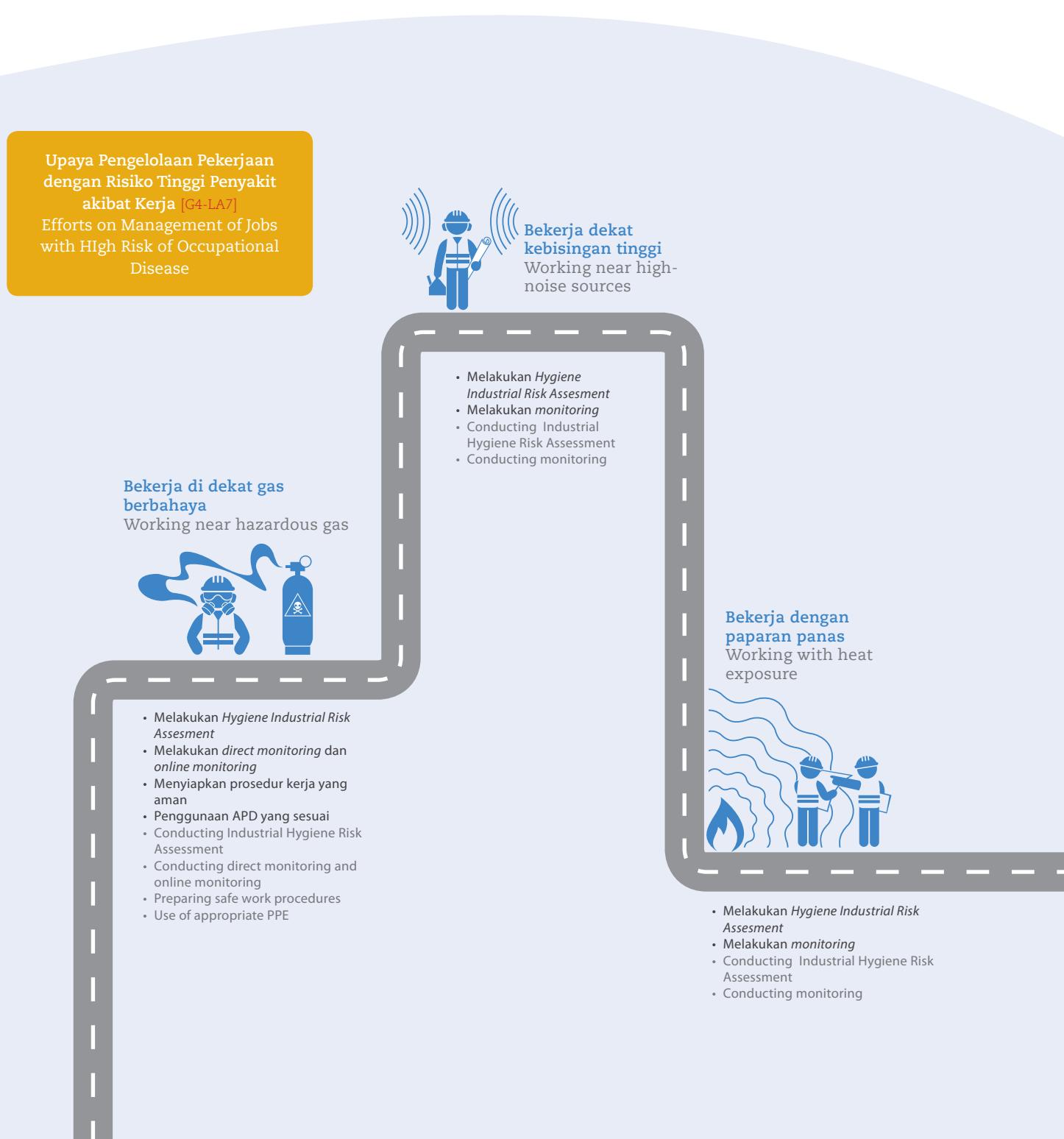
Upaya Pengelolaan Pekerjaan dengan Risiko Tinggi Kecelakaan Kerja [G4-LA7] Efforts on Management of Jobs with High Risk of Workplace Accident



Compliance to Occupational Health and Safety (K3) [G4-DMA]

Compliance with occupational health and safety (K3) is a must for PT Vale in order to achieve the target of zero injuries (zero harm). The employees are required to implement K3 best practices contained in the Collective Labor Agreement (CLA), as well as the Major Hazard Standard (MHS) and Golden Rules. K3 implementation is closely monitored by the Division of Environment Health & Safety under Deputy COO, Director of Environment, Health & Safety, as well as Chief of Mine Engineering. [G4-36]

PT Vale's activities range from nickel laterite ore mining and production to refining into the form of nickel matte. This condition makes the employees at the mine site and production facilities exposed to a high risk situation or work accidents.



Untuk memastikan sistem K3 berjalan dengan baik dan perbaikan dilakukan secara berkelanjutan, dibentuk komite K3 bersama manajemen dan karyawan.

To ensure the OHS system is running properly and continuous improvement, an OHS joint committee was formed together with management and employees.

Jumlah Pekerja Dalam Komite K3 Tahun 2015 [G4-LA5]

Total Employees in OHS Committee of 2015

Persentase Total Perwakilan Pekerja dalam Komite K3
Percentage of Total Employee Representatives in OHS Committee

Wilayah Operasi Operational Area	Jumlah Karyawan Total Employees	Jumlah Perwakilan Pekerja Total Employee Representatives	Persentase Percentage
2015			
Sulawesi	187	0	0%
Luar Sulawesi Outside Sulawesi	274	12	4.3%
Luwu Timur	2,642	196	7.4%
2014			
Jumlah Total	3,122	179	5.7%

Untuk menghilangkan kejadian *fatality* pada karyawan dan kontraktor, mulai tahun 2014 Perusahaan terus fokus menerapkan program pencegahan kecelakaan berakibat meninggal dunia dan cedera serius, melalui *Fatality Prevention Program* (FPP). Program ini fokus pada penerapan standar bahaya utama (*major hazard standard/critical activity requirements-RAC*) yang didapat berdasarkan analisis dan evaluasi risiko di setiap proses bisnis PT Vale. Kepala Teknik Tambang secara langsung memimpin program FPP ini. Selain itu, mulai akhir tahun 2015 PT Vale juga menerapkan *process safety management* (PSM). Selama tahun 2015, belum dapat dikonfirmasi secara medis adanya Penyakit Akibat Kerja (PAK) yang terjadi. Jumlah hari absen karena sakit tercatat sebesar 0,84. [G4-LA6]

To eliminate the incidence of fatality on employees and contractors, in 2014 the Company continued to focus on implementing prevention program on accident resulting in death and serious injury, through the Fatality Prevention Program (FPP). This program focuses on the major hazard standard and critical activity requirements (CAR) based on the analysis and evaluation of risks in each business process of PT Vale. Head of Mine Engineering directly leads this FPP program. Additionally, starting at the end of 2015, PT Vale has also implemented process safety management (PSM). During 2015, there has been no medically confirmed occurrence of occupational diseases (PAK). The number of days of absence due to illness was recorded at 0.84. [G4-LA6]



Langkah-langkah lain untuk mencegah kecelakaan kerja adalah:

1. Melakukan analisa PKS (Prosedur Kerja Standar) dengan fokus kepada kegiatan yang mempunyai resiko tinggi,
2. Melakukan inspeksi dan observasi pada pekerjaan yang mempunyai risiko tinggi,
3. Melakukan diskusi pada *safety talk*,
4. Menganalisa sistem proteksi peralatan untuk menyakinkan peralatan bekerja dengan baik,
5. Melakukan audit Sistem Manajemen Keselamatan,
6. Melakukan pemantauan terhadap kinerja K3 secara berkala,
7. Melakukan pemantauan terhadap bahaya kesehatan terkait faktor fisika di tempat kerja,
8. Penerapan *fatigue control*,
9. Penerapan *critical activities control requirement – major hazard standard*,
10. Pencegahan kecelakaan komuting (pulang dan pergi kerja) dengan menyediakan bus ke lokasi kerja bagi karyawan PT Vale dan kontraktor.

Other measures to prevent workplace accidents are:

1. Analyzing the PKS (Standard Working Procedure) with a focus on high-risk activities,
2. Conducting inspections and observations on the high risk work,
3. Conducting a discussion at safety talk,
4. Analyzing equipment protection system to assure it runs properly,
5. Conducting audits on the Safety Management System,
6. Monitoring OHS performance regularly,
7. Monitoring the health hazards related to physical factors in the workplace,
8. Implementation of fatigue control,
9. Implementation of critical activities control requirements - major hazard standard,
10. Commuting accident prevention (to and from work) by providing buses to work locations for employees of PT Vale and contractors.

Sejumlah pekerja sedang bekerja di ketinggian dengan pengawasan ketat serta peralatan keselamatan kerja yang memadai di area Dryer di pabrik pengolahan PT Vale di Sorowako.

A number of workers working at heights under closed supervisions and proper safety equipments at the Dryer area at PT Vale's processing plant in Sorowako.

Adapun peristiwa kecelakaan kerja pada tahun 2015 tercatat 11 kasus dengan 1 kematian (fatal). [G4-LA6]

Seorang operator *chainsaw* karyawan kontraktor PT Bintang Utama meninggal pada tanggal 7 September 2015 setelah tertimpa pohon saat menebang pohon di area Konde Central, Sorowako, Indonesia. Faktor penyebab terjadinya kecelakaan terkait dengan kepatuhan terhadap standar kerja.

Untuk mencegah terulangnya kejadian ini, Perusahaan telah melakukan upaya-upaya pencegahan dan perbaikan yang berfokus kepada substitusi risiko, yaitu:

1. Mengganti kegiatan penebangan pohon di tambang dengan penggunaan peralatan untuk menghilangkan paparan risiko terhadap pekerja.
2. Melakukan evaluasi bertingkat terhadap pelaksanaan *Contractor Safety Management System* (CSMS).
3. Peningkatan pengawasan di aktivitas kritis, baik terhadap perilaku pekerja untuk meyakinkan kepatuhan standar kerja maupun lokasi kerja.
4. Memastikan kompetensi pengawas (pengawas lini, menengah, dan para manajer).

Meanwhile, the recorded occurrence of workplace accidents in 2015 was 11 cases with one fatality. [G4-LA6]

A chainsaw operator, a contractor employee of T Bintang Utama died on September 7, 2015 after hit by tree when felling trees in Konde Central area, Sorowako, Indonesia. The cause of accident was related to lack of compliance with work standards.

To prevent a recurrence of this incident, the Company has made prevention measures and improvements that focus on the risk substitution, namely:

1. Changing the tree cutting activity in the mine with the use of equipment to eliminate the risk exposure to employees.
2. Conducting tiered evaluation on the implementation of Contractor Safety Management System (CSMS).
3. Increasing supervision at critical activities, both to the employees' behavior to ensure compliance with work standards and work locations.
4. Ensuring the competence of inspectors (line supervisors, middle, and managers).

Tingkat dan Jumlah Peristiwa Kecelakaan Kerja* [G4-LA6]
Level and Number of Workplace Accidents



* Jumlah mencakup kontraktor | Total numbers include contractors
** Ringan: Pengobatan medis dan bantuan pertama pada kecelakaan | Medical treatment and first aid care
*** Sedang dan berat: Pembatasan kerja dan kehilangan jam kerja | Restricted work case and Lost work case

Kinerja Pelaksanaan K3*

OHS Implementation Performance

Uraian Description	2015	2014	2013
Tingkat Kecelakaan Tercatat Recordable Injury Rate	0.67	0.81	1.38
Tingkat Kekerapan Kasus Kehilangan Kerja Lost Time Injury Frequency Rate	0.11	0.06	0.22
Kehilangan Hari Kerja Lost Time Injury	6,011	6,000	172

* Jumlah mencakup kontraktor | Total numbers include contractors

Uraian K3 dalam Perjanjian Kerja Bersama (PKB) [G4-LA8]

Description of OHS in Collective Labor Agreement

Topik Kesehatan dan Keselamatan Kerja Occupational Health and Safety Topics	Uraian dalam PKB sesuai Topik Kesehatan dan Keselamatan Kerja Description in CLA according to Occupational Health and Safety
Alat perlindungan diri Personal protective equipment	<ol style="list-style-type: none"> 1. PPE 2. <i>Respiratory Protection</i> 3. <i>Hearing Conservation</i>
Komite bersama K3 OHS Joint Committee	P2K3
Partisipasi perwakilan pekerja dalam pelaksanaan inspeksi, audit K3 dan investigasi peristiwa kecelakaan kerja Participation of employee representatives in the implementation of inspections, OHS audits and workplace accident investigations	<ol style="list-style-type: none"> 1. <i>Incident Investigation</i> 2. <i>EMQNET Refreshing Training</i>
Pendidikan dan pelatihan K3 OHS education and training	<ol style="list-style-type: none"> 1. POP 2. POM 3. <i>Risk Assessment</i> 4. <i>Working at Height</i> 5. <i>Confined Space Sentry</i> 6. JSA 7. <i>Rigging</i> 8. <i>LV Driving Assesment</i> 9. <i>Heat Stress</i>
Mekanisme keluhan Grievance mechanisms	Sosialisasi PKB <i>CLA dissemination</i>
Hak untuk menolak pekerjaan berbahaya Rights to decline dangerous work	Sosialisasi PKB <i>CLA dissemination</i>
Inspeksi berkala Regular inspections	<ol style="list-style-type: none"> 1. <i>Safety Observation & Inspection</i> 2. JCC 3. EHS Inspection



Kegiatan tapping di area tanur pelebur di Sorowako,
Tapping activity at furnace area in Sorowako.

Pencapaian kinerja K3 di lingkungan PT Vale dilengkapi dengan beberapa sistem dan piranti keamanan baru, diantaranya:

- **Budaya Keselamatan**

Budaya keselamatan dilakukan melalui *safety felt leadership*. Setiap pemimpin secara langsung terlibat dalam setiap kegiatan keselamatan. Untuk mendukung program ini, pemimpin membuat Rencana Aksi Keselamatan Individu / *Personal Safety Action Plan* (PSAP). Selama tahun 2015, kegiatan ini telah memenuhi rata-rata tingkat partisipasi/pemenuhan PSAP sebesar >90 %.

- **Analisis Risiko Aktivitas Individu Personal Activity Risk Analysis (PARA)**

Program ini mewajibkan pekerja untuk menganalisis pekerjaannya sebelum mulai bekerja agar mampu mengenali dan membuat rencana pengendalian bagi setiap bahaya dan resiko yang mungkin terjadi.

OHS performance achievement at PT Vale is equipped with several new security systems and devices, including:

- **Safety Culture**

Safety culture is implemented through safety felt leadership. Each leader is directly involved in every safety activity. To support this program, leaders prepare Individual Safety Action Plan/Personal Safety Action Plan (PSAP). During 2015, this activity has reached the average level of PSAP participation/completion by >90%.

- **Personal Activity Risk Analysis (PARA)**

This program requires the employees to analyze their jobs before starting to work in order to be able to recognize and make control plans for any hazards and risks that may arise.

- Contractor Safety Management System (CSMS)**

PT Vale mewajibkan para kontraktor untuk mematuhi ketentuan K3 melalui penerapan *Contractor Safety Management System* (CSMS). Tingkat pencapaian CSMS di tahun 2015 adalah 79,9%.

- Program Pencegahan Fatalitas-Major Hazard Standard (MHS)**

Program ini bertujuan untuk mengawasi aktivitas kritis disetiap bagian operasi Perusahaan. Selama tahun 2015, program ini fokus pada aspek kegiatan kepemimpinan dan evaluasi prosedur kerja. Tingkat pemenuhan program MHS adalah 87%.

- Mencegah dan Menanggulangi HIV/AIDS**

PT Vale memperoleh penghargaan pencegahan dan penanggulangan HIV/AIDS kategori 'Platinum' dari Kementerian Tenaga Kerja dan Transmigrasi. Perhatian khusus PT Vale pada upaya pencegahan HIV/AIDS didorong oleh tingginya angka pasien penderita AIDS di Kabupaten Luwu Timur. Pada tahun 2015, jumlah penderita HIV/AIDS mencapai 99 orang, meningkat tajam dibanding tahun 2010 yang berjumlah sekitar 30 hingga 40 orang.

- Program Konseling Karyawan**

Program ini bertujuan untuk memberikan penyuluhan dan konseling pribadi untuk setiap karyawan.

- Program Ergonomi**

PT Vale melakukan evaluasi terhadap seluruh kegiatan operasional dari sisi ergonomi kerja.

- Standarisasi K3 [G4-15]**

Kami menerapkan EHS-MS (*Environment Health & Safety Management System*) yang berbasis pada OHSAS 18001, ISO 14000, dan SMKP (Sistem Manajemen Keselamatan Pertambangan). EHS-MS dikelola oleh Departemen EHS.

- Contractor Safety Management System (CSMS)**

PT Vale requires contractors to comply with OHS provisions through the application of Contractor Safety Management System (CSMS). CSMS achievement rate in 2015 was 79.9%.

- Fatality Prevention Program - Major Hazard Standard (MHS)**

The program aims to monitor critical activity in any part of the Company's operations. During 2015, this program focused on aspects of leadership activities and evaluation of work procedures. MHS program compliance rate was 87%.

- Preventing and Mitigating HIV/AIDS**

PT Vale received an award for HIV-AIDS prevention and control in 'Platinum' category from the Ministry of Manpower and Transmigration. PT Vale's special attention on HIV/AIDS prevention driven by the high number of patients with AIDS in Luwu Timur Regency. In 2015, the number of people living with HIV/AIDS reached 99 people, a sharp increase compared to 2010 of 30 to 40 people.

- Employee Counseling Program**

The program aims to provide counseling and personal counseling to each employee.

- Ergonomics Program**

PT Vale do an evaluation of all operational activities of the working ergonomics.

- OHS Standards [G4-15]**

We implement EHS-MS (*Environment Health & Safety Management System*) based on OHSAS 18001, ISO 14000, and SMKP (Mining Safety Management System). EHS-MS is managed by EHS Department.

Kesempatan Untuk Pekerja Lokal [G4-LA1, G4-LA12]

Perusahaan memberikan kesempatan setara kepada setiap warga negara Indonesia, termasuk penduduk lokal, untuk bekerja sebagai karyawan berdasarkan kompetensi dan peraturan. Keberpihakan pada pekerja lokal tercermin melalui 85% karyawan PT Vale yang berasal dari penduduk di sekitar Perusahaan, yaitu dari Kabupaten Luwu Timur, Sulawesi Selatan. Dari jumlah ini, sebanyak 1 orang menduduki jabatan sebagai manajer.

Opportunity for Local Workers [G4-LA1, G4-LA12]

The company provides equal opportunity to every citizen of Indonesia, including local residents, to work as employees based on their competencies and regulations. The preference towards local workers is reflected by 85% of PT Vale's employees originated from the local residents around the company, which is Luwu Timur, South Sulawesi. One of the employees has been appointed as manager.

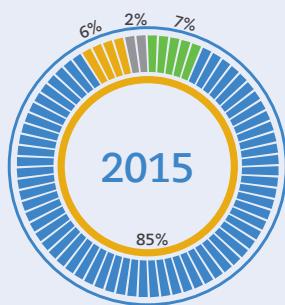
Jumlah dan Komposisi Pekerja Baru Berdasarkan Lokasi Kerja [G4-LA1]

Total and Composition of New Employees by Work Location

Pria Male		Wanita Female		Jumlah Total
Kabupaten Luwu Timur Luwu Timur Regency	61	Kabupaten Luwu Timur Luwu Timur Regency	2	Kabupaten Luwu Timur Luwu Timur Regency 63
Kabupaten Lain di Sulawesi Selatan Other Regencies in South Sulawesi	0	Kabupaten Lain di Sulawesi Selatan Other Regencies in South Sulawesi	0	Kabupaten Lain di Sulawesi Selatan Other Regencies in South Sulawesi 0
Luar Sulawesi Selatan Other Regencies in South Sulawesi	1	Luar Sulawesi Selatan Other Regencies in South Sulawesi	2	Luar Sulawesi Selatan Other Regencies in South Sulawesi 3
Jumlah ulawe	62	Jumlah ulawe	4	Jumlah ulawe 66

Jumlah dan Komposisi Pekerja berdasarkan Daerah Asal [G4-LA12]

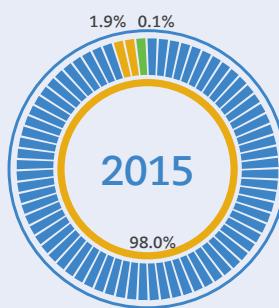
Total and Composition of Employees by Region of Origin



- Kabupaten Luwu Timur Luwu Timur Regency
- Makassar
- Jakarta
- Kabupaten Luwu Utara, Pomalaa & Daerah Lain North Luwu Regency, Pomalaa & Other Regions

Komposisi Pekerja Berdasarkan Lokasi Kerja [G4-10] [G4-LA12]

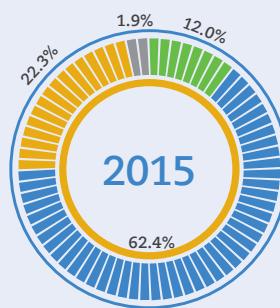
Composition of Employees by Work Location



- Luwu Timur Luwu Timur
- Luar Sulawesi Outside Sulawesi
- Sulawesi

Komposisi Karyawan Berdasarkan Jenjang Pendidikan [G4-LA12]

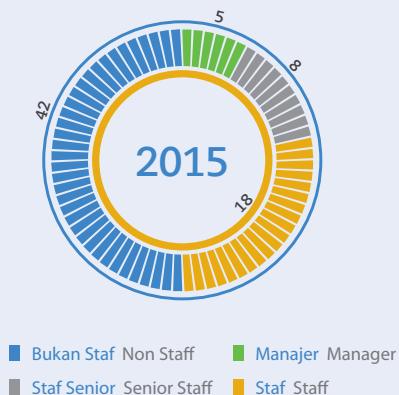
Composition of Employees by Level of Education



- Sarjana Bachelor's Degree
- Pascasarjana Master's and Doctorate Degrees
- Diploma Associate Degree
- SLTA dan Sederajat Senior High School and Equivalent

Jumlah dan Komposisi Karyawan Baru Berdasarkan Jabatan [G4-LA1]

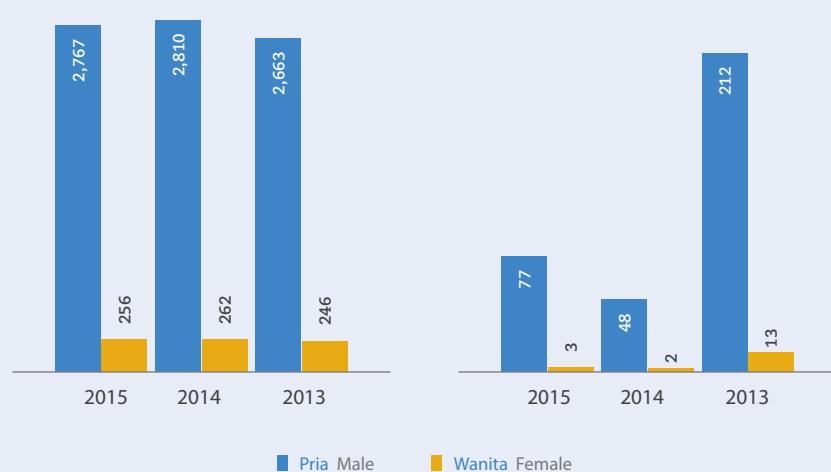
Total and Composition of Employees by Position



Jumlah dan Komposisi Pekerja Berdasarkan Status Kepegawaian Total and Composition of Employees by Employment Status [G4-10] [G4-LA12]

Karyawan Tetap Permanent Employees

Karyawan Kontrak Contract Employees



Jumlah dan Komposisi Karyawan Berdasarkan Jabatan dan Gender [G4-10] [G4-LA12]

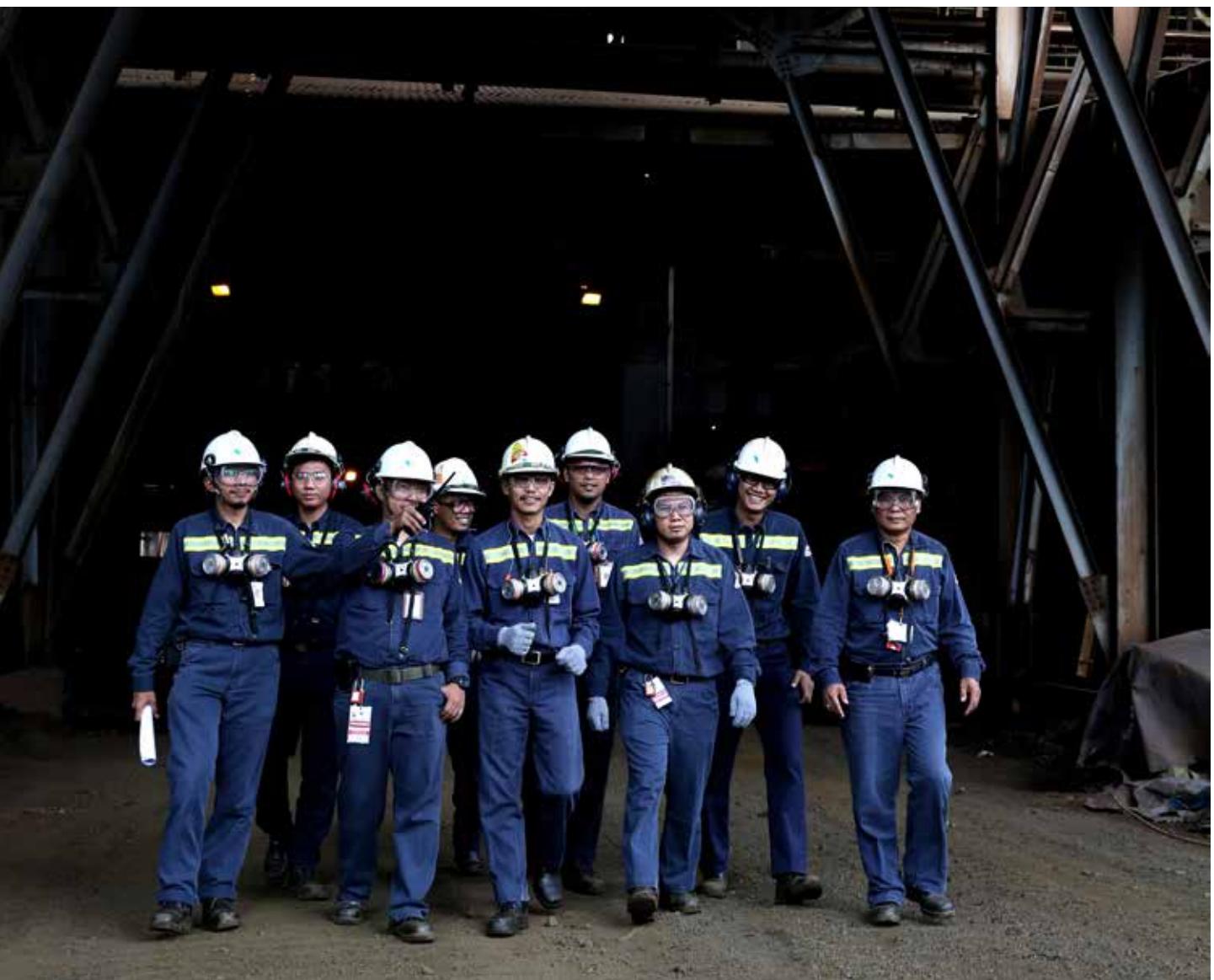
Total and Composition of Employees by Position and Gender

Jabatan / Position	2015		2014	
	Jumlah / Total	Pria / Male	Wanita / Female	
Direktur / Directors	3	2	1	4
Manajer Senior / Senior Manager	12	11	1	15
Manajer Madya / Middle Manager	55	53	2	46
Penyelia / Supervisor	120	112	8	462
Spesialis / Specialist	230	201	29	119
Teknisi / Technician	2,027	1,905	122	2,476

Jumlah dan Komposisi Karyawan Pejabat Tata Kelola Berdasarkan Kelompok Umur [G4-LA12]

Total and Composition of Governance Officials by Age Group

Jabatan / Position	Komposisi Pejabat Tata Kelola Berdasarkan Kelompok Umur / Composition of Governance Officials by Age Group		
	<30	30-50	>51
Direktur / Directors	0	2	1
Manajer Senior / Senior Manager	0	6	6
Manajer Madya / Middle Manager	0	45	10
Penyelia / Supervisor	16	191	23
Spesialis / Specialist	0	110	10
Spesialis / Specialist	158	2,345	180
Jumlah / Total	174	2,699	230



Sejumlah pekerja PT Vale di pabrik pengolahan Sorowako
A number of PT Vale employees at Sorowako process plant

Ketenagakerjaan [G4-11]

Relasi ketenagakerjaan dibangun atas dasar saling menghormati dalam sebuah Perjanjian Kerja Bersama (PKB) yang telah disusun dan disepakati bersama manajemen dengan serikat pekerja sebagai perwakilan karyawan. PKB yang berlaku melindungi segenap pekerja PT Vale. Seluruh karyawan PT Vale telah menandatangani dokumen PKB.

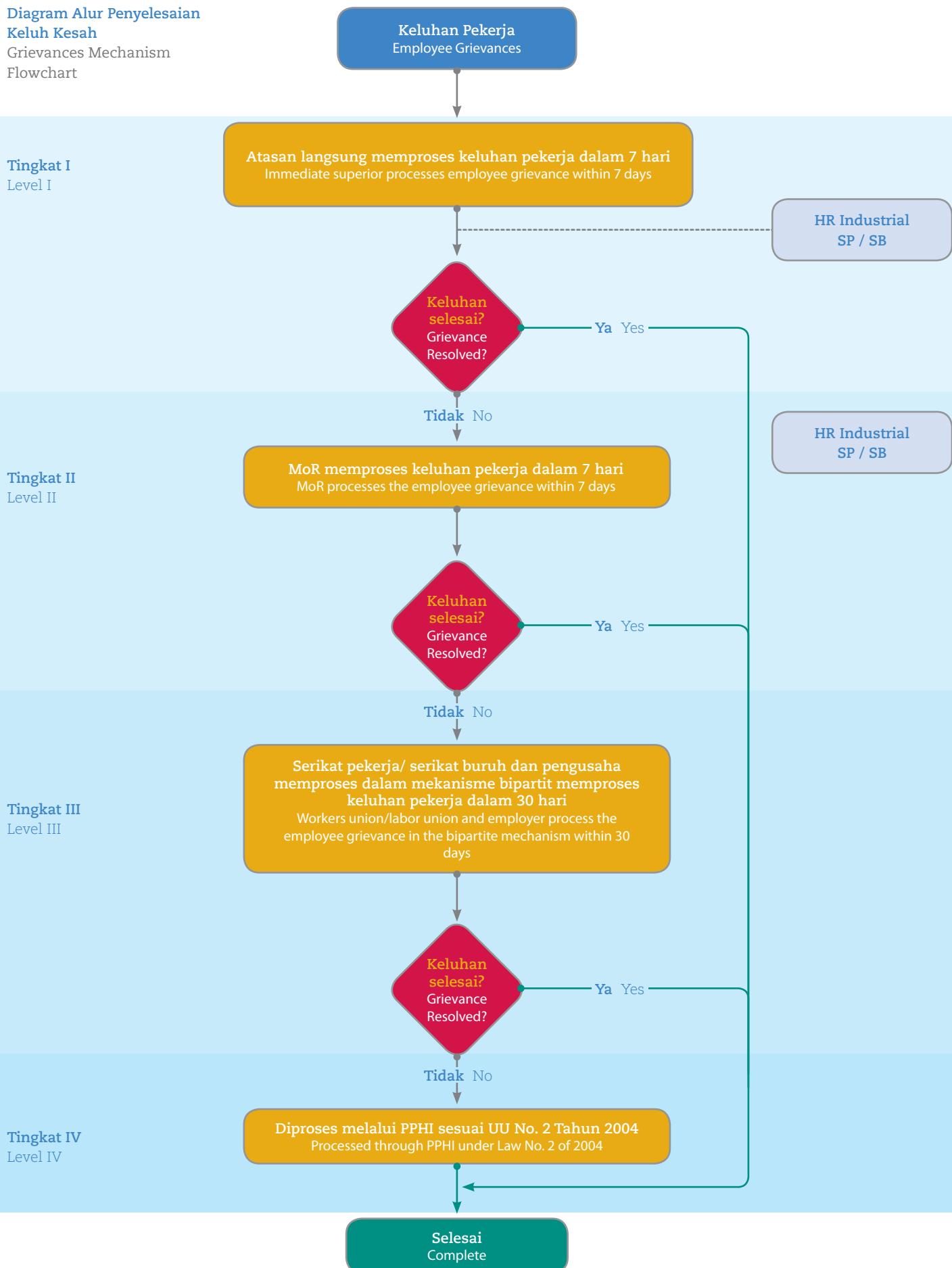
PKB yang berlaku menjadi rujukan bersama bagi penyelesaian bermartabat dari setiap perselisihan terkait hubungan ketenagakerjaan.

Employment [G4-11]

Employment relations are built on mutual respect in a Collective Labor Agreement (CLA), which has been prepared and agreed upon by the management and the workers union as the representative of the employees. The existing CLA protects all employees of PT Vale. All employees of PT Vale signed the CLA document.

The existing CLA is used as a common reference for dignified settlement of any dispute related to the employment relations.

Diagram Alur Penyelesaian Keluh Kesah
Grievances Mechanism Flowchart



Pelatihan Bagi Pekerja [G4-LA9]

Rata-rata jam pelatihan per karyawan pada tahun 2015 adalah 8,19 jam dengan biaya mencapai AS\$737,350.

Training for Employees [G4-LA9]

Average hours of training per employee in 2015 was 8.19 hours with cost reached US\$737,350.

	Jenis Pelatihan Type of Training	Jumlah Peserta Total Participants	Jam Pelatihan Training Hours	Rerata Average
	Pelatihan Manajemen dan Profesional Management and Professional Training	601	684	1.1
Umum General	Pelatihan Teknologi Informasi Information Technology Training	191	256	1.3
	Pelatihan Bahasa Language Training	158	676	4.3
	Pelatihan Teknis Technical Training	4,665	5,728	1.2
	Pelatihan K3 OHS Training	2,675	557	0.2
	Jumlah Total	8,290	7,900	8.19

Diskusi antar karyawan di bagian Corporate Services

Discussion among employees at Corporate Services section

PT Vale melanjutkan proses sertifikasi bagi karyawan sebagai tindak lanjut pembentukan Lembaga Sertifikasi Profesi (LSP). Terdapat 902 karyawan yang telah mengikuti program LSP dan layak untuk diakreditasi oleh Badan Nasional Sertifikasi Profesi (BNSP).

PT Vale continued to process certification for employees as the follow up on the establishment of professional certification agency (LSP). A total of 902 employees have participated in the LSP program and were qualified to be accredited by the National Professional Certification (BNSP)



Pemenuhan Manfaat Kewajiban Masa Depan Karyawan [G4-EC3, G4-LA2]

Karyawan PT Vale yang akan menghadapi masa persiapan pensiun difasilitasi oleh perusahaan dengan pendampingan, pelatihan, dan konseling. Perbedaan manfaat yang didapat oleh karyawan tetap dan tidak didapatkan oleh karyawan tidak tetap adalah tunjangan pensiun.

Fulfillment of Employee Future Benefit Obligation [G4-EC3, G4-LA2]

PT Vale's employees who will enter pre-retirement period are facilitated by the company through mentoring, training, and counseling. The difference of benefits received by permanent employees and non-permanent employees is a pension plan.

Program Pensiun Pension Plan

Jenis Program Masa Depan (Pensiun) Karyawan Type of Pension Plan for Employees

Dana Pensiun International Vale Indonesia International Pension Plan of Vale Indonesia	<p>Sifat penyelenggaraan Nature of management: Wajib Compulsory</p> <p>Skema pembayaran premi/iuran Payment scheme of premium/contribution: 10% perusahaan, 2% karyawan 10% by the company, 2% by employee</p> <p>Skema pembayaran kepada karyawan yang pensiun Payment scheme to retiring employees: Dibayar 100% saat pensiun Paid 100% upon retirement</p> <p>Hal lain yang perlu disampaikan Other thing that needs to be known: Dapat dibayar sebagian di muka sebelum karyawan pensiun May be paid partly in advance before the employee retires</p>
BPJS Ketenagakerjaan (Dahulu Jamsostek) BPJS for Manpower (Formerly Jamsostek)	<p>Sifat penyelenggaraan Nature of management: Wajib Compulsory</p> <p>Skema pembayaran premi/iuran: Payment scheme of premium/contribution: 2% karyawan (utk JHT), 3.74% perusahaan 2% by employee (for JHT), 3.74% by the company</p> <p>Skema pembayaran kepada karyawan yang pensiun Payment scheme to retiring employees: 100% saat karyawan pensiun, atau sesuai peraturan pemerintah Paid 100% upon retirement, or subject to government regulations</p> <p>Hal lain yang perlu disampaikan Other thing that needs to be known: Dapat berubah mengikuti peraturan pemerintah May change subject to government regulations</p>
Saving Plan Lainnya Other Saving Plans	<p>Sifat penyelenggaraan Nature of management: Wajib Compulsory</p> <p>Skema pembayaran premi/iuran Payment scheme of premium/contribution: 10% perusahaan , 0% karyawan (untuk karyawan non-staff) 10% by the company, 0% by employee (for non-staff) 4% perusahaan , 2% karyawan (untuk karyawan staff) 4% by the company, 2% by employee (for staff)</p> <p>Skema pembayaran kepada karyawan yang pensiun Payment scheme to retiring employees: 100% saat karyawan pensiun Paid 100% upon retirement</p>

Penilaian Kinerja Karyawan [G4-EC3]

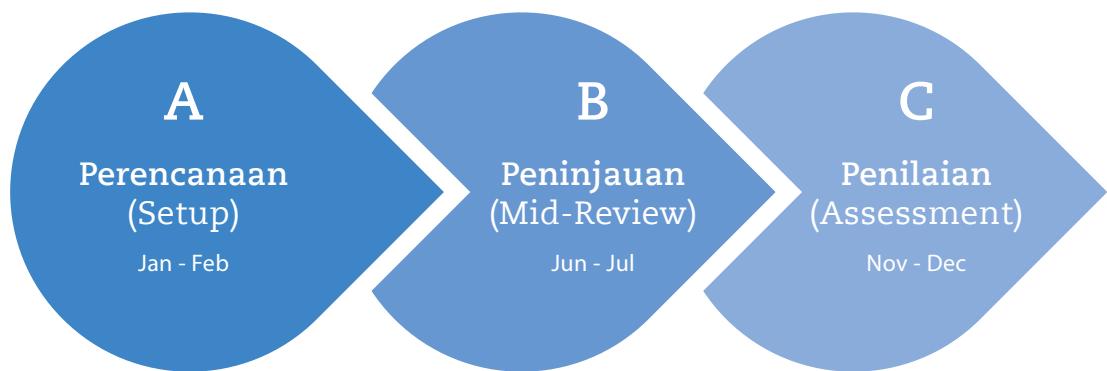
Secara berkala, PT Vale melaksanakan penilaian kinerja bagi setiap karyawan.

Siklus Penilaian Kinerja

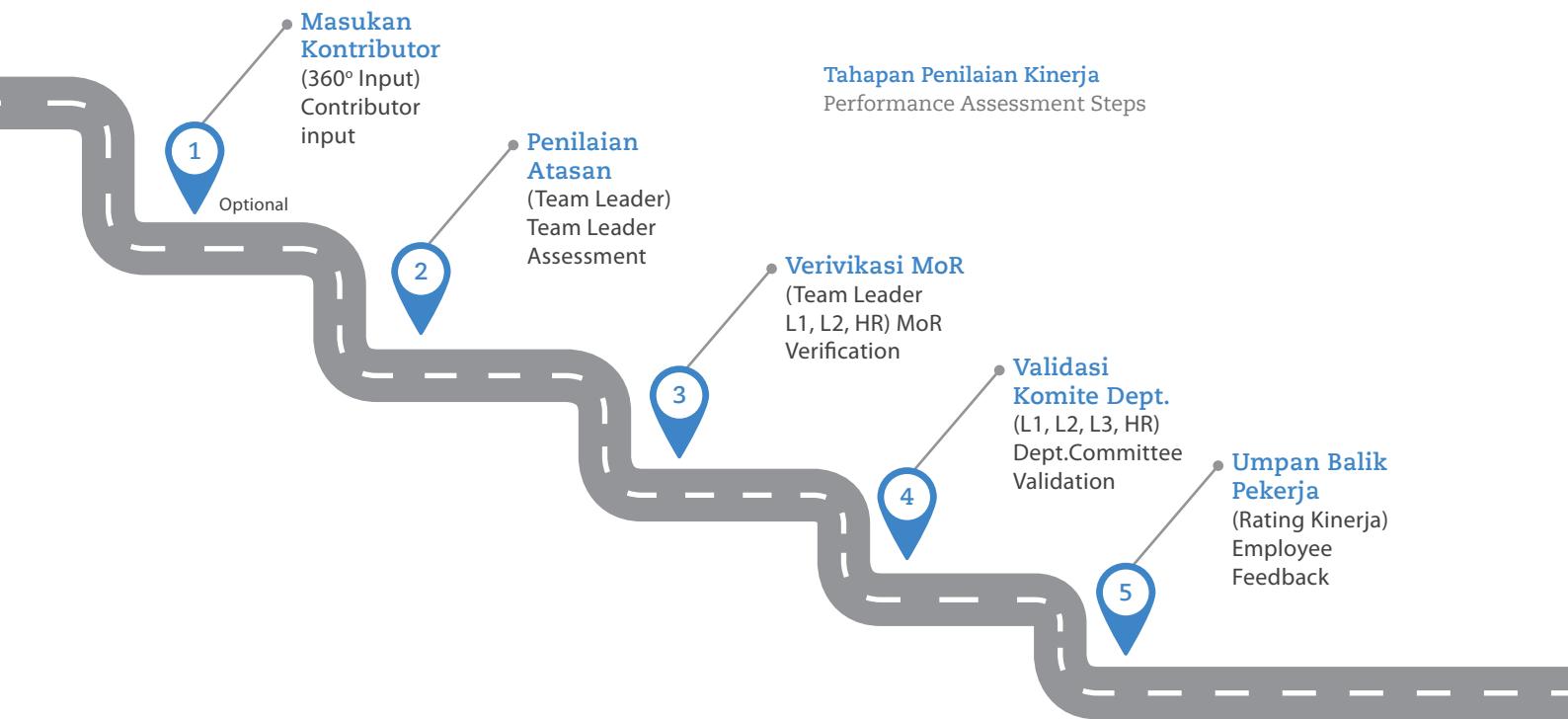
Employee Performance Assessment

Periodically, PT Vale conducts performance assessment of each employee.

Performance Assessment Cycle



Tahapan Penilaian Kinerja Performance Assessment Steps



Note:

- Masukan kontributor terdiri dari *self-assessment* pekerja, *peer*, *customer/client*, *former superior* (mantan atasan)
- Untuk yang lompat dua langkah atau lebih, validasi komite akan melibatkan *team leader*
- Hasil validasi komite (rating kinerja) dikomunikasi kepada *team leader* melalui supervisor untuk dikomunikasikan kepada pekerja masing-masing
- Contributor's input consists of employee self-assessment, peer, customer/client, former superior
- To skip 2 steps or more, committee validation will involve team leader
- Results of committee validation (performance ratings) are communicated to team leader through supervisor to be communicated to each employee

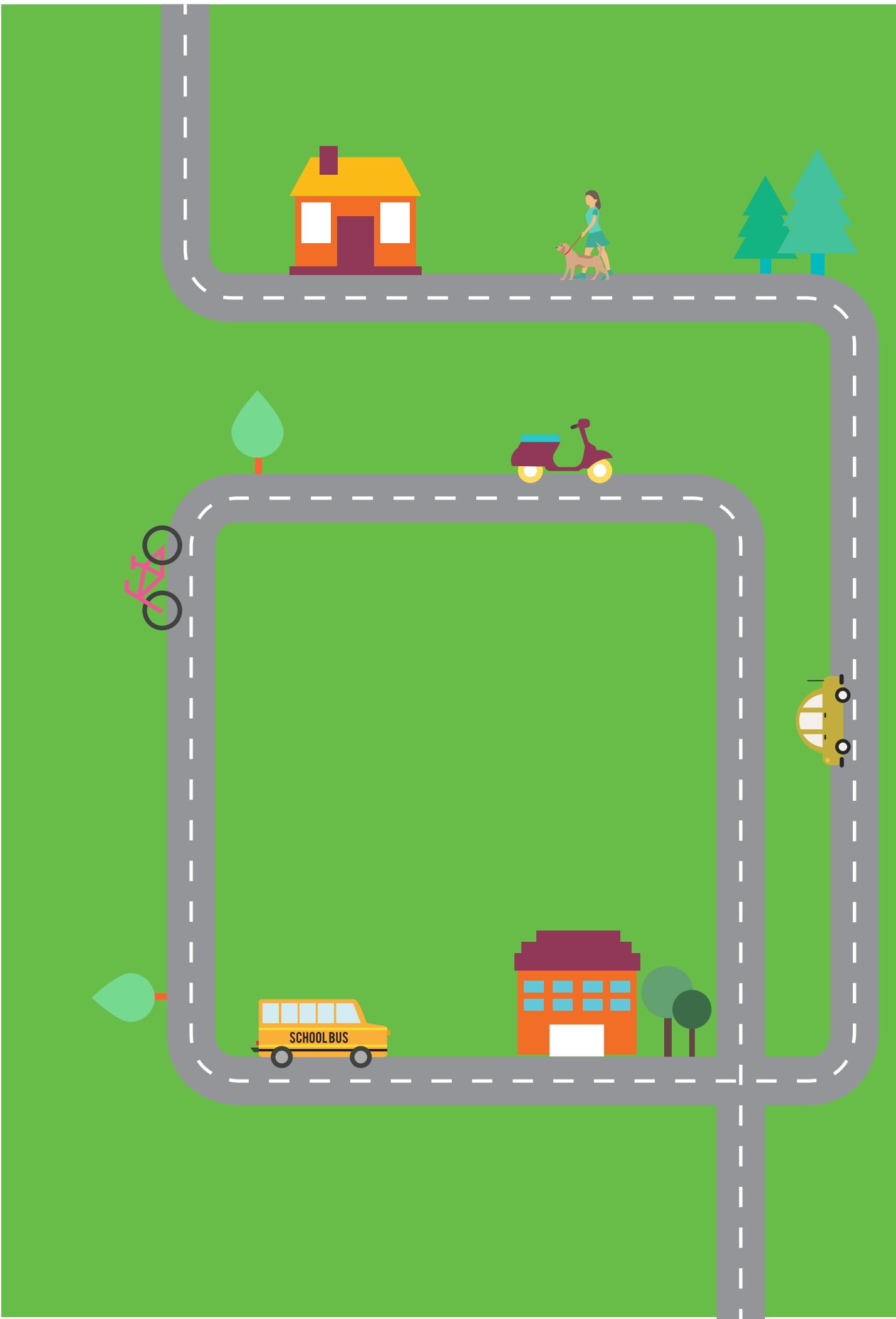
Jumlah Karyawan Penerima Penilaian Kinerja Berdasarkan Gender tahun 2015 [G4-LA11]

Total Employees Receiving Performance Assessment by Gender in 2015

Bentuk Akhir Penilaian Assessment Final Form	Jumlah Total	Pria Male		Wanita Female	
		Jumlah Total	Percentase Percentage	Jumlah Total	Percentase Percentage
Promosi Promotion	315	281	89.21%	34	10.79%
Mutasi dan Rotasi Transfer and Rotation	1,627	1,534	94.28%	93	5.72%
Demosi Demotion	0	0	0	0	0
Jumlah Total	1,942	281	89.21%	34	10.79%

Karyawan memasuki tempat kerja melalui pintu yang dilengkapi dengan sistem pengamanan
 Workers entering working area through doors with securing system





Bagi Lingkungan

For Environment

8%
Pengurangan
emisi SO₂
Reduction of SO₂
emission



In 2015, our pioneering water treatment system, using lamella gravity settler technology, was successfully commissioned.

100%

Menggunakan biodiesel terpasang untuk mengurangi emisi, melanjutkan penggunaan B10 sejak Q4 2014, dan mulai menggunakan B15 sejak Q3 2015

Use of installed biodiesel to reduce emissions, continuing the use of B10 since Q4 2014, and began using B15 since Q3 2015

Mengendalikan Dampak Lingkungan [G4-11]

Perusahaan tunduk dan mengikuti semua peraturan lingkungan hidup dalam menjalankan kegiatan operasi, diantaranya Peraturan Menteri ESDM No.1/2014 terkait peningkatan nilai tambah mineral, serta Peraturan Menteri Lingkungan Hidup No.4/2014 tentang baku mutu emisi. Kepatuhan pada peraturan secara langsung dipantau oleh Direktur *Environment Health & Safety* (EHS). [G4-DMA]

Setiap tahun PT Vale juga menyertakan pelaksanaan pengelolaan lingkungan pada Penilaian Peringkat Kinerja Perusahaan Dalam Pengelolaan Lingkungan (PROPER) oleh Kementerian Lingkungan Hidup dan Kehutanan.

Controlling Environmental Impact

The Company is subject to and follows all environmental regulations in the running its operations, including the Minister of Energy and Mineral Resources Regulation No. 1/2014 on increasing value-added minerals, as well as the Minister of Environment Regulation No. 4/2014 on emission quality standards. Regulatory compliance is directly monitored by the Director of Environment Health & Safety (EHS). [G4-DMA]

Every year PT Vale also enters its environmental management implementation to Corporate Performance Rating in Environmental Management (PROPER) by the Ministry of Environment and Forestry.



Kegiatan pemantauan lahan
rehabilitasi di Bukit Himalaya,
Sorowako

Monitoring activity at
the rehabilitated area in
Himalaya Hill, Sorowako

Terkait dengan ketersediaan cadangan bijih nikel, PT Vale melakukan konservasi sumber daya mineral dengan menghindari terbuangnya mineral secara percuma dan memberikan jaminan usia pemanfaatan sumber daya yang lebih lama. Salah satu langkah upaya konservasi cadangan bijih nikel yang dilakukan adalah pembuatan pile nikel kadar rendah (*low-grade ore* atau LGO).

In regards with the availability of nickel ore reserves, PT Vale conserves the mineral resources by avoiding waste minerals and provides assurance of longer utilization life of resources. One of the nickel ore reserves conservation efforts undertaken is the manufacture of low grade nickel ore (LGO) pile.

Sepanjang tahun 2015 Perusahaan mengendalikan dampak lingkungan melalui berbagai kegiatan:

Throughout 2015 the Company controlled environmental impact through the following activities:

1. Terkait reduksi emisi SO₂, Perusahaan telah memenuhi baku mutu yang ditetapkan dalam Peraturan Menteri Lingkungan Hidup No. 4 Tahun 2014. Ketaatan baku emisi untuk pabrik pengolahan nickel matte dihitung berdasarkan neraca massa dengan baku mutu sebesar 0,86 dan angka neraca massa Perusahaan adalah sebesar 0,78.

2. Fasilitas pengelolaan buangan tambang dengan teknologi LGS (*Lamella Gravity Settler*) telah selesai dibangun dan memasuki tahap *comissioning* untuk mendapatkan parameter operasi yang sesuai. Pembangunan sistem pengolahan air buangan dengan teknologi LGS mengurangi beban cemaran dari air limpasan tambang yang bermuara di danau Matano, terutama parameter TSS.

3. Membangun sistem Instalasi Pengelolaan Air Limbah (IPAL) yang baru dengan teknologi SBR (*Sequencing Batch Reactor*) untuk Rumah Sakit Inco dan teknologi Bioseptic untuk fasilitas sekolah Yayasan Pendidikan Sorowako Lawewu.

4. Memulai penerapan pemisahan (segregasi) sampah organik dan non-organik dari limbah domestik untuk memaksimalkan tempat pembuangan akhir yang dikelola dengan sistem *sanitary landfill*.

1. Related to SO₂ emission reduction, the Company has met the quality standards stipulated in the Regulation of the Minister of Environment No. 4 of 2014. Compliance with the emission standard for nickel matte processing plant was calculated based on mass balance with the quality standard of 0.86 and the Company's mass balance of 0.78.

2. The construction of mine effluent management facilities with LGS (*Lamella Gravity Settler*) technology have been completed and entered the commissioning phase to achieve the appropriate operating parameters. Construction of the effluent treatment system with LGS technology reduces the contamination load from mine runoff water that flows into Lake Matano, especially TSS parameter.

3. Construction of new waste water treatment installation (IPAL) system with Sequencing Batch Reactor (SBR) technology for Inco Hospital and Bioseptic technology for Sorowako Lawewu Education Foundation school facilities.

4. Starting to apply segregation of organic and non-organic domestic waste to maximize final waste disposal site managed with the sanitary landfill system.

Di samping itu, kami selalu melengkapi setiap rencana kegiatan pengembangan usaha dengan penyusunan dokumen Analisis Mengenai Dampak Lingkungan (AMDAL). Kami telah memulai penyusunan AMDAL tentang rencana peningkatan kapasitas produksi nikel di Kabupaten Luwu Timur, Sulawesi Selatan, dan pembangunan pabrik nikel di Kabupaten Morowali, Sulawesi Tengah. Penyusunan AMDAL didasarkan pada Peraturan Menteri Lingkungan Hidup No.5 Tahun 2012, dan No.17 Tahun 2012 yang mengatur penyusunan AMDAL serta Izin Lingkungan. [G4-DMA]

In addition, we have always equipped each plan of business development activities with the Analysis on Environmental Impact (AMDAL) document. We have started the AMDAL preparation on plans to increase nickel production capacity in Luwu Timur, South Sulawesi, and the construction of nickel plant in Morowali Regency, Central Sulawesi. The AMDAL is prepared based on the Regulation of the Minister of Environment No.5 of 2012, and No. 17 of 2012 governing the preparation of AMDAL and Environmental Permit. [G4-DMA]

Mekanisme Pengelolaan Lingkungan Hidup [G4-14]

Environmental Management Mechanism

Mekanisme Mechanism	Legalitas	Periodisasi
Analisis Mengenai Dampak Lingkungan (AMDAL) Analysis on Environmental Impact (AMDAL)		Di Awal Proyek At the Beginning of Project
Rencana Pemantauan Lingkungan (RPL) Environmental Monitoring Plan (RPL)	Peraturan Pemerintah Nomor 27 Tahun 2012 Tentang Izin Lingkungan Government Regulation No. 27 of 2012 on Environmental Permit	Setiap 6 Bulan Every 6 months
Rencana Pengelolaan Lingkungan (RKL) Environmental Management Plan (RKL)		Setiap 6 Bulan Every 6 months
Penilaian PROPER PROPER Assessment	Peraturan Menteri LH Nomor 3 Tahun 2014 Tentang PROPER Environment Minister Regulation No. 3 of 2014 on PROPER	Setiap Tahun Annual

Tahun 2015 Perusahaan tengah menyelesaikan penyusunan Dokumen AMDAL Blok Pomalaa di Kabupaten Kolaka, Sulawesi Tenggara. Ada beberapa rekomendasi yang disampaikan pemangku kepentingan terkait penyusunan Dokumen AMDAL Blok Pomalaa. Rekomendasi ini menjadi perhatian PT Vale untuk ditindaklanjuti, diantaranya: [G4-27]

1. Menjelaskan secara mendalam tentang rencana kegiatan yang meliputi lokasi dan jadwal kegiatan, pembangunan pabrik, pelabuhan, bendungan, dan rencana penyerapan tenaga kerja.
2. Mengkaji lebih mendalam dampak kegiatan terhadap lingkungan, seperti kualitas air permukaan, laut, hutan lindung, keanekaragaman hayati, hak tanah adat masyarakat, dan gangguan pada mata pencarian penduduk.
3. Memindahkan rencana lokasi pelabuhan untuk menghindari kawasan strategis kabupaten untuk pengembangan hutan bakau.
4. Berkoordinasi erat dengan pemerintah pusat, instansi terkait dan pemerintah daerah dalam pemenuhan peraturan perundang-undangan, implementasi program CSR dan penyerapan tenaga kerja.
5. Melakukan sosialisasi pelaksanaan rencana kegiatan secara terbuka dan intensif kepada pihak-pihak terkait dan masyarakat terdampak.

In 2015, the Company completed the preparation of AMDAL Document of Pomalaa Block in Kolaka, Southeast Sulawesi. There were several recommendations made by stakeholders regarding the AMDAL document preparation of Pomalaa Block. These recommendations were heeded by PT Vale to be followed up, including:

- [G4-27]
1. Describe in depth on action plans that include the location and schedule of activities, the construction of plants, ports, dams, and plans for employment.
 2. Deeper analysis of the activities impact on the environment, such as the quality of surface water, sea, protected forests, biodiversity, land rights of indigenous communities, and disruption of livelihoods.
 3. Relocate the site plan of port to avoid the regency's strategic area for the development of mangrove forests.
 4. Coordinate closely with the central government, relevant agencies and local governments in compliance with laws and regulations, the implementation of CSR programs and employment.
 5. Disseminate the action plan execution transparently and intensively to the concerned parties and affected communities.

6. Mempertimbangkan aspek batas wilayah studi dengan tidak memasukkan Kabupaten Kolaka Timur mengingat semua rencana kegiatan berada di Kabupaten Kolaka.

6. Consider the study area boundaries by excluding East Kolaka Regency due to all activity plans are in Kolaka Regency.

Penggunaan Material [G4-EN1, G4-EN2]

Dalam proses produksi, Perusahaan juga melakukan identifikasi penggunaan material yang dapat atau tidak dapat diperbarui. Identifikasi ini terkait dengan upaya efisiensi dan menjaga kelestarian lingkungan hidup.

Use of Material [G4-EN1, G4-EN2]

In the production process, the Company also identified the use of materials that can or can not be updated. This identification is related to the efficiency and preserving the environment.

Penggunaan Material

Material Uses

Material Terpakai Material Consumption

Material	Description	Unit	2015	2014	2013
Bijih Nikel Nickel Ore	Bahan baku tidak bisa diperbarui Processing material Non-renewable	WMT	15.161.170	13.557.891	13.070.625
Amonium Nitrat Ammonium Nitrate	Bahan pendukung tidak bisa diperbarui Processing material Non-renewable	Kg	191.075	207.225	194.575
Sisa lapisan tanah Overburden	Bahan tersisa digunakan kembali Waste material reused	WMT	42.422.043	33.335.407	30.027.605
Lapisan Tanah Atas Top soil	Bahan tersisa digunakan kembali Waste material reused	WMT	377.877	479.118	298.629
Silika Silica	Bahan pendukung tidak bisa diperbarui Processing material Non-renewable	DMT	76,082	88,371	103,751
Sulfur Sulphur	Bahan pendukung tidak bisa diperbarui Processing material Non-renewable	Ton	63,247	63,727	59,826
Debu Tanur Pereduksi Reduction Kiln Dust	Bahan pendukung hasil proses daur ulang Processing material recycled material	MT Ni	21,695	20,459	21,931
Debu Tanur Listrik (Kalsin) Electric Furnace Dust (Calcine)	Bahan pendukung hasil proses daur ulang Processing material recycled material	DMT Ni	862	818	811
Matte Dari Kolam Penampung Matte From Pond	Bahan pendukung hasil proses daur ulang Processing material recycled material	DMT Ni	437	446	438
Terak Nikel Tinggi High Nickel Slag	Bahan pendukung hasil proses daur ulang Processing material recycled material	DMT Ni	8,416	10,672	12,362
Nikel Bekas Nicke Scrap	Bahan pendukung hasil proses daur ulang Processing material recycled material	DMT Ni	22,505	31,110	33,668
Pasta Electroda Electrode Paste	Bahan pendukung tidak bisa diperbarui Processing material Non-renewable	MT Ni	7,000	6,169	5,074

Reklamasi Pascatambang [MM1, MM2, MM10]

Luasan tambang terbuka pada tahun 2015 mencapai 1.192,58 Ha. Sebagian dari salah satu wilayah operasi PT Vale, Sorowako, memiliki area sebesar 70.894 Ha. Sebanyak 58,92% dari area tersebut (41.822,95 Ha) merupakan area yang dilindungi.

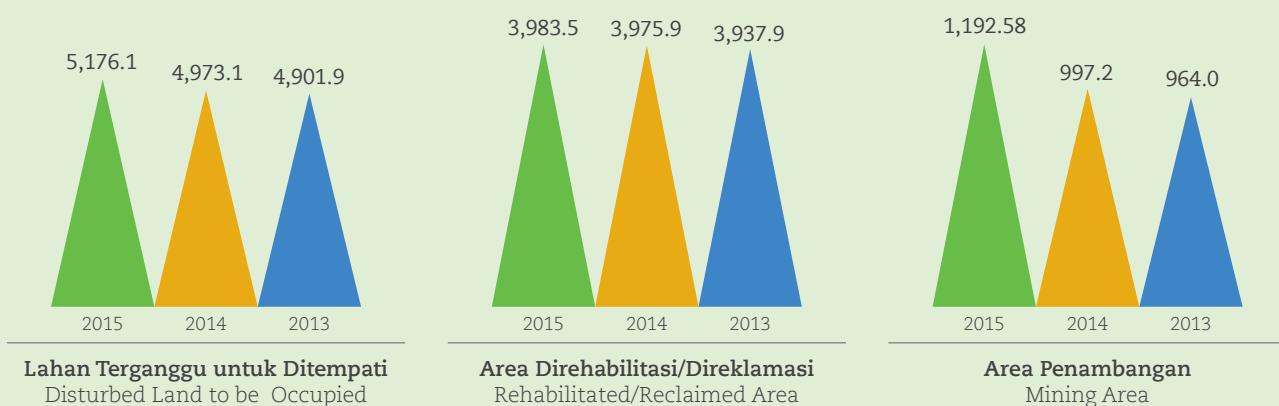
Perubahan bentang alam akibat kegiatan penambangan berupa lereng dan cebakan besar akan ditimbun dengan material tanah penutup (*overburden*) yang akan ditata kembali menyerupai bentang alam dengan perbandingan kelerengan 1 : 3. Permukaan lahan ini selanjutnya akan ditutupi dengan *top soil* setebal 30 cm. Luasan area direhabilitasi/direklamasi mencapai 3.985,5 Ha, dengan akumulasi jumlah pohon ditanam sebanyak 1.859.107 batang.

Post-Mining Reclamation [MM1, MM2, MM10]

The area of open pit mine in 2015 reached 1,192.58 Ha. Part of one of the operational areas of PT Vale, Sorowako, had an area of 70,894 Ha. A total of 58.92% of the area (41,822.95 Ha) is protected area.

The change of landscape resulted from mining activities in the form of slopes and large deposits will be backfilled with overburden material that will be reorganized to resemble the landscape with a slope ratio of 1: 3. The surface of the land will then be covered with top soil of 30-cm thick. The rehabilitated/reclaimed area reached 3,983.5 hectares, with a total of 1,859,107 planted trees.

Luasan Penggunaan Lahan | Land Use Area (Ha)



Perusahaan memperhatikan peraturan internal Vale global, yakni Vale *Environmental Management System* (EMS). Sesuai ketentuan dalam Vale EMS, luasan lahan tambang terbuka atau *open cast* tidak boleh melebihi 1.100 hektar. Untuk mempertahankan luasan tambang terbuka ini, PT Vale melakukan kegiatan pascatambang pada semua wilayah operasi. Dengan demikian, luasan tambang tetap dapat memenuhi ketentuan dalam Vale EMS. [G4-DMA]

The Company pays attention to Vale Global internal regulation, the Vale Environmental Management System (EMS). According to the provisions in the Vale EMS, the area of open pit mine should not exceed 1,100 hectares. To maintain the area of open pit mine, PT Vale conducts post-mining activities in all areas of operations. Thus, the area of the mines can still meet the requirements of Vale EMS. [G4-DMA]

Tahapan rehabilitasi lahan pascatambang meliputi penataan atau pembentukan muka lahan dengan standar lereng lahan rehabilitasi, pengembalian tanah pucuk, pengendalian erosi, pembangunan drainase, pembangunan jalan revegetasi, penghijauan dengan penanaman tumbuhan perintis dan endemis, pemeliharaan tanaman, dan pemantauan keberhasilan.

Dalam wilayah kegiatan operasional, Perusahaan juga mengidentifikasi beberapa lokasi penambangan liar atau skala kecil. Keberadaan mereka sedapat mungkin selalu dikomunikasikan dengan Pemerintah Daerah setempat.

Post-mining land rehabilitation phase includes restructuring or formation of land surface with rehabilitated land slope standard, topsoil restoration, erosion control, drainage construction, road building, revegetation, reforestation by planting pioneer and endemic plants, plant maintenance, and success monitoring.

In the operational, the Company also has identified several illegal or artisanal mines. Their presence as much as possible is always communicated with the local government.

Lokasi Penambangan Liar atau Penambangan Skala Kecil [MM8]

Illegal and Artisanal Mining Location

Kabupaten Regency	KK PT Vale-2010	Jumlah IUP-ESDM 2013		Overlap (Tumpang Tindih) dengan Kontrak Karya (KK) PT Vale			
		Total IUP-ESDM 2013	Total Luas Total Area (Ha)	Jumlah IUP Total IUP	Total Luas Total Area (Ha)	% Overlapping dengan KK % Overlapping with CoW	
Blok Block	Luas Area (Ha)	Jumlah IUP Total IUP	Total Luas Total Area (Ha)	Jumlah IUP Total IUP	Total Luas Total Area (Ha)	% Overlapping dengan KK % Overlapping with CoW	
Morowali	Bahodopi & Kolonodale	36,635	196	606,443	50	34,719	94.77
Luwu Timur	Sorowako-Towuti	118,386	12	34,457	2	11	0.01
Kolaka	Pomalaa	20,286	36	34,665	1	0.0001	0
Kolaka Utara North Kolaka	Suasua-Latao	13,518	54	60,024	14	11,338	83.88
Konawe	N/A	N/A	23	117,364	N/A	N/A	N/A
Konawe Utara North Konawe	Matarappe	1,679	118	246,982	4	111	6.59
Luwu Utara North Luwu	N/A	N/A	8	197,924	N/A	N/A	N/A
Luwu	N/A	N/A	13	71,039	N/A	N/A	N/A
Total		190,504	460	1,368,897	71	46,179	



Ruang pengawasan di
Bendungan Balambano
Control room area in Balambano
Hydro Dam

Biaya Lingkungan [G4-EN31]

Besaran biaya lingkungan untuk tahun 2015 mencapai 10,2 juta dolar AS, naik 16% dibandingkan tahun 2014. Jumlah ini juga lebih besar dari anggaran yang dialokasikan, yaitu 9,4 juta dolar AS. Tanpa mengurangi kualitas kegiatan pengelolaan lingkungan, rencana biaya lingkungan yang dianggarkan untuk tahun 2016 sebesar 8,1 juta dolar AS.

Menjaga Sumber Air [G4-EN8, G4-EN9]

PT Vale memanfaatkan air untuk keperluan proses produksi dan Pembangkitan Tenaga Listrik (PLTA). Sumber air yang digunakan berasal dari air permukaan Danau Matano.

Rerata pemakaian air danau untuk keperluan produksi adalah 124,2 m³ per ton nikel dalam matte, naik dibandingkan rerata tahun 2014 sebanyak 108,3 m³ per ton nikel dalam matte. Kenaikan ini disebabkan karena meningkatnya jumlah produksi nikel di tahun 2015, yakni sebesar 2,451 ton.

Environmental Costs [G4-EN31]

The environmental costs for 2015 amounted to US\$10.2 million, up 16% compared to 2014. This amount was higher than the allocated budget at US\$9.4 million. Without lowering the quality of environmental management activities, environmental cost plan budget for 2016 amounted to US\$8.1 million.

Conserving Water Sources [G4-EN8, G4-EN9]

PT Vale uses water for the production process and hydroelectric power plant (PLTA). The source of water used originated from the surface water of Lake Matano.

Average use of lake water for production purposes was 124.2 m³ per ton of nickel in matte, slightly higher than the average in 2014 of 108.3 m³ per ton of nickel in matte. This increase was due to increased nickel production volume in 2015, which amounted to 2,451 tons.

Total Volume Air Terpakai Berdasarkan Sumber

Total Water Usage Based On Sources

Sumber Air Water Sources	Penggunaan Usage	VOLUME (m ³)		
		2015	2014	2013
	Pabrik Plant Site	10,080,237	8,512,063.5	7,645,426.08
Air Permukaan Surface Water	Pemukiman Residence	7,222,548	4,538,843.0	3,302,606.67
	PLTA Hydro Power Plant	10,792,966,670.73	10,299,860,508.65	9,792,280,787.43

Intensitas Pemakaian Air untuk Produksi

Water Intensity for Production

Uraian Description	Satuan Unit	VOLUME (m ³)		
		2015	2014	2013
Produksi Nikel dalam Matte Nickel matte Production	Ton	81,177	78,726	75,802
Konsumsi Air Water Consumption	m ³	10,080,237	8,512,063.5	7,645,426.08
Konsumsi Air per Ton Produksi Water Consumption per Ton Production	m ³ /Ton	124.2	108.3	100.7

Selain mengendalikan volume air yang dimanfaatkan, Perusahaan juga memantau kualitas air Danau Matano beserta keanekaragaman hayati di dalamnya. Kami memastikan tidak ada spesies di Danau Matano yang termasuk dalam Daftar Merah IUCN, maupun keanekaragaman hayati lain yang terganggu akibat pengambilan dan pemanfaatan air danau. [G4-EN26]

In addition to controlling the volume of water uses, the Company also monitors the quality of Lake Matano water and its biodiversity. We make sure there are no species in Lake Matano included in the IUCN Red List, neither other biodiversity disturbed due to withdrawal and use of the lake water. [G4-EN26]

Di samping penggunaan air untuk keperluan proses produksi dan Pembangkit Listrik Tenaga Air (PLTA), Perusahaan berupaya meminimalkan air limbah hasil dari kegiatan tambang. Air limbah ini memiliki kandungan konsentrasi Cr₆₊ yang berpotensi terbawa oleh aliran air hujan. Dampak negatif ditanggulangi dengan memantau kandungan padatan air limbah pada kolam sedimentasi sebelum dialirkan kembali ke badan air. [G4-EN26]

Kami telah membangun kolam sedimentasi berkapasitas 3.5 juta m² yang berfungsi mengendapkan padatan terlarut di dalamnya, dengan menambahkan ferrous sulfat monohidrat. Selanjutnya, dilakukan pengujian secara teratur untuk memastikan bahwa kualitas olahan air limbah tersebut telah memenuhi baku mutu yang ditetapkan Pemerintah. Sebagian dari air di kolam pengendapan ini juga dimanfaatkan untuk penyiraman jalan di area tambang. [G4-EN22]

In addition to the use of water for the production process and hydroelectric power plant, the Company strived to minimize the effluent from mining activities. The effluent contains Cr₆₊ concentration that could potentially be carried by the rainwater runoff. The negative impact is mitigated by monitoring the solid content of the effluent in sedimentation ponds before being discharged into the water body. [G4-EN26]

We have built sedimentation ponds with capacity of 3.5 million m², which have the function to precipitate the dissolved solids in it, by adding ferrous sulphate monohydrate. Furthermore, testing is done regularly to ensure that the quality of the processed effluent has met the quality standards set by the Government. Most of the water in the sedimentation ponds are also used for watering the road in the mine area. [G4-EN22]

Volume Air Limbah dan Sumbernya [G4-EN22, G4-EN26]

Effluent Volume and Source

Sumber Source	Badan Air Water Bodies	Tahun Year	Kinerja Pengelolaan Efluen Effluent Treatment Perfomance				
			Flow Total	TSS	Cr Total	Cr ₆₊	Fe
Anak Sungai Lamoare Creek (LC3)	Danau Matano Lake Matano	2013	5,386,058	9.62	0.100	<0.02	0.9033
		2014	6,525,922	21.00	<0.030	0.0320	0.4063
		2015	6,427,909	16.00	0.135	<0.030	0.4083
Lamangka (LMK)	Danau Mahalona Lake Mahalona	2013	71,259,205	6.42	0.113	0.0600	0.4645
		2014	62,528,228	17.50	0.049	<0.030	0.3139
		2015	36,960,298	<10	0.040	<0.030	0.2327
Petea Timur East Petea	Danau Matano Lake Matano	2013	8,254,857	19.83	0.046	<0.02	1.3843
		2014	4,628,641	25.38	0.042	<0.030	0.6074
		2015	4,963,220	15.00	0.047	<0.030	0.8822
Petea Barat West Petea	Danau Matano Lake Matano	2013	18,738,990	11.50	0.030	<0.02	1.0038
		2014	14,000,934	44.00	0.079	<0.030	0.4055
		2015	6,975,488	22.40	0.030	<0.030	0.7563



Bendungan PLTA Balambano
dengan kapasitas 110 MW

Balambano Hydro Power Plant
with 110 MW capacity

Pemanfaatan Energi [G4-EN3]

Energi dibutuhkan terutama untuk kegiatan penambangan bijih nikel laterit dan proses produksi nikel dalam matte. Sumber-sumber energi yang dimanfaatkan PT Vale selama tahun 2015 meliputi bahan bakar minyak (BBM) berupa *High Speed Diesel* (HSD), *High Sulfur Fuel Oil* (HSFO), dan bensin, serta batubara dan listrik. Sebagian besar energi yang dikonsumsi ini termasuk energi tak terbarukan.

Secara umum, konsumsi energi selama tahun 2015 bertambah 7% menjadi 28,552,292.40 GJ, dibanding tahun 2014 sebesar 26,613,595.40 GJ. Perhitungan ini dilakukan dengan metode penjumlahan dan konversi angka ke GJ. Kenaikan konsumsi energi terjadi seiring peningkatan kegiatan operasional, baik penambangan bijih nikel laterit maupun produksi nikel dalam matte.

Energy Uses [G4-EN3]

Energy is needed mainly for nickel laterite ore mining and production process of nickel in matte. Other sources of energy used by PT Vale during 2015 included fuel (BBM) in the form of High Speed Diesel (HSD), High Sulfur Fuel Oil (HSFO), and gasoline, as well as coal and electricity. Most of the energy consumed are non-renewable energy sources.

In general, the energy consumption in 2015 increased 7% to 28,552,292.40 GJ, compared to 2014 amounted to 26,613,595.40 GJ. The calculation is done by the method of addition and the conversion of numbers to GJ. The energy consumption increased along with increases in operational activities, both laterite ore mining and nickel in matte production.

Konsumsi Energi [G4-EN3]

Energy Consumption

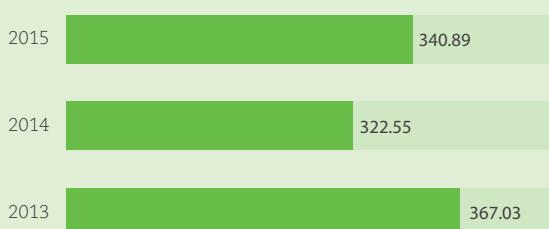
Jenis Energi Type of Energy	Pemakaian Consumption	Periode Pelaporan dan Volume (GJ) Reporting Period and Volume (GJ)		
		2015	2014	2013
Batubara Coal	Pembakar CCP Dryer	5,363,150.13	4,965,504.00	1,020,492.94
HSD* High Speed Diesel	Pembakar Dryer, Kiln Kendaraan Vehicle	3,298,526.39	2,489,287.16	2,344,294.89
HSFO** High Sulphur Fuel Oil	Pembakar Dryer, Kiln Pemanas Boiler Kendaraan Vehicle	10,537,303.28	10,001,924.30	14,179,764.49
Bensin Gasoline	Kendaraan Vehicle	17,346.28	17,031.55	16,379.20
PLTD Diesel Power Plant	Tenaga listrik untuk Pabrik Pengolahan Power Generation for Processing Plant	205,909.23***	22,496.33	18,683.61
Listrik PT PLN Electricity from PT PLN	Listrik untuk Komunitas Electricity for community	12,816.01	8,235.68	5,125.79
PLTA Hydro Power Plant	Tenaga listrik untuk Pabrik Pengolahan Power Generation for Processing Plant	9,117,241.51	9,109,116.31	8,709,537.90
Jumlah Total		28,552,292.40	26,613,595.40	26,294,278.80

* tidak termasuk kendaraan | excluding vehicles

** tidak termasuk pemanas (boiler) dan kendaraan | excluding boiler and vehicles

*** Kenaikan terjadi, salah satunya karena adanya dampak El Niño sehingga penggunaan diesel bertambah | One of the increasing use of diesel due to the impacts of El Nino

Intensitas Energi
Energy Consumption
(GJ/ton)
[G4-EN3]



↑ 5%

Intensitas Energi*
Energy Intensity

* Kenaikan intensitas energi terjadi karena jumlah produksi yang meningkat dan adanya fluktuasi kadar biji nikel
The increase in energy intensity occurred due to the increased production volumes and the fluctuations in nickel ore grade

Pengembangan Energi Baru dan Terbarukan

Hingga akhir tahun 2015, Perusahaan mengoperasikan tiga unit Pembangkit Listrik Tenaga Air (PLTA) sebagai sumber energi, dengan total kapasitas 365 MW.

Development of New and Renewable Energy

By the end of 2015, the Company has operated three hydroelectric power plants (PLTA) as energy sources, with a total capacity of 365 MW.

PLTA Larona dengan kapasitas 165 MW
Larona Hydro Power Plant with 165 MW capacity



Kapasitas PLTA
PLTA Capacity

Unit PLTA PLTA Unit	Tahun Operasi Year Operation	Kapasitas (MW) Capacity (MW)
PLTA Larona	1979	165
PLTA Balambano	1999	110
PLTA Karelbe	2011	90
Total		365

Pemanfaatan Energi dari PLTA | Energy Uses from PLTA



↑ 0.09%
Δ% (3:4)

↓ 4.59%
Δ% (4:5)

Pengembangan Biodiesel

PT Vale juga telah menggunakan biodiesel dengan kandungan 15%. Total volume biodiesel yang digunakan tahun 2015 mencapai 28 juta liter. Pengembangan biodiesel menjadi bentuk kepatuhan dan kesiapan PT Vale dalam mendukung ketentuan Pemerintah yang tertuang dalam Kebijakan Energi Nasional, yang terimplementasi dalam Peraturan Menteri ESDM No. 12 Tahun 2015 tentang kewajiban pemakaian biodiesel sebesar 20% pada kendaraan bermotor di tahun 2016.

Efisiensi Energi [G4-EN6]

PT Vale mengoptimalkan tiga unit PLTA milik sendiri sebagai sumber energi untuk kegiatan produksi maupun aktivitas pendukung lainnya. Unit pembangkit termal hanya dioperasikan pada kondisi tertentu sehingga mengurangi tingkat pemakaian BBM secara signifikan.

Selama tahun 2015, Perusahaan juga meningkatkan pemakaian batubara sebagai bahan bakar mesin pengeringan nikel. Penggunaan batubara secara bertahap diproyeksikan untuk menggantikan HSFO. Besaran intensitas energi dari tahun 2014 ke tahun 2015 naik sebesar 5%.

Intensitas Energi [G4-EN5]

Energy Intensity

Uraian Description	Satuan Unit	2015	2014	2013
Total Produksi Total Production	ton	81,177	78,726	75,802
Total Energi Terpakai Total Energy Uses	GJ	27,672,889	25,333,175	27,021,696.72
Intensitas Energi Energy Intensity	GJ/ton	340.89	322.55	367.03

Konsumsi Batubara dan HSFO [G4-EN3]

Coal and HSFO Consumption

Uraian Description	Satuan Unit	2015	2014	2013
Batubara Coal	DMT	227,314	210,460	43,253
HSFO	Barrel	1,732,273	1,644,260	2,331,073

Biodiesel Development

PT Vale has also been using biodiesel with a content of 15%. Total volume of biodiesel used in 2015 reached 28 million liters. Biodiesel development has become a form of PT Vale's compliance and readiness to uphold government requirements set out in the National Energy Policy, which is implemented in the Regulation of the Minister of Energy and Mineral Resources No. 12 of 2015 on the obligation to use 20% biodiesel for motor vehicles in 2016.

Energy Efficiency

PT Vale has optimized its own three units of hydroelectric power plants as an energy source for production activities or other support activities. The thermal power plant unit is operated only on certain conditions to reduce fuel consumption significantly.

During 2015, the Company also increased the use of coal as fuel for nickel drying machines. The use of coal is projected to gradually replace HSFO. The energy intensity from 2014 to 2015 rose by 5%.

Biaya Produksi

Production costs

Komponen Biaya Produksi Production Cost Components	2015		2014	
	Biaya (Juta AS\$)	%	Biaya (Juta AS\$)	%
BBM dan Pelumas Fuel and Lubricants	153.0	23	223	30.4
Bahan Pembantu Indirect Materials	154.7	23	150.5	20.4
Biaya Depresiasi, Amortisasi, Deplesi Depreciation, Amortization, Depletion Costs	121.4	18	122	16.6
Lainnya Other	235.2	36	240.1	32.6
Total Total	664.3	100	736.5	100

Pasokan listrik dari PLTA juga menjadikan biaya pengolahan nikel menjadi lebih rendah dibandingkan pembangkit termal. Rata-rata biaya produksi nikel tahun 2015 mencapai 8.183,35 dolar AS per metrik ton nikel. [G4-EN6]

Power supply from hydroelectric power plants has also lowered nickel processing costs compared to thermal power plants. The average cost of nickel production in 2015 reached US\$8,183.35 per metric ton of nickel. [G4-EN6]

Pengendalian Emisi [G4-DMA]

Pengendalian emisi terutama dilakukan dengan pengurangan SO2 dan CO2. Kegiatan pengendalian emisi mengacu pada Keputusan Menteri Negara Lingkungan Hidup (Kepmen LH) No.13 Tahun 1995 Tentang Baku Mutu Emisi Sumber Tidak Bergerak, dan Surat Edaran Kementerian Lingkungan Hidup No.B-8594/MENLH/09/2011 yang mengatur emisi SO2 untuk industri nikel.

Emission Control [G4-DMA]

Control of emissions is mainly done by reducing SO2 and CO2 emissions. Emission control programs refer to the Decree of the State Minister of Environment No. 13 of 1995 on Quality Standard of Emissions from Stationary Sources and Circular of the Ministry of Environment No. B-8594/MENLH/09/2011, on SO2 emissions for nickel industry.

Pengendalian emisi meliputi pemantauan dan pengukuran kualitas pada cerobong tanur reduksi, tanur peleburan dan tanur pengeringan. Pengukuran dilakukan laboratorium independen terakreditasi.

Emission control includes monitoring and measuring the quality of reduction furnace, smelting furnace and dryer kiln stacks. Measurements are conducted by accredited independent laboratory.

Hasil pengukuran emisi dilaporkan secara berkala kepada Pemerintah melalui Rencana Pengelolaan Lingkungan (RKL) dan Rencana Pemantauan Lingkungan (RPL). Dari hasil pemantauan diketahui ambang batas emisi dari cerobong asap selama tahun 2015 masih sesuai dengan baku mutu yang ditetapkan Pemerintah.

Emission measurement results are reported regularly to the Government through the Environmental Management Plan (RKL) and Environmental Monitoring Plan (RPL). The emission monitoring results found the emission threshold of the stacks during 2015 met the quality standards set by the Government.

Emisi SO₂ [G4-EN21]

PT Vale mengendalikan emisi SO₂ dengan meningkatkan efisiensi pemakaian sulfur dan mengganti HSFO dengan batubara. Melalui upaya ini, hingga akhir 2015, emisi SO₂ yang dihitung sebesar 0.79 kg SO₂/kg Ni, turun dari emisi di tahun 2014 sebesar 0.86 kg SO₂/kg Ni.

Emisi Gas Rumah Kaca

PT Vale berkomitmen mengurangi emisi Gas Rumah Kaca (GRK) yang memicu pemanasan global. Beberapa cara yang dilakukan adalah dengan mengganti penggunaan *freon* tipe *chlorodifluoromethane* (R22) yang tidak ramah lingkungan dengan R-32 dan R-410a yang ramah lingkungan. [G4-EN15, G4-EN16,G4-EN19]

Selain itu, Perusahaan juga melakukan kajian untuk melakukan uji coba penggunaan freon berbahan dasar *hydrocarbon* yang lebih ramah lingkungan pada unit-unit pendingin yang lama. Hingga akhir tahun 2015, pengukuran emisi SOx dari cerobong adalah 63.991 ton, sedangkan jumlah CO₂ tercatat sebanyak 32.372.537 ton. Jumlah CO₂ ini berkurang dari tahun sebelumnya yang sebanyak 34.396.098 ton. Metode pengukuran dilakukan oleh internal PT Vale berdasarkan konsumsi bahan bakar menurut tabel perhitungan GRK. [G4-EN19][G4-EN21]

SO₂ Emissions [G4-EN21]

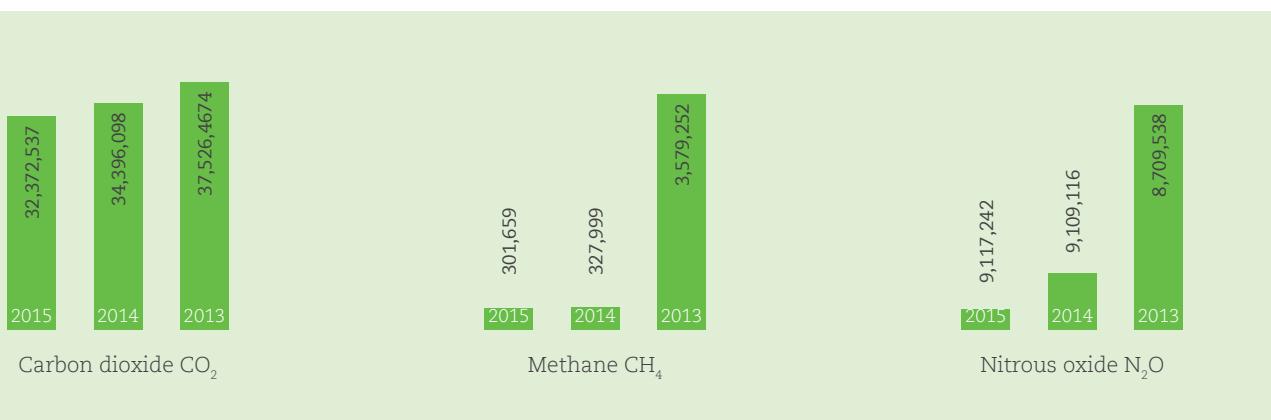
PT Vale has reduced its SO₂ emissions by improving the efficiency of sulfur consumption, and by replacing HSFO with coal. Through these efforts, until the end of 2015, SO₂ emissions were calculated at 0.79 kg SO₂/kg Ni, down from emissions in 2014 of 0.86 kg SO₂/kg Ni.

Greenhouse Gas Emissions

PT Vale is committed to reducing greenhouse gas emissions (GHG) that trigger global warming. Several ways undertaken included to replace the use of refrigerant of chlorodifluoromethane (R22) type, which is not environmental friendly, with R-32 and R-410a that are environmentally friendly. [G4-EN15, G4-EN16,G4-EN19]

In addition, the Company has also conducted a study to test the use of more environmentally friendly hydrocarbon-based refrigerant for old air conditioners. By the end of 2015, SOx emission from the stacks was measured at 63,991 tons, while total CO₂ emission was 32,372,537 tons. The amount of CO₂ deceased from the previous year of 34,396,098 tons. Internal measurement method performed by PT Vale was based on fuel consumption according to the GHG calculation table. [G4-EN19][G4-EN21]

Volume GRK Dihasilkan dari Proses Plant | GHG Volume generated from Plant Process





Fasilitas penyaring debu dan gas di pabrik pengolahan di Sorowako

Dust and gas filtering facility at processing plant in Sorowako

Intensitas GRK tahun 2015 [G4-EN18]

GHG Intensity in 2015

Jenis GRK Type of GHG	Volume GRK GHG Volume	Volume Produksi Production Volume	Intensitas GRK GHG Intensity
Carbon dioxide CO2	32,372,537	81,177	398.8
Methane CH4	301,659	81,177	3.7
Nitrous oxide N2O	73,729	81,177	0.9

Pengelolaan Limbah

Limbah dari kegiatan penambangan bijih nikel laterit adalah kupasan tanah (*overburden*), kupasan lapisan tanah atas, dan bebatuan. Volume material *overburden* pada tahun 2015 mencapai 42.422.043 WMT, meningkat dibanding tahun 2014 sebesar 33.335.407 WMT. Bertambahnya volume material *overburden* terjadi seiring meningkatnya kegiatan penambangan. [G4-EN23, MM3]

Kami mengelola material *overburden* dengan cara: [G4-EN23, MM3]

1. Ditimbun pada area penimbunan (*disposal pit*) di sekitar lokasi kegiatan penambangan.
2. Dimanfaatkan ulang sebagai material timbun, untuk menimbun kembali lahan pascatambang dalam proses reklamasi.

Waste Management

Waste of lateritic nickel ore mining activities is overburden, top soil, and rocks. Overburden material volume in 2015 reached 42,422,043 WMT, an increase over 2014 amounted to 33,335,407 WMT. The increase of overburden material volume was due to increasing mining activities. [G4-EN23, MM3]

We manage the overburden material by means of: [G4-EN23, MM3]

1. Stockpiled at the disposal pit in the vicinity of mining operations site.
2. Reused as backfill materials, to refill the post-mining land during reclamation process.

Volume Limbah [G4-EN23, MM3]

Waste Volume

Material Limbah Waste Material	Satuan Unit	2015	2014	2013
Sisa lapisan tanah Overburden	WMT	42,422,042	33,335,407	30,027,605
Lapisan tanah atas Top soil	WMT	341,532.23	510,426	291,676
Batuhan Reject Station Rock	Ton	5,790,712	4,570,958	4,494,928

Pengelolaan limbah dari proses produksi nikel dalam matte yang mengandung B3 dilakukan dengan pemanfaatan ulang, baik oleh Perusahaan maupun pihak ketiga yang memiliki izin dari Kementerian Lingkungan Hidup dan Kehutanan. Proses pengangkutan limbah B3 dilaksanakan oleh pihak ketiga dengan prosedur dan standar pengawasan ketat. [G4-EN23, G4-EN25]

The management of waste from nickel in matte production process containing hazardous and toxic material (B3) is done through reuse, either by the company or third parties who have permission from the Ministry of Environment and Forestry. B3 waste transportation process is conducted by a third party with procedures and strict supervision standard. [G4-EN23, G4-EN25]

Volume Limbah B3 (dalam ton) [G4-EN25]

B3 Waste Volume (in tons)

Jenis Limbah B3 Dihasilkan Type of Hazardous and Toxic Waste	2015	2014	2013
Oli dan Gemuk Bekas Used Lubricants and Grease	1,470.4	1,358.81	1,166.80
Baterai dan Aki Bekas Used Battery and Accu	60.59	51.5	20.9
Asbes Asbestos	12.68	7.4	17
Limbah Medis Medical Waste	2.11	1.2	1.7
Bahan Terkontaminasi Oli dan Gemuk Lubricants and Grease Contaminated Materials	332.45	209.73	137.4
Cat dan Bahan Kimia Paints and Chemicals	25.46	15.8	41.5
Jumlah Total	1,907.57	1,644.4	1,385.3

Jenis Limbah B3 dan Metode Pengelolaan [G4-EN23]

Types of B3 Waste and Method of Management

Skema Pengelolaan dan Pengolahan Limbah
Waste Management and Treatment Scheme

Jenis Type	Bentuk Form	Metode Pengelolaan Management Method	Jumlah yang Diolah (ton) Volume Treated (tons)
Limbah Bukan B3 Non Hazardous and Toxic Waste	Limbah domestik Domestic waste	Penimbunan di area bekas tambang. Backfilling in mined areas.	13,733
	Limbah scrap/logam Scrap/metal waste		5,624
	Oli dan gemuk bekas Used lubricants and greas	Dimanfaatkan sebagai tambahan bahan bakar pada proses pengolahan bijih nikel dryer dan kiln. Reused as an additional fuel in the processing of nickel ore in dryer and kiln.	1,470.4
	Terak tanur listrik Furnace slag	Dimanfaatkan untuk menunjang operasi tambang Used to support mine operations	4,181,838
	Filter, kain majun dan material terkontaminasi oli/minyak Lubricants and grease contaminated materials	Dikirim ke Pusat Pengolahan Limbah Industri (PPLI) Sent to the Industrial Waste Reduction Center (PPLI)	332.4
	Bahan kimia kadaluwarsa Expired date chemical reagent	Dikirim ke PPLI Sent to PPLI	11,346
	Aki bekas Used battery	Dikirim ke PPLI Sent to PPLI	60.6
Limbah B3 Hazardous and Toxic Waste	Cat dan bahan kimia Paints and chemicals	Dikirim ke PPLI Sent to PPLI	5,889
	Limbah Medis Medical waste	Dibakar di incinerator dan abunya dikirimkan ke pihak ke tiga Burned in the incinerator and the ashes were sent to a third party	2.1

Khusus untuk limbah domestik, kami mengelolanya dengan cara melakukan pemisahan (segregasi) antara sampah organik dan non-organik. Selanjutnya sampah organik ditimbun di Tempat Pembuangan Sampah (TPA) yang dikelola Perusahaan, sedangkan sampah non-organik dikelola oleh pihak ke tiga dibawah pengawasan PT Vale.

We manage domestic waste with segregation method between organic and non-organic waste. The organic waste is then disposed in final disposal site (TPA) which is managed by the Company, while the non-organic waste is managed by a third party under the supervision of PT Vale.

Dampak Negatif Lingkungan

Perusahaan terus berusaha meminimalkan dampak negatif lingkungan dari kegiatan operasi dengan beberapa upaya.

Negative Environmental Impact

The company continues the efforts to minimize the negative environmental impact of operations.

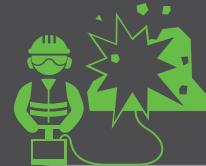
Pengelolaan Dampak Negatif Lingkungan [G4-EN30]

Negative Environmental Impact Management

Dampak Negatif Lingkungan Akibat Kegiatan Pengangkutan Material, Produk, dan Karyawan

Negative Environmental Impact Due to Waste Material Transportation, Products and Employee

Bentuk Kegiatan Forms of Activity	Dampak Negatif Negative Impact	Tindak Lanjut oleh Perusahaan Follow-up by the Company
2014		
<ul style="list-style-type: none"> Pengangkutan material tambang. Pengangkutan produk (nikel dalam matte). Transportation of mine material. Transportation of products (nickel in matte). 	<ul style="list-style-type: none"> 1. Kebisingan 2. Perubahan kualitas udara ambien 1. Noise 2. Changes in ambient air quality 	<ul style="list-style-type: none"> Mewajibkan kendaraan pengangkut melaju dengan kecepatan rendah Secara rutin melakukan penyiraman jalan untuk mengurangi potensi debu maupun total partikulat tersuspensi pada kualitas udara ambien Melakukan pemantauan dan pengukuran tiap bulan. <p>Hasil pengukuran menunjukkan kualitas udara ambien telah memenuhi baku mutu sesuai Keputusan Gubernur No.69/2010, yakni sebesar 0,23 mg/Nm₃.</p> <ul style="list-style-type: none"> Requiring the transporter vehicles to ride at low speed Routine road watering to reduce the potential of dust and total suspended particulates in ambient air quality Monthly monitoring and measurement. <p>Measurement results showed the ambient air quality has met the quality standards according to Governor Decree No.69/2010, which is equal to 0.23 mg/Nm₃.</p>
2015		
Pengangkutan material (Menggunakan truk) Material transportation (using trucks)	<ul style="list-style-type: none"> 1. Kebisingan 2. Perubahan kualitas udara ambien 	<ul style="list-style-type: none"> Mewajibkan kendaraan pengangkut melaju dengan kecepatan rendah. Secara rutin melakukan penyiraman jalan untuk mengurangi potensi debu maupun total partikulat tersuspensi pada kualitas udara ambien. Melakukan pemantauan dan pengukuran tiap bulan. <p>Hasil pengukuran menunjukkan kualitas udara ambien telah memenuhi baku mutu sesuai Keputusan Gubernur No. 69/2010, yakni sebesar 0,23 mg/Nm₃.</p> <ul style="list-style-type: none"> Requiring transporter vehicles to ride at low speed. Routine road watering to reduce the potential of dust and total suspended particulates in ambient air quality Monhly monitoring and measurement. <p>The measurement results showed the ambient air quality has met the quality standards according to Governor Decree No.69/2010, which is equal to 0.23 mg/Nm₃.</p>
Pengangkutan produk (Menggunakan truk dan kapal laut) Transportation of products (Using trucks and ships)	<ul style="list-style-type: none"> 1. Noise 2. Changes in ambient air quality 	
Pengangkutan karyawan (Menggunakan bus) Transportation for employees (Using bus)		



Penghargaan

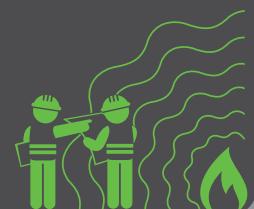
Kesungguhan dan komitmen PT Vale dalam mengelola lingkungan hidup mendapatkan apresiasi dengan diperolehnya anugerah "Pengelolaan Lingkungan Pertambangan Terbaik 2015" dari Kementerian Energi dan Sumber Daya Mineral (ESDM). Pencapaian ini mengungguli 78 perusahaan tambang yang mengikuti penilaian.

Selain itu, Perusahaan memperoleh penghargaan Adhitama (Emas) dalam pengelolaan lingkungan tambang, yang juga diberikan oleh Kementerian ESDM. Diantara peraih Adhitama (Emas), PT Vale dinobatkan sebagai perusahaan terbaik dalam pengelolaan lingkungan tambang dan memperoleh penghargaan.

Awards

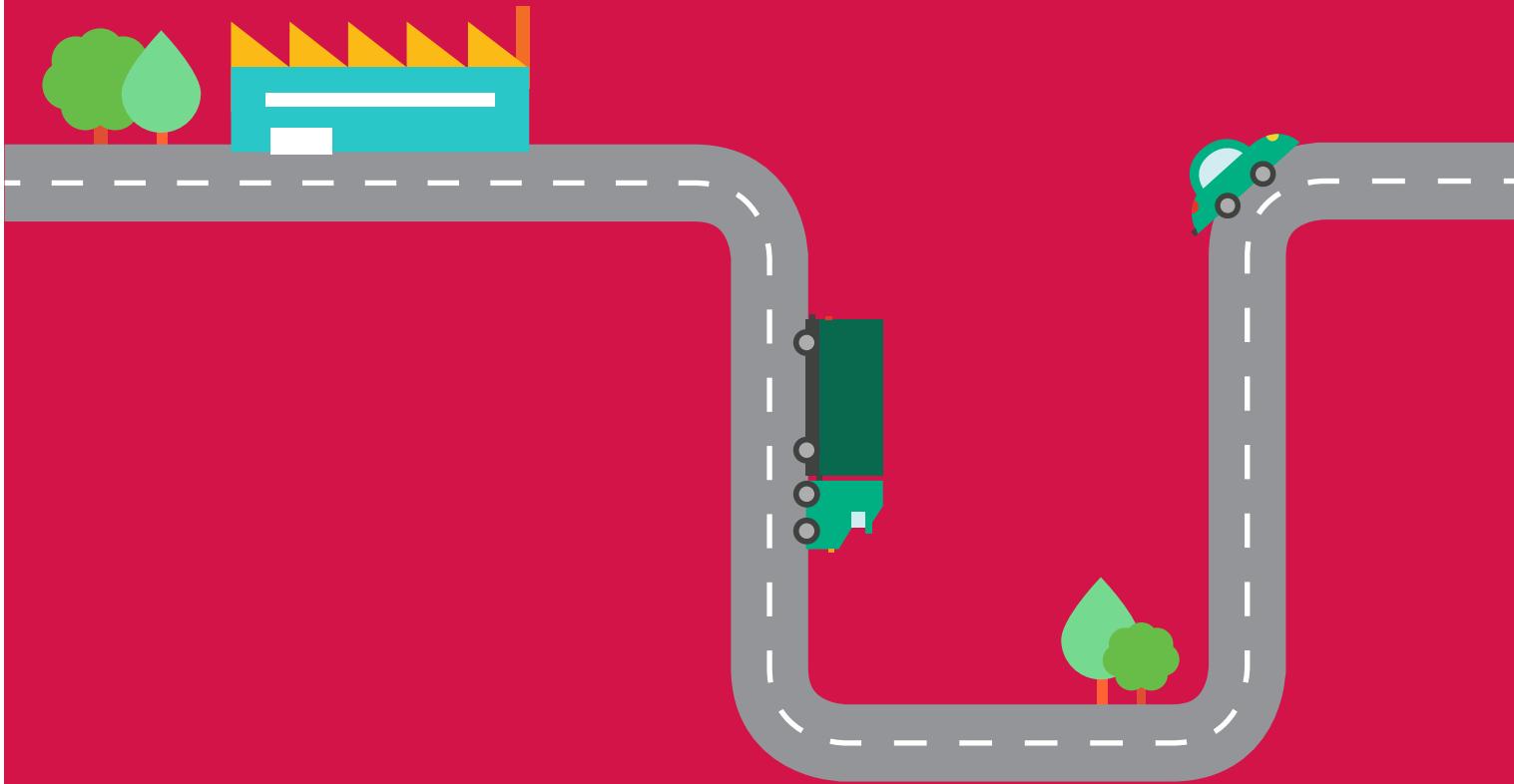
PT Vale's determination and commitment in managing the environment gained appreciation through the award of "Best Environmental Management 2015" from the Ministry of Energy and Mineral Resources (ESDM). The Company won the award over 78 mining companies who were taking part in the assessment.

In addition, the Company received Adhitama (Gold) award in the mine environmental management, which was also presented by the Ministry of Energy and Mineral Resources. Among the winners of Adhitama (Gold) award, PT Vale was named the best company in the environmental management of mining and received the award.



Untuk Kesejahteraan

For Welfare



103

Program Mitra Desa Mandiri
Bidang Pengembangan
Kapasitas Masyarakat
Independent Village Partnership
Program Community Capacity
Building

102

Program Mitra Desa Mandiri
Bidang Kesehatan
Independent Village Partnership
Program in Health Sector



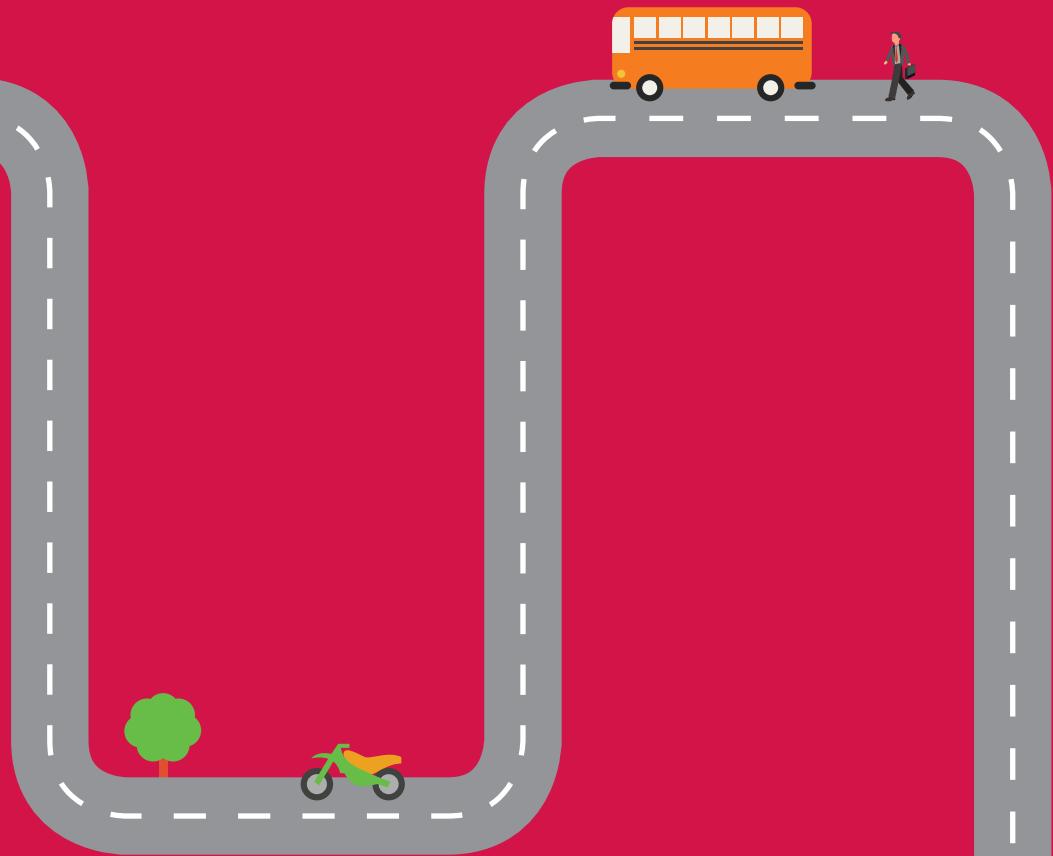
We continued our three-sector partnership through various integrated social programs to promote independency, transparency, and accountability as part of the road to sustainable development. We also launch System of Rice Intensification as part of the road to sustainable farming.

116

Program Mitra Desa Mandiri
Bidang Ekonomi
Independent Village Partnership
Program in Economic Sector

62

Program Mitra Desa Mandiri
Bidang Pendidikan
Independent Village Partnership
Program in Educational Sector



Pelatihan SRI Organik bagi petugas penyuluhan lapangan se-Kabupaten Luwu Timur di Kecamatan Nuha

SRI Organic training for field agriculture instructors from Luwu Timur regency at Nuha sub-district.



PT Vale terus membangun dialog dan menjaga keharmonisan dengan masyarakat dengan mengelola dinamika yang berkembang. Berbagai kegiatan dilakukan melalui pelaksanaan program sosial sebagai salah satu bentuk tanggung jawab sosial perusahaan (*corporate social responsibility/CSR*).

Pelaksanaan program sosial dipantau langsung oleh Direktur *Communications & External Affairs* agar sejalan dengan hasil pemetaan *Social Management System (SMS)* yang telah dilakukan pada tahun 2013. Kegiatan pengembangan masyarakat tetap dilakukan secara strategis dan efisien oleh Perusahaan, bahkan di saat kondisi ekonomi mengalami tantangan. Hal ini sejalan dengan kepatuhan pada Undang Undang Perseroan Terbatas no.40/2007, tentang pelaksanaan tanggung jawab sosial dan lingkungan perusahaan. [G4-DMA, G4-36]

PT Vale continues to build and maintain harmonious dialogue with the community to manage the ongoing dynamics. Various activities have been carried out through the implementation of social programs as a form of corporate social responsibility (CSR).

The social programs implementation is monitored directly by the Director of Communications and External Affairs to be in line with the mapping of Social Management System (SMS) that has been conducted in 2013. The community development activities remain to be done strategically and efficiently by the Company, even while facing an economic downturn. This is in line with compliance with the Limited Liability Company Law No.40/2007 on the implementation of corporate social and environmental responsibility. [G4-DMA, G4-36]

Pelibatan Komunitas Lokal dan Program Pemberdayaan Masyarakat [G4-SO1]

Local Community Engagement and Community Empowerment Program

Bahodopi**Bentuk kegiatan | Forms of activity:**

Program Sosial Reguler Kemasyarakatan dengan pembentukan komite desa & pengembangan kapasitas masyarakat
 Regular Community Social Programs with the establishment of village committees and community capacity development

Target ingin dicapai | Target to be achieved:

Kemandirian masyarakat dan peningkatan mutu program kegiatan
 The community's self-reliance and improvement of program activities quality

Hasil didapat | Results:

Peningkatan keterampilan masyarakat
 The community's increased skills

Sorowako**Bentuk kegiatan | Forms of activity:**

Program Mitra Desa Mandiri (PMDM) Bidang Kesehatan, Pendidikan, Ekonomi dan Pengembangan Kapasitas
 Independent Village Partnership Program (PMDM) for Health, Education, Economy and Capacity Building

Target ingin dicapai | Targets to be achieved:

Kemandirian masyarakat di area wilayah Pemberdayaan PT Vale
 The community's self-reliance in the area of PT Vale's Empowerment Regions

Hasil didapat | Results:

Peningkatan pelayanan kesehatan, akses pendidikan, kegiatan usaha masyarakat dan peningkatan keterampilan masyarakat.
 Improved health services, access to education, community business activities and the community's increased skills.

Pomalaa**Bentuk kegiatan | Forms of activity:**

Program Sosial Reguler Kemasyarakatan
 Regular Community Social Program

Target ingin dicapai | Targets to be achieved:

Kemandirian masyarakat dan kesejahteraan masyarakat di area pemberdayaan PT Vale serta memperoleh dukungan masyarakat agar PT Vale dapat segera beroperasi di Pomalaa.
 Community self-reliance and welfare in the area of PT Vale's empowerment regions as well as the support of the community to PT Vale to be able to immediately operate in Pomalaa.

Hasil didapat | Results:

Peningkatan keterampilan masyarakat dan kesejahteraan masyarakat serta peningkatan kualitas sarana publik yang ada di area pemberdayaan PT Vale Indonesia Tbk.
 The community's increased skills and welfare as well as improved quality of existing public facilities in the area of empowerment of PT Vale Indonesia Tbk.

Pembelajaran 01

Lesson Learnt 01



Menuju Pertanian Berkelanjutan

Program Pertanian Berkelanjutan sebagai bagian dari Program Terpadu Pengembangan Masyarakat (PTPM) dilakukan untuk memperbaiki budidaya pertanian pada komoditas unggulan Kabupaten Luwu Timur dengan menerapkan atau mendorong teknologi budidaya yang ramah lingkungan.

Salah satu kegiatan pertanian berkelanjutan adalah penerapan konsep *System of Rice Intensification* (SRI) Organik di Desa Mahalona, Kecamatan Towuti, dan Desa Ledu-Ledu, Kecamatan Wasuponda.

Saat mencanangkan dimulainya program ini dan menerima kunjungan team Sustainable Partnership Universitas Paramadina, Desember 2014, mantan Bupati Luwu Timur, Andi Hatta Marakarma mengatakan, "Saya heran Perusahaan mau ikut mengurus petani kami. Padahal pekerjaan mereka adalah menambang. Tentunya kami berterima kasih."

Setelah menjalani masa tanam selama sekitar empat bulan, petani merasakan panen padi yang bebas bahan kimia. "Setelah enam tahun menanam (padi konvensional) dengan tiga kali gagal panen, baru kali ini kami bisa menghasilkan padi organik yang hasilnya tidak saja membanggakan tapi juga menghasilkan pendapatan yang berlipat. Memang, harus kerja keras karena tidak memakai pupuk dan kita harus telaten," kata Paimin, Ketua Kelompok Tani Harapan Jaya, Desa Libukang Mandiri. Setelah gagal panen selama tiga musim, pada Desember 2015 sebanyak 36 petani yang mempraktikkan pola tanam SRI Organik dapat merasakan kembali manisnya hasil panen.

Towards Sustainable Agriculture

The Sustainable Agriculture Program as part of the Integrated Community Development Program (PTPM) is carried out to improve the cultivation on selected commodities of Luwu Timur by applying or promoting the environmentally friendly cultivation technology.

One of sustainable agriculture activities is the application of Organic System of Rice Intensification (SRI) concept in Mahalona Village, Towuti District, and Ledu-Ledu Village, Wasuponda District.

When this program was launched during the visit of Sustainable Partnership team from Paramadina University, former Regent of Luwu Timur, Andi Hatta Marakarma said, "I am surprised that the Company wants to take care of our farmers, while its business is mining. Surely we are grateful."

After undergoing the planting season for about four months, farmers harvested chemical-free rice. "After farming for 6 years with 3 failures, this is the first time we produce organic rice we are proud of and also multiply our income. Hard work and patience is required because we dont use fertilizer." said Paimin, Chairman of Harapan Jaya Farmers Group, Libukang Mandiri Village. After failed harvests for three seasons, in December 2015, a total of 36 farmers who practiced Organic SRI managed to enjoy sweetness of harvesting again.

CSR dan Program Terpadu Pemberdayaan Masyarakat [G4-SO1, G4-EC8]

Tanggung jawab sosial perusahaan (CSR) di lingkungan PT Vale dilaksanakan melalui kemitraan dengan pemangku kepentingan di Luwu Timur dalam bentuk Program Terpadu Pemberdayaan Masyarakat (PTPM), yang telah dimulai pada tahun 2014. Program ini merupakan bagian dari Rencana Pengelolaan Sosial (RPS).

Selama tahun 2015, Perusahaan menyediakan dana sebesar AS\$4.202.725,38 guna membiayai pelaksanaan kegiatan PTPM yang meliputi Program Mitra Desa Mandiri (PMDM), kemitraan strategis dan kontribusi strategis. Pelaksanaan kegiatan melibatkan masyarakat di desa pada seluruh area operasi, yang meliputi empat kecamatan di Kabupaten Luwu Timur, Sulawesi Selatan; 2 kecamatan di Kabupaten Morowali, Sulawesi Tengah; dan 4 kecamatan di Kabupaten Kolaka, Sulawesi Tenggara.

Program Mitra Desa Mandiri (PMDM) [G4-SO1, G4-EC7, G4-EC8]

PMDM dikelola dalam bentuk dukungan dana stimulan desa/kecamatan untuk kegiatan bidang kesehatan, ekonomi, pendidikan dan pengembangan kapasitas. PMDM diwujudkan dengan prinsip keberpihakan kepada masyarakat miskin dan rentan, keberpihakan pada perempuan, bertumpu pada pembangunan sumber daya, partisipatif, transparansi, akuntabilitas dan kemandirian.

Bersama Pemerintah Kabupaten Luwu Timur, PT Vale menggelar PMDM Award 2015 sebagai bentuk apresiasi terhadap para pihak yang terlibat dalam PMDM.

Program PMDM dilaksanakan di empat wilayah Kabupaten Luwu Timur yang menjadi lokasi Perusahaan, yang meliputi Kecamatan Nuha, Towuti, Wasuponda dan Malili. Sebanyak 43.295 orang menerima manfaat dari program ini, dengan biaya total untuk kesehatan Rp4.150.000.000. Biaya lainnya, yaitu untuk bidang ekonomi sebanyak Rp5.810.000.000, bidang pendidikan Rp3.320.000.000, serta di bidang pengembangan kapasitas masyarakat sebesar Rp3.320.000.000.

CSR and Integrated Program for Community Empowerment [G4-SO1, G4-EC8]

Corporate social responsibility (CSR) within PT Vale is implemented through the partnership with stakeholders in Luwu Timur via the Integrated Community Empowerment Program (PTPM), which began in 2014. This program is part of the Social Management Plan (RPS).

During 2015, the Company provided US\$4,202,725.38 in funds to finance the implementation of PTPM activities covering Independent Village Partnership Program (PMDM), strategic partnership and strategic contributions. The activities were implemented by engaging the community in the villages of all our operational areas, including four subdistricts in Luwu Timur Regency, South Sulawesi; two subdistricts in Morowali Regency, Central Sulawesi; and four subdistricts in Kolaka Regency, Southeast Sulawesi.

Independent Village Partnership Program (PMDM) [G4-SO1, G4-EC7, G4-EC8]

PMDM is managed in the form of village/district stimulant fund support for health, economic, education and capacity building activities. PMDM is implemented based on the principles of attention to poor and vulnerable communities, attention to woman, focus on resource development, participations, transparency, accountability and independence.

Together with the Government of Luwu Timur Regency, PT Vale held PMDM Award in 2015 as a token of appreciation to the parties involved in PMDM.

PMDM program has been conducted in four areas of Luwu Timur Regency, which are in the area of the Company's site, including Nuha, Towuti, Wasuponda and Malili districts. A total of 43,295 people became the beneficiaries of this program, with a total cost for health was Rp4,150,000,000. Other funds included Rp5,810,000,000 for economic sector, Rp3,320,000,000 for educational sector, and Rp3,320,000,000 for community development.

Lebih lanjut, PT Vale memberikan pelatihan *life skill*, pertanian, kewirausahaan, dan administrasi kepada 4.159 masyarakat untuk meningkatkan kemampuan mereka dan agar dapat memenuhi kualifikasi yang disyaratkan sebagai pekerja. PT Vale juga mendorong mitra kerja dan pemasok, terutama perusahaan lokal agar mempekerjakan warga setempat.

Program Pengembangan Masyarakat lainnya dilakukan pada bidang sosial-budaya dan olahraga, pemberdayaan komunitas, serta bantuan sarana umum dan bantuan bencana.

Furthermore, PT Vale provides training of life skills, agriculture, entrepreneurship, and administration to 4,159 people to improve their skills and to be able to meet the required qualifications as employees. PT Vale also encouraged partners and suppliers, mainly local companies to hire local residents.

Other Community Development Program is conducted in the sectors of socio-cultural and sports, community empowerment, and assistance of public facilities and disaster relief.

Pembelajaran 02

Lesson Learnt 02

Program Magang dan Studi Banding Guru Pendidikan Anak Usia Dini (PAUD)

Program Terpadu Pengembangan Masyarakat (PTPM) meluncurkan Program Peningkatan Kapasitas Pendidik PAUD se-Kabupaten Luwu Timur pada September 2015. Program tersebut terbagi atas dua kegiatan yaitu magang dan studi banding yang diikuti oleh 504 tenaga pendidik PAUD dari 187 sekolah di Luwu Timur.

“Saya berharap bisa menggali cara-cara kreatif untuk mendidik siswa, terutama cara komunikasi dan pendekatan ke anak didik. Apalagi sekolah kami masih baru berdiri dan letaknya terpencil. Kegiatan belajar seperti ini sangat perlu untuk menambah wawasan,” kata Setyowati, guru TK Tunas Harapan SP3 Mahalona, Kecamatan Towuti.



Internship Program and the Comparative Study for Early Childhood Education (PAUD) Educators

Integrated Community Development Program (PTPM) launched the Capacity Building Program for Early Childhood Educators across Luwu Timur Regency in September 2015. The program was divided into two activities, namely internships and comparative study, which were participated by 504 early childhood educators from 187 schools in Luwu Timur.

“I hope to be able to explore creative ways to educate students, especially in communication methods and approach to students. Moreover, our school is still newly established and in remote location. Learning activities like these are necessary to broaden my horizon,” said Setyowati, teacher of Tunas Harapan kindergarten SP3 Mahalona, Towuti District.

Dampak Sosial [G4-EC9, MM7]

Tuntutan dari masyarakat untuk mempekerjakan warga setempat telah menjadi isu utama setiap tahun. PT Vale memahami tuntutan tersebut dan terus membangun komunikasi serta dialog dengan mereka dan melibatkan pemerintah setempat, baik melalui pertemuan dengan tokoh maupun perwakilan masyarakat setempat atau dengan bantuan dan fasilitas pihak-pihak berwenang.

Saat ini 85% dari total pekerja merupakan warga Kabupaten Luwu Timur, tempat Perusahaan berada. 15% pekerja berasal dari luar Kabupaten Luwu Timur; yaitu 7% berasal dari daerah lain di Sulawesi dan 8% berasal dari daerah lain di Indonesia, termasuk pekerja asing.

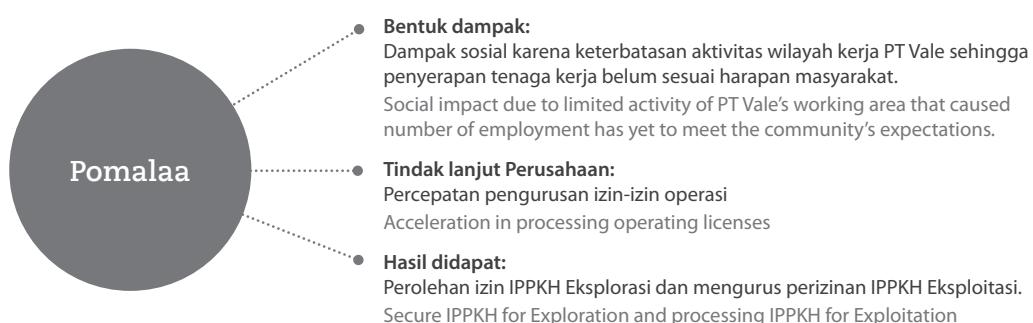
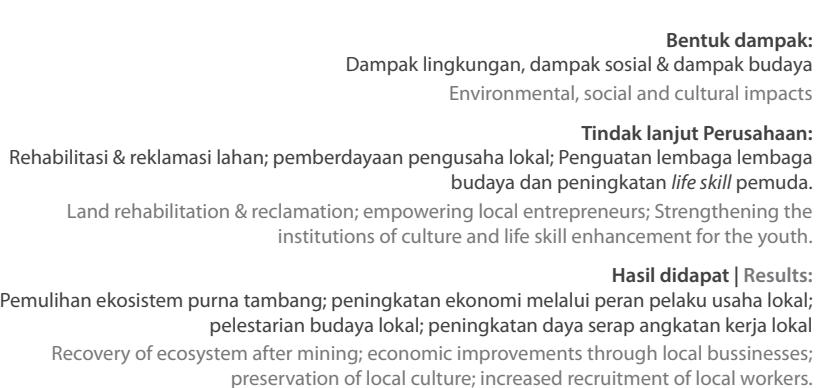
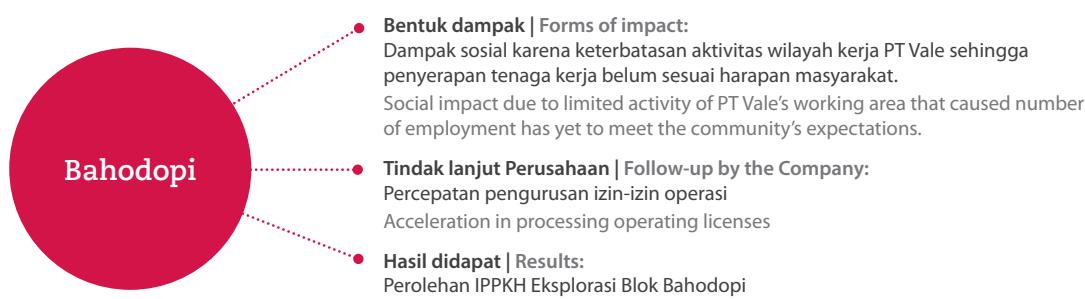
Social Impact [G4-EC9, MM7]

The community's demands to employ local residents have become a major issue every year. PT Vale understands these demands and continues to build communication and dialogue with them involving local government, through meetings with leaders and representatives of the local community or with the assistance and facilities to the authorities.

Currently 85% of total employees are residents of Luwu Timur Regency, where the Company is located. Some 15% of employees originated from outside Luwu Timur Regency; comprising 7% came from other regions of Sulawesi and 8% from other regions of Indonesia, including foreign employees.

Dampak Sosial dan Tindak Lanjut [G4-SO2]

Social Impact and Follow up



Pembelajaran 03

Lesson Learnt 03



Layanan Kesehatan untuk Masyarakat Pesisir

Untuk mengatasi kendala akses pada fasilitas kesehatan dan pendidikan, masyarakat pesisir di Kecamatan Towuti dan Malili mengajukan bantuan perahu ambulans. Bantuan ini didanai dari Program Mitra Desa Mandiri (PMDM). Perahu akan difungsikan sebagai sarana transportasi bagi masyarakat yang membutuhkan penanganan kesehatan lanjutan ke Puskesmas maupun ke rumah sakit terdekat.

Di Desa Pasi-Pasi, perahu ambulans digunakan oleh staf Puskesmas, bidan desa, dan petugas kesehatan lain untuk menjangkau 40 kepala keluarga di daerah pesisir.

"Dulu sebelum ada perahu ambulans bantuan PMDM, petugas kesehatan harus menyewa perahu sendiri. Yang paling sulit kalau ada warga yang mengalami kondisi darurat, misalnya jatuh atau kecelakaan, dan dia tidak punya perahu pribadi. Dengan adanya bantuan perahu, masyarakat bisa cepat mendapat pertolongan," kata Sarli Asuti, bidan Desa Pasi-Pasi.

Health Services for Coastal Communities

To overcome the limited access to health and education facilities, coastal communities in the Towuti and Malili districts have proposed for ambulance boat assistance. The funds for the assistance was originated from the Independent Village Partnership Program (PMDM). The boat will be used as a means of transportation for people who need further medical treatment to the nearest community health center (Puskesmas) or hospital.

In Pasi-Pasi Village, the ambulance boats used by Puskesmas staff, village midwives and other health workers to reach 40 families in the coastal areas.

"Back before there was an ambulance boat from PMDM assistance, health workers have to rent the boat themselves. The most difficult time was when one was in an emergency situation, such as falling or other accident, and did not have his or her own boat. With the boat assistance, people can quickly get help," said Sarli Asuti, Pasi-Pasi village midwife.

Pengaduan Dari Masyarakat [G4-SO11]

Selama tahun 2015, terdapat 6 keluhan yang berkaitan dengan dampak negatif terhadap masyarakat. Seluruh keluhan yang disampaikan dapat diselesaikan.

Grievances from the Community [G4-SO11]

During 2015, there were six complaints regarding the negative impact on the community. All complaints that were submitted have been resolved.

Keluhan Masyarakat

Community Complaints

Keluhan Menonjol Terkait Dampak Terhadap Masyarakat Tahun 2015 dan Penyelesaiannya

Highlighted Grievances Regarding Impact on the Community in 2015 and Resolutions

Bentuk Keluhan Type of Complaint	Pelapor Complainant	Penyelesaian Resolution
1. Penerimaan Karyawan Employee Recruitment	LSM dan Forum Lokal NGO and Local Forum	Mekanisme penyelesaian melalui proses mediasi oleh Dinas Tenaga Kerja dan Transmigrasi Luwu Timur, memperkuat sosialisasi tahapan proses penerimaan, transparansi melalui pelibatan forum pemuda dalam melakukan pengawasan. The mechanism of resolution through mediation by Luwu Timur Manpower and Transmigration Agency, intensifying dissemination on recruitment process, transparency through the involvement of the youth forum in monitoring.
2. Penerimaan karyawan melalui <i>outsourcing</i> HCOG	LSM dan Forum lokal NGO and Local Forum	
3. Lahan tergenang di pesisir Danau Towuti akibat bendungan Larona	Penduduk Pesisir Danau Towuti Residents of Lake Towuti Coastal Area	Mekanisme penyelesaian melalui proses mediasi pemerintah kabupaten Luwu Timur The mechanism of resolution through mediation process by Luwu Timur Regency Government
4. Proses perubahan program <i>Community Development</i> ke PTPM	Forum Masyarakat, LSM Community Forum and NGO	Mekanisme penyelesaian penguatan sosialisasi program di tingkat desa, pembentukan Komite Desa dan mendorong proses transparansi pengelolaan dana yang dialokasikan dengan skema <i>blockgrant</i> (PMDM) Resolution mechanisms through intensifying dissemination program at the village level, the establishment of Village Committee and promoting transparency in the management of allocated funds under blockgrant scheme (PMDM)
5. Penguasaan lahan konsesi Perusahaan oleh masyarakat untuk perkebunan lada	Petani di Towuti Farmers in Towuti	Penanganan melalui jalur hukum Handling through legal means

Tahapan Penyelesaian Pengaduan dari Masyarakat Stages of Community Grievances Resolution

Isu atau keluhan dari masyarakat Identifikasi isu atau keluhan oleh tim Communication & External Affairs (C & EA)
Issues or complaints from the community Identification of the issue or complaint by Communication & External Affairs (C & EA) team

- Melakukan pertemuan dengan *stakeholder* terkait Mitigasi isu dan keluhan
- Melakukan pengelompokan isu dan keluhan
- Membuat tim yang menangani isu secara spesifik
- Melakukan persuratan dan memberikan *feedback*
- Pencatatan internal – *issue tracker*

- Hold meetings with relevant stakeholders
- Grouping issues and complaints
- Create teams that handle specific issues
- Correspondence and provide feedback
- Internal Recording - issue tracker

Penanganan isu dan keluhan

- Melakukan pertemuan regular dan *ad-hoc*, melibatkan pemerintah
- Memberikan *feedback* dan solusi permasalahan
- Membahas program *follow-up* penanganan bersama pihak terkait.

Handling issues and complaints

- Hold regular and ad-hoc meetings, involving government
- Provide feedback and solutions to problems
- Discuss the handling follow-up program together with related parties.

Pembelajaran 04

Lesson Learnt 04

Memandirikan Pebisnis Rumahan

Sektor ekonomi yang mendapat dukungan pendanaan dari Program Mitra Desa Mandiri (PMDM) menyentuh UMKM dan industri kreatif. Usaha rumahan seperti produk kayu dan olahan pangan menjadi andalan di sektor UMKM. Sementara itu, industri kreatif yang ditekuni masyarakat di empat wilayah terdampak operasi PT Vale mayoritas berbentuk usaha kerajinan tangan.

Fatma, salah seorang pengrajin tali kur dari Desa Wawondula, Kecamatan Towuti, menjadi nominator peraih PMDM Award 2015 kategori Penerima Manfaat Terbaik. "Dari PMDM, saya menerima manfaat berupa pelatihan pembuatan tas berbahan tali kur. Sejak pelatihan itu, saya telah menyelesaikan sekitar 50 tas dan sudah berhasil saya jual. Tas tali kur buatan Fatma bahkan telah menjangkau konsumen di Kecamatan Bungku Barat, Sulawesi Tengah.

Towards Independent Home-based Businesses

The economic sector supported by funding from the Independent Village Partnership Program (PMDM) touched the MSMEs and creative industries. Home-based businesses such as production of wood products and processed food became a mainstay in the MSME sector. Meanwhile, the creative industries run by majority of communities in four regions affected by the operation of PT Vale is in handicraft business.

Fatma, one of cord artisans in Wawondula Village, Towuti District, was nominated in the PMDM Award 2015 for Best Beneficiary category. "From PMDM, I receive the benefit of training in making bags made from cord. Since the training, I have completed about 50 bags and sold them. The cord bags produced by Fatma have even reached consumers in West Bungku District, Central Sulawesi.



Selain pelatihan tali kur, Perseroan juga memberikan pelatihan pengolahan limbah plastik bagi ibu-ibu Desa Ledu-Ledu, Kecamatan Wasuponda, Luwu Timur. Besides cord artisans training, PT Vale also provides domestic plastic waste processing training for women in Ledu-Ledu Village, Wasuponda sub-district, Luwu Timur

Pembelajaran 05

Lesson Learnt 05



Bias Positif Perubahan Paradigma

Perubahan paradigma merupakan salah satu hal penting dari proses pemberdayaan komunitas. Saat ini, beberapa komunitas lokal di sekitar PT Vale turut mengalami perubahan paradigma yang menghasilkan dampak positif. Perubahan paradigma positif selalu diikuti pula munculnya tanggungjawab dan bias positif. "Saat ini, kami berjalan dengan tanggung jawab untuk komunitas dan membiaskannya kepada komunitas lainnya. Kami belajar menjadi each other's keeper," ujar Bryan Balebu, pemuda lokal yang mengkoordinir sekelompok pemuda di Wasuponda untuk belajar mendirikan usaha.

Para pemuda ini sebelumnya memiliki cara berpikir yang apatis dan tidak kreatif karena terbatasnya pendidikan yang dimiliki. Setelah mereka memimpin usaha dan mempunyai tanggung jawab, terjadilah perubahan cara berpikir dan mental. Saat ini, mereka terus belajar untuk berkomunikasi dengan lebih baik, menggunakan komputer dan internet, serta mengurus keuangan dengan lebih mandiri. Perubahan ini juga terjadi berkat keikutsertaan pada kelas pembelajaran kepemimpinan yang diberikan oleh PT Vale.

Sekarang kelompok usaha ini sudah berkembang cepat menjadi 38 unit usaha berbasis korporasi (CV, PT, Koperasi) yang bermitra dengan PT Vale. "Bagi anak kampung seperti kami, pergeseran paradigma terus berproses pada diri kami. Kami cukup beruntung di karunia keinginan belajar dari proses-proses transformasi CSR PT Vale. Bahkan kami pun meniru program comdev PT Vale dengan menyediakan beasiswa bagi 4 mahasiswa kami yang tidak mampu membiayai pendidikan sekolah tinggi mereka," imbuh Bryan.

Bryan dan kelompoknya mungkin merupakan segelintir masyarakat yang mulai belajar untuk berpindah dari penerima dan pengguna dana comdev, atau penunggu kesempatan bekerja di PT Vale dan kontraktor, menjadi pemilik usaha pribadi.

Positive Refraction in Paradigm Shift

Paradigm shift is an important aspect of community empowerment. Nowadays, some local communities surrounding PT Vale experience a paradigm shift in creating a positive impact. The paradigm shift is also accompanied by positive refraction and accountability. "Nowadays, we move with our responsibility for the community, and spread that to our colleagues in other communities. We learn to become each other's keeper," said Bryan Balebu, a local leader coordinating Wasuponda's youth learning to establish a company.

In the earlier days, the youth had uncreative mindsets due to their lack of educational background. After they had lead the local business with responsibilities, their mental and mindset improved. Now they are learning to communicate better, use computer and internet, and become financially independent. This change was also due to their participation leadership learning class held by PT Vale.

These local business has grown to 38 corporate-based business unit (CV, LLC, cooperatives) partnering with PT Vale. "To villagers like us, the paradigm shift is a continuing process within us. We are lucky that we are willing to learn from CSR transformation process by PT Vale. We even replicate PT Vale's comdev program by providing scholarship to 4 of our students that unable to pay for their higher education need," said Bryan.

Bryan and his group might be a glimpse of people starting to shift; from beneficiaries of comdev funds or waiting to get a job from PT Vale and its contractor, to become a business owner.

Keluhan Sekelompok Masyarakat Lokal

[MM5, MM6, MM7, MM9]

Pada tahun 2015, PT Vale menghadapi dinamika terkait penolakan peta batas hasil amandemen 2014 yang dekat dengan area Kontrak Karya Perusahaan. Keluhan disampaikan sekelompok masyarakat yang mengatasnamakan wakil dari tiga kecamatan di Kabupaten Luwu Timur, yakni Kecamatan Nuha, Kecamatan Towuti dan Kecamatan Wasuponda.

Alasan keluhan terkait peta batas areal Kontrak Karya hasil amandemen 2014 memuat lokasi yang diklaim sebagai area permukiman dan pertanian mereka. Di lain pihak, peta batas areal tersebut didapat setelah melalui proses hukum yang melibatkan pihak-pihak berwenang. Dengan demikian, keabsahannya telah mendapatkan pengakuan hukum positif di Indonesia.

PT Vale memahami keluhan masyarakat tersebut. Perusahaan selalu membuka diri untuk melakukan dialog, baik secara langsung dengan wakil masyarakat maupun melalui pihak lain seperti pemerintah setempat, DPRD, maupun lembaga lainnya.

Terdapat beberapa wilayah operasi PT Vale yang berdekatan dengan lahan wilayah penduduk sekitar, yaitu: Sorowako (dekat dengan Masyarakat Karunsie Dongi dan Komunitas Masyarakat Asli Sorowako); Bahodopi (dekat dengan Masyarakat Bungku), dan Pomalaa (dekat dengan Masyarakat Mekongga). Perusahaan telah melakukan pemindahan lokasi dan relokasi serta melakukan pembangunan perumahan baru dan fasilitas bagi Masyarakat Karunsie Dongi.

Perusahaan mengedepankan mekanisme pengaduan melalui pendekatan komunikasi dan dialog untuk mendapatkan solusi terbaik bagi semua pihak. Sepanjang tahun 2015, Perseroan tidak mencatat adanya unjuk rasa maupun pemblokiran yang terkait dengan pemindahan lokasi dan relokasi.

Grievance by a Local Community Group

[MM5, MM6, MM7, MM9]

In 2015, PT Vale had to deal with the dynamics over the rejection on boundary map amended in 2014 that is adjacent to the area of the Company's Contract of Work. The grievance was raised by a group of local community claiming themselves as representative of three districts in Luwu Timur Regency, namely Nuha, Towuti and Wasuponda.

Their grievance was about the 2014 amendment of Contract of Work area boundary map contained the location of which was claimed as their residential area and farms. On the other hand, the boundary map area was obtained after going through the legal process involving the authorities. Thus, the validity has been recognized by positive laws in Indonesia.

PT Vale acknowledged the grievance. The Company was always open to dialogue, both directly with the community or through the local government, the local Council, and other institutions.

There are several operational areas of PT Vale adjacent to the residential areas, namely: Sorowako (adjacent to the land of Karunsie Dongi People and Sorowako Community); Bahodopi (adjacent to the land of Bungku People), and Pomalaa (adjacent to the land of Mekongga People). The Company has resettled the Karunsie Dongi Community and provided houses, and relevant facilities.

The Company has been prioritizing grievance mechanism through communication and dialogue approaches to reach the best solution for all parties. During 2015, the Company recorded no protests or blockages related to the resettlement issues.

Pembelajaran 06

Lesson Learnt 06

Melahirkan Petani yang Partisipatif

Di Dusun Molindowe, Desa Lioka, Kecamatan Towuti, Kabupaten Luwu Timur, Sulawesi Selatan, kehadiran PMDM mampu mengajak petani untuk berpartisipasi dalam memberikan usulan pembangunan desa bidang pertanian.

Hal ini tampak pada aktivitas pembangunan bendungan dan rehabilitasi saluran irigasi untuk areal persawahan petani Molindowe seluas 30 hektar.

"Proyek ini dikerjakan sendiri oleh warga. Ada 27 orang yang kerja. Mereka semangat sekali, lima hari bisa selesai semua. Tenaga dan biaya makan tidak dibayar, sehingga bisa dibilang swadaya masyarakat di proyek ini besar. Petani ingin proyek ini cepat selesai dan bagus kualitasnya," ungkap Aliasar, Kepala Dusun Molindowe.

Swadaya masyarakat petani juga tampak pada kegiatan pembangunan jalan tani dan saluran irigasi di Desa Langkea Raya, Kecamatan Towuti. Jalan tani sepanjang satu kilometer dan lebar empat meter itu dibangun di atas lahan pribadi warga. "Mereka lepaskan lahannya untuk dijadikan jalan tani tanpa kompensasi. Mereka sadar betul kalau kegiatan ini manfaatnya besar," ujar M. Tajarianto, Kader Pemberdayaan Masyarakat Desa Langkea Raya.

Creating Participatory Farmers

In Molindowe Hamlet, Lioka Village, Towuti District, Luwu Timur Regency, South Sulawesi, the presence of PMDM has been able to invite farmers to participate in making proposal for rural development in agricultural sector.

This was evident in the dam construction and rehabilitation of irrigation canals for farmland of Molindowe farmers with total area of 30 hectares.

"The project was carried out independently by the residents. There were 27 people working. They were highly enthusiastic, it only took five days to complete it. The work for free and no payment for their meals either, so you could say it was the community's major independent project. The farmers wanted the project to be completed fast, and in good quality," said Aliasar, Chief of Molindowe Village.

The farmers community's self-reliance was also seen in the activities of farm road construction and irrigation canals in Langkea Raya Village, Towuti District. The farm road along 1 kilometer and four meters wide was built on the residents' private land. "They release their land to be used as farm road without compensation. They are well aware that this activity has great benefits," said M. Tajarianto, Cadre of Langkea Raya Village Community Empowerment.



Pembelajaran 07

Lesson Learnt 07



Revitalisasi Balai Penyuluhan Pertanian

Revitalisasi Balai Penyuluhan Pertanian, Perikanan dan Kehutanan (BP3K) Nuha dilakukan melalui skema PTPM (Program Terpadu Pengembangan Masyarakat), bersama Pemerintah Kabupaten Luwu Timur sejak September 2015. Pusat penyuluhan pertanian seluas dua hektar ini kini dilengkapi beragam fasilitas dan sarana penunjang pusat informasi, seperti *green house*, gedung pertemuan (baruga), kebun tanaman obat keluarga, kebun buah dan sayuran, kolam ikan, persawahan, dan pembibitan tanaman perkebunan.

Tempat ini juga digunakan sebagai pusat pengembangan teknologi pertanian ramah lingkungan dan non pestisida (organik). "BP3K Model Nuha diusung menjadi pusat komunikasi, informasi, tempat belajar, ekowisata termasuk kebun bibit masyarakat, lumbung pangan, pusat kesehatan pertanian masyarakat," ujar Koordinator BP3K Nuha Burhanuddin.

Revitalization of Agricultural Extension Center

The Agriculture, Fisheries and Forestry Extension Center (BP3K) of Nuha has been revitalized through PTPM (Integrated Community Development Program) scheme, together with the Government of Luwu Timur Regency since September 2015. The two-hectare agriculture extension center has been equipped with various facilities and amenities to support the information center, such as green house, meeting hall (baruga), medicinal plant gardens, fruit and vegetable gardens, fish ponds, rice fields, and plant nursery.

This place is also used as a center for the development of environmentally friendly and non pesticides (organic) agricultural technologies. " Nuha BP3K Model is promoted as the center of communication, information, learning center, ecotourism including community's seed nursery, food barns, community agriculture health center," said Nuha BP3K Coordinator, Burhanuddin.

Pemangku Kepentingan PT Vale [G4-24, G4-26, G4-27]

Komunikasi dan dialog menjadi pendekatan utama PT Vale kepada para pemangku kepentingan. Identifikasi para pemangku kepentingan dilakukan Perusahaan melalui mekanisme yang dijabarkan dalam *Social Management System* (SMS). [G4-25]

PT Vale Stakeholders [G4-24, G4-26, G4-27]

Communication and dialogue are PT Vale's main approach to the stakeholders. The stakeholders are identified by the Company through the mechanism outlined in the Social Management System (SMS). [G4-25]

Kami membagi pemangku kepentingan kedalam 5 kelompok:

- a. Internal (Pekerja, Pemimpin, Kontraktor, dan Keluarga pekerja)
- b. Komunitas (Pemimpin Komunitas dan Pensiunan)
- c. Pemerintah dan Swasta (Pemerintah lokal, Pemerintah pusat, Investor, Pelanggan, Pemasok dan mitra, Sektor Publik)
- d. Pengamat (Media, Akademia, LSM, Asosiasi Buruh dan Entitas lain)
- e. Masyarakat Sekitar

We divide the stakeholders into 5 groups:

- a. Internal (Employees, Leaders, Contractors, and Family of employees)
- b. Community (Community Leaders and Retirees)
- c. Public and private sector (Local governments, Central government, Investors, Customers, Suppliers and partners, Public Sector)
- d. Observers (Media, Academia, NGOs, Labor Association and Other Entities)
- e. Surrounding community

Pembelajaran 08 Lesson Learnt 08



Mengupayakan Transparansi PTPM Lewat Media Komunikasi

Pada tahun pertama pengelolaan PTPM, para pemangku kepentingan menyadari adanya kesenjangan informasi mengenai implementasi program pengembangan masyarakat. Hal itu mendasari diterbitkannya Tabloid *Verbeek*, yang berisi informasi mengenai pengawasan dan evaluasi program, sekaligus sebagai bahan perbaikan dan motivasi. Sementara di sisi lain, penerima manfaat difasilitasi untuk memberikan feedback melalui penerbitan regular maupun media sosial. "Perbedaan program Comdev dulu dengan PTPM sekarang ini ada pada transparansi kegiatan dan anggaran yang tercermin dalam tabloid *Verbeek*," ujar Lukas Toding, Ketua Komite Desa Lioka, Kecamatan Towuti.

Diterbitkan pertama kali pada 20 Juli 2013, Tabloid *Verbeek* dicetak dengan tiras 4000 eksemplar setiap kali terbit. Sasaran distribusinya adalah masyarakat dan pemangku kepentingan terkait di 38 desa di empat kecamatan terdampak operasi PT Vale, yakni Kecamatan Malili, Wasuponda, Towuti, dan Nuha. "Kalau membaca *Verbeek*, yang pertama saya cari adalah berita atau foto tentang kegiatan desa saya atau kegiatan desa lain. Banyak sekali kegiatan desa kami yang bisa diulas," kisah Jumahir dari Desa Matano.

Sought PTPM Transparency Through Communication Media

At the first year of PTPM, stakeholders realize there is a gap of information about the implementation of community development program. That is the reason for us to launch *Verbeek* Tabloid, which contain information about the monitoring and evaluation of the program, and at once provide materials for improvement and motivation. The beneficiaries also encouraged to give feedback through regular channel or social media. "The main difference between previous ComDev with PTPM is on the transparency of activities and budget that is reflected in *Verbeek* Tabloid," said Lukas Toding, Chairman of the Village Committee Lioka, District Towuti.

Initially published on July 20, 2013, *Verbeek* Tabloid printed for 4000 copies on each edition. The target audience is the public and relevant stakeholders within 38 villages and four districts affected by PT Vale's operation, namely District Malili, Wasuponda, Towuti, and Nuha. "When I read *Verbeek*, I look for the news or photos about the activities of my village or another village activities first. Many activities of our village can be published," said Jumahir from Matano village.

Pendekatan Pemangku Kepentingan [G4-26, G4-27, G4-SO1] Stakeholder Approach

Kelompok Pemangku Kepentingan

Stakeholder Group

Topik Pembahasan

Topic of Discussion

Internal (Pekerja, Pimpinan, Kontraktor, dan Keluarga pekerja)
Internal (Employees, Leaders, Contractors, and family of employees)

- a. Kinerja ekonomi perusahaan disaat harga nikel turun dan perkembangan bisnis nikel dunia
- b. Peningkatan efisiensi
- c. Peningkatan produktivitas
- d. Penguatan posisi PT Vale sebagai perusahaan nikel yang tangguh
- e. Penguatan kapasitas pemasok lokal
- f. Pengembangan mekanisme peningkatan transparansi hubungan antara kontraktor lokal dan pemanfaatan pekerja lokal
- g. Pentingnya kerjasama untuk saling menjaga keseimbangan aspek ekonomi, lingkungan dan sosial
- h. Kepastian bahwa aspek legal dan semua peraturan dipatuhi dengan baik
- i. Kepastian bahwa kerjasama bisnis dibangun secara etis dan profesional
- a. The company's economic performance when the price of nickel declined and the development of the world's nickel business
- b. Increased efficiency
- c. Increased productivity
- d. Strengthening the position of PT Vale as a formidable nickel company
- e. Strengthening the capacity of local suppliers
- f. Mechanism development for increased transparency of the relationship between local contractors and local employees
- g. The importance of cooperation to mutually maintain the balance of economic, environmental and social aspects
- h. Assurance that all the legal aspects and regulations are complied properly
- i. Assurance that the business cooperation is built ethically and professionally

Komunitas (Pimpinan Komunitas dan Pensiunan)
Community (Community Leaders and Retirees)

- a. Mekanisme penerapan program pengembangan masyarakat
- b. Peningkatan kualitas hubungan dengan pemangku kepentingan
- a. The implementation mechanism of community development programs
- b. Improved relationships quality with stakeholders

Respon dari PT Vale

Response from PT Vale

Frekuensi Pendekatan

Frequency of Approach

- a. RUPS
- b. Pertemuan berkala dan terjadwal sepanjang tahun
- a. GMS
- b. Regular and scheduled meetings throughout the year

- RUPS minimal sekali setiap tahun
- Kerjasama dalam bisnis sebagai mitra kerja yang dilakukan setiap hari
- Dialog secara berkala
- GMS is held at least once every year
- Cooperation in business as partners is done every day
- Hold dialogue regularly

- a. Penerapan program pengembangan masyarakat, terutama penyampaian hasil pemantauan dan evaluasi.
- b. Pelibatan aktif pada penyelenggaraan kegiatan kebudayaan di Luwu Timur dan Sorowako.
- c. Kerjasama perekruit tenaga kerja lokal.
- a. The implementation of community development programs, particularly disclosure of monitoring and evaluation results.
- b. Active involvement in the organization of cultural activities in Luwu Timur and Sorowako.
- c. Cooperation in local manpower recruitment.

Hampir setiap minggu Almost every week

Kelompok Pemangku Kepentingan
Stakeholder Group

Topik Pembahasan
Topic of Discussion

Pemerintah dan Swasta
(Pemerintah lokal, Pemerintah pusat, Investor, Pelanggan, Pemasok dan mitra, Sektor Publik)
Government and Private Sector
(Local governments, Central government, Investors, Customers, Suppliers and partners, Public Sector)

- a. Pembahasan komitmen PT Vale dalam berkontribusi pada aspek ekonomi, lingkungan, dan sosial untuk Pemerintah dan masyarakat
- b. Peningkatan kerjasama untuk saling mendukung dalam menjalankan transparansi dan akuntabilitas operasi PT Vale
- c. Kerjasama kegiatan program pemberdayaan masyarakat
- d. Pemanfaatan area konsesi PT Vale oleh pihak lain secara *illegal*
- e. Diskusi tentang rencana divestasi dan pengembangan izin PLTA
- a. Discussion PT Vale's commitment in contributing to the economic, environmental, and social for the Government and community
- b. Increased cooperation for mutual support in transparency and accountability in the operations of PT Vale
- c. Cooperation in activities of community empowerment programs
- d. Illegal use of the concession area of PT Vale by other parties
- e. Discussion on the divestment plan and the development of hydroelectric power plan license

Pengamat (Media, Akademia, LSM, Asosiasi Buruh dan Entitas lain)
Observers (Media, Academia, NGOs, Labor Association and Other Entities)

- a. Konsultasi untuk pelestarian aspek sosial dan budaya Luwu Timur dan Pasitabe, dengan tujuan meningkatkan hubungan yang lebih baik dengan pemangku kepentingan.
- b. Melakukan diskusi dan pelatihan
- c. Pengembangan program pemberdayaan masyarakat.
- d. Pembahasan isu penggunaan tanah *illegal* oleh pihak lain.
- e. Pembahasan isu keberlanjutan secara global, termasuk perubahan cuaca dan polusi.
- f. Penyampaian informasi yang tepat, benar dan bersifat strategis.
- g. Pemahaman kode etik dalam menyampaikan informasi, terutama pada situasi kritis
- a. Consultation for the preservation of social and cultural aspects of Luwu Timur and Pasitabe, with the aim to improve relations with stakeholders.
- b. Hold discussions and training
- c. Development of community empowerment programs.
- d. Discussion on issue of illegal land use by other parties.
- e. Discussion on the issue of global sustainability, including climate change and pollution.
- f. Disclosure of information in appropriate, accurate and strategic manner.
- g. Understanding of the code of ethics in conveying information, especially in critical situations

Masyarakat Sekitar
Surrounding Community

- a. Peningkatan kerjasama untuk menegakkan transparansi dan akuntabilitas operasi PT Vale.
- b. Pengembangan mekanisme penerapan program pemberdayaan masyarakat.
- a. Increased cooperation to uphold transparency and accountability in the operations of PT Vale.
- b. Mechanism development for the implementation of community development programs.

Respon dari PT Vale
Response from PT Vale

Frekuensi Pendekatan
Frequency of Approach

- a. Dialog dan kerjasama.
- b. Fasilitasi dan mediasi bila diperlukan.
- c. Penerapan program CSR dan kolaborasi dengan aparat Satuan Kerja Pemerintahan Daerah (SKPD).
- a. Dialogue and cooperation.
- b. Facilitation and mediation when needed.
- c. The implementation of CSR programs and collaboration with regional government apparatus work unit (SKPD).

Hampir setiap minggu dan kapanpun fasilitasi dan mediasi diperlukan
Almost every week and anytime necessary of facilitation and mediation

- a. Mengadakan pelatihan dan konsultasi sesuai kebutuhan.
- b. Menjadi narasumber sesuai permintaan
- c. Ikut serta dalam meliputi kegiatan PT Vale.
- a. Hold training and consultation as needed.
- b. Become a source according to requests
- c. Participate in coverage of PT Vale's activities.

- Kerjasama magang bagi mahasiswa setiap semester.
- Kerjasama publikasi yang dilakukan sesuai kebutuhan.
- Cooperation in internships for students every semester.
- Cooperation in publications is carried out as needed.

Keanggotaan Asosiasi [G4-16]
Association Membership

- Indonesian Mining Association (IMA)
- ASEAN Federation of Mining (AFMA)

Anggota
Member

- a. Diskusi pengembangan mekanisme dalam program pengembangan masyarakat.
- b. Pengembangan prosedur perekrutan tenaga kerja dan pelibatan kontraktor lokal.
- a. Discussion of mechanism development in the community development programs.
- b. Development of manpower recruitment procedures and the engagement of local contractors.

Hampir setiap hari
Almost every day

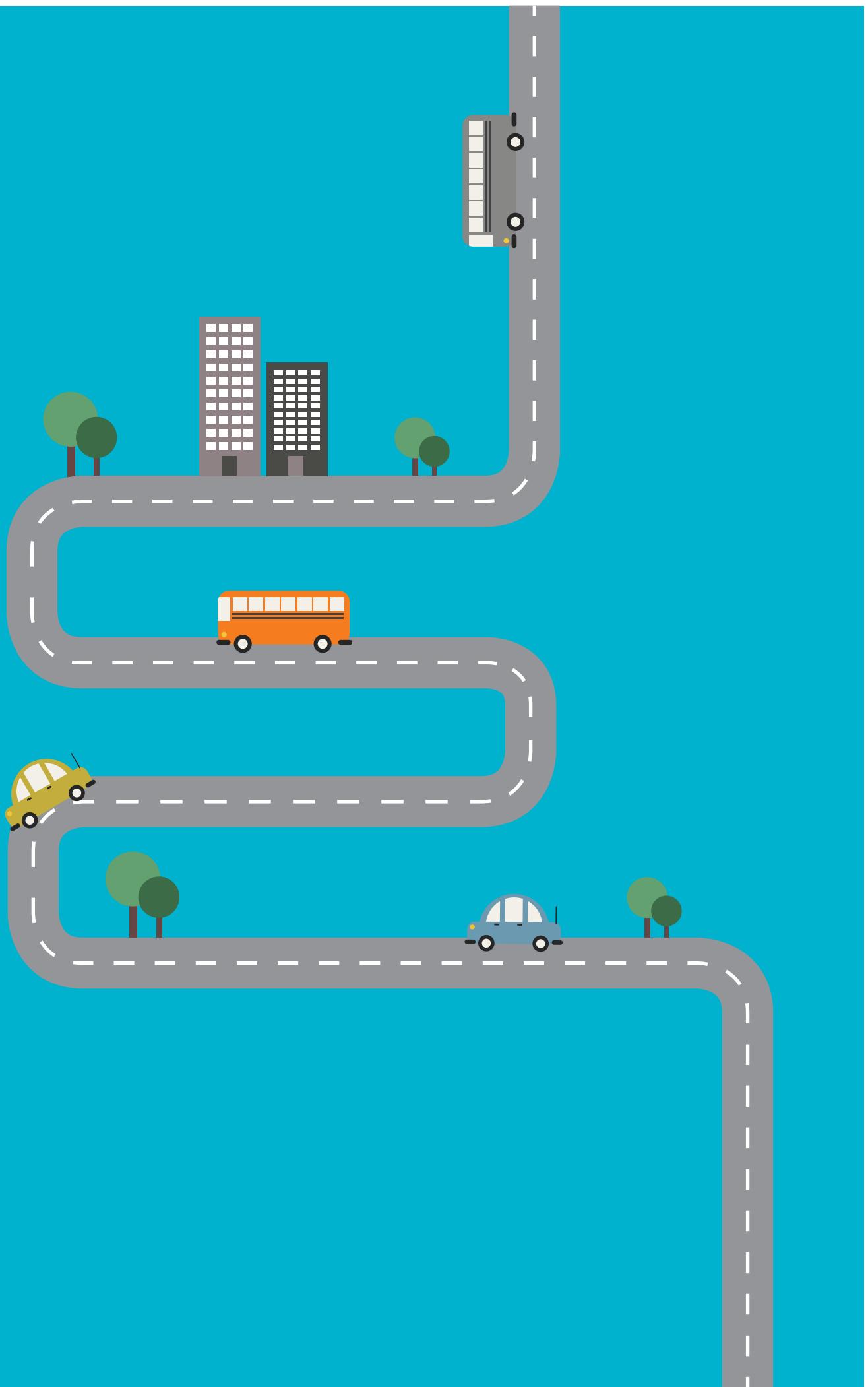
Anti-korupsi dan Tata Kelola Keberlanjutan

Anti-corruption and Sustainable Governance



Through management team work, we provide returns to shareholders, and ensure the compliance with environmental preservation and social responsibility commitments

Every year, all employees are required to submit a statement on conflict of interest to ensure a sustainable governance



Bagi PT Vale, komitmen untuk mendukung kegiatan anti korupsi merupakan hal mutlak yang harus dilakukan dengan tegas. Komitmen ini diwujudkan melalui sikap patuh terhadap Kode Etik dan Perilaku, serta tindakan yang bertanggung jawab, jujur, terpercaya, respek serta loyal pada Perusahaan.

Anti-korupsi [G4-DMA]

Pada Agustus 2015, PT Vale menambah 1 fungsi Independen, yaitu *compliance officer* yang mengawasi pelaksanaan anti korupsi. Secara tegas, kebijakan anti korupsi harus dipatuhi oleh seluruh karyawan Vale tanpa terkecuali. Kebijakan ini tercantum dalam Peraturan Perusahaan No POL-006-PTVI. Penyusunan peraturan anti korupsi dilakukan dengan merujuk pada hukum anti suap dari Amerika, Brazil, Inggris dan Indonesia.

Kegiatan anti korupsi PT Vale dilakukan sesuai manual anti korupsi yang telah disusun, termasuk melakukan identifikasi bagian mana yang memiliki risiko tinggi atas praktik korupsi. Hasilnya, hubungan terhadap institusi pemerintahan diidentifikasi mempunyai risiko tertinggi. Perusahaan berencana melakukan evaluasi tindakan anti korupsi ini setiap tahun sekali. [G4-SO3]

Hingga akhir Desember 2015, sosialisasi program anti korupsi telah dilakukan kepada lebih dari 70% karyawan level manajerial di PT Vale. Sosialisasi juga dilakukan ke masyarakat, beberapa instansi di pemerintah pusat dan juga pemerintah daerah setempat. Selain itu, Perusahaan memiliki panduan *whistleblowing system* yang khusus disediakan untuk menjadi saluran pelaporan dan penyelesaian kasus terkait *code of ethical conduct*, termasuk praktik anti korupsi, seperti gratifikasi, standar etika, dan langkah pencegahannya. [G4-SO4]

For PT Vale, a commitment to support the anti-corruption activities is absolute and must be done. This commitment has been realized through compliance with the Code of Ethics and Conduct, as well as the responsible, honest, trustworthy, respectful and loyal conduct to the Company.

Anti-corruption [G4-DMA]

In August 2015, PT Vale added another independent function, ie a compliance officer who oversees the implementation of anti-corruption activities. The anti-corruption policy must be adhered to by all Vale employees without exception. This policy is contained in the Company Regulation No. POL-006-PTVI. The anti-corruption regulations were drafted with reference to the anti-bribery laws in the United States, Brazil, the United Kingdom and Indonesia.

PT Vale's anti-corruption activities are conducted in accordance with anti-corruption manual that has been prepared, including identifying which divisions with high risk of corruption. The result identified that the function with relations to government agencies have the highest risk. The company has planned to perform an evaluation on anti-corruption measures once a year. [G4-SO3]

Until the end of December 2015, the anti-corruption program has been disseminated to more than 70% of manager-level employees of PT Vale. The dissemination was also held for the community, several agencies in the central government and local governments. In addition, the Company has whistleblowing system guidelines, which exclusively reserved to be the channels of reporting and resolution of cases related to the code of ethical conduct, including anti-corruption practices, such as gratification, ethical standards, and prevention measures. [G4-SO4]

Jumlah peserta pelatihan Anti-Bribery and Corruption (ABC)
Total Participants in Anti-Bribery and Corruption (ABC) Training

No	Jabatan Position	Jumlah Peserta Total Participants
1	Direksi Directors	3
2	L3 (Direktur Departemen) L3 (Director of Department)	15
3	L2 (Manajer Senior) L2 (Senior Manager)	52
4	L1 (Manajer) L1 (Manager)	343
5	Karyawan Employees	153
	Total	580



PT Vale terus berupaya untuk menjalankan program anti korupsi. Sebagai perusahaan publik yang terdaftar di Bursa Efek Indonesia, Perusahaan secara rutin diaudit oleh badan independen nasional dan internasional, baik dalam penerapan kaidah penambangan yang baik, maupun tata kelola perusahaan yang baik. Hingga akhir tahun 2015, tidak terdapat laporan kasus korupsi. [G4-SO5]

Eтика dan Integritas [G4-56]

Dalam melaksanakan kegiatan bisnis, PT Vale berpedoman pada nilai-nilai yang mencerminkan standar etika dan moral tinggi melalui penerapan Kode Etik dan Perilaku, serta *supplier conduct guidelines* dan *ethical practices policy*.

Setiap individu yang menjadi bagian dari PT Vale berkewajiban membuat Pernyataan Kepatuhan Kode Etik dan Perilaku. Secara berkala, Pernyataan Kepatuhan tersebut diperbarui kembali.

PT Vale continues to strive to carry out the anti-corruption program. As a publicly listed company on the Indonesia Stock Exchange, the Company is regularly audited by independent national and international bodies, both in the application of good mining principle, as well as good corporate governance. By the end of 2015, there were no reported cases of corruption. [G4-SO5]

Ethics and Integrity [G4-56]

In running its business operations, PT Vale refers to values that reflect high ethical and moral standards through the implementation of the Code of Ethics and Conduct, as well as supplier conduct guidelines and ethical practices policy.

Every individual that is part of PT Vale is obliged to make a Statement of Compliance with the Code of Ethics and Conduct. Periodically, the Compliance Statement is renewed.



Nilai Perusahaan dapat dilihat di:
Company Values can be found at

<http://www.vale.com/indonesia/BH/aboutvale/mission/pages/default.aspx>

Whistleblowing System

Aspek penting dalam penerapan anti-korupsi dan anti-suap dalam tata kelola perusahaan yang baik adalah mekanisme pelaporan dugaan pelanggaran. Pelanggaran ini mencakup pelanggaran terhadap Kode Etik dan Perilaku maupun terhadap hukum positif yang berlaku di Indonesia.

Hingga akhir periode pelaporan, PT Vale terus menyiapkan mekanisme dan sistem penyampaian pelaporan berbasis Bahasa Indonesia (*whistleblowing system* atau WBS). Namun demikian, saat ini sudah terdapat saluran layanan etik dan perilaku yang merupakan fasilitas bagi para pemangku kepentingan untuk menyampaikan pelanggaran Kode Etik dan Perilaku yang disediakan oleh Vale secara global (berbasis bahasa Inggris). Layanan Etik dan Perilaku ini dapat diakses dalam <http://www.vale.com/indonesia/BH/aboutvale/ethics-and-conduct-office/Pages/default.aspx>

Whistleblowing System

An important aspect in the implementation of anti-corruption and anti-bribery in good corporate governance is a mechanism for alleged violation reporting. These violations include violation of the Code of Ethics and Conduct as well as the positive laws in Indonesia.

Until the end of the reporting period, PT Vale continued the preparation of mechanism and whistleblowing system (WBS) in Bahasa Indonesia. However, now there is a line service of ethics and conduct, which is a facility for stakeholders to report violations of Code of Ethics and Conduct, provided by Vale Global, available in English. The Ethics and Conduct service can be accessed at <http://www.vale.com/indonesia/BH/aboutvale/ethics-and-conduct-office/Pages/default.aspx>

Uraian Lain Terkait Anti-Korupsi dan GCG

Uraian dan informasi yang lebih mendetail terkait penerapan dan pelaksanaan GCG serta anti-korupsi disampaikan pada Laporan Tahunan 2015 PT Vale Indonesia Tbk, yang disusun dan diterbitkan terpisah dari Laporan ini.

Uraian tentang pelaksanaan RUPS pada tahun 2015 dan putusan-putusan yang dihasilkan disampaikan dalam Laporan Tahunan 2015 PT Vale Indonesia Tbk.

Other Description Related to Anti-Corruption and GCG

More detailed description and information related to the GCG application and implementation as well as anti-corruption are presented in the 2015 Annual Report of PT Vale Indonesia Tbk, which is prepared and published separately from this report.

Description on the GMS implementation in 2015 and the resolutions are presented in the 2015 Annual Report of PT Vale Indonesia Tbk.



Struktur Tata Kelola Perusahaan [G4-34]

Sesuai Undang-Undang No.40 Tahun 2007 Tentang Perusahaan Terbatas, struktur badan tata kelola Perusahaan terdiri atas organ perusahaan, yaitu: Rapat Umum Pemegang Saham (RUPS), Dewan Komisaris, dan Direksi.

RUPS merupakan organ perusahaan tertinggi dalam struktur badan tata kelola Perusahaan. Penyelenggaraan RUPS juga menjadi mekanisme bagi Pemegang Saham untuk meminta penjelasan atau menyampaikan rekomendasi kepada Dewan Komisaris maupun Direksi.

Corporate Governance Structure [G4-34]

According to Law No. 40 of 2007 on the Limited Liability Company, the Company's governance body structure consists of corporate organs, namely the General Meeting of Shareholders (GMS), the Board of Commissioners and Board of Directors.

GMS is the company's highest organ in the structure of corporate governance body. The General Meeting of Shareholders is also held as a mechanism for shareholders to ask for an explanation or make recommendations to the Board of Commissioners and Board of Directors.



Dewan Komisaris

Rapat Umum Pemegang Saham (RUPS) Tahunan PT Vale pada 31 Maret 2015 telah menerima pengunduran diri Bapak Peter Poppingga sebagai Komisaris Perusahaan. Selanjutnya, melalui RUPS Luar Biasa pada 30 Juni 2015, pemegang saham menyetujui pengangkatan Ibu Andrea Marques De Almeida sebagai Komisaris Perusahaan. [G4-13, G4-34, G4-40]

Dengan demikian, per 31 Desember 2015 keanggotaan Dewan Komisaris tetap terdiri dari 10 orang. Dua orang di antaranya adalah Komisaris Independen. Perusahaan memastikan tidak ada anggota Dewan Komisaris yang merangkap jabatan sebagai Direksi maupun pejabat eksekutif lainnya di Perusahaan.

Board of Commissioners

Annual General Meeting of Shareholders (AGMS) of PT Vale on March 31, 2015 has accepted the resignation of Mr. Peter Poppingga as Commissioner. Furthermore, through the Extraordinary General Meeting of Shareholders on June 30, 2015, the shareholders approved the appointment of Ms. Andrea Marques de Almeida as Commissioner. [G4-13, G4-34, G4-40]

Thus, as of December 31, 2015, the Board of Commissioners remained composed of 10 members. Two of them are Independent Commissioners. The company ensured that no member of the Board of Commissioners who concurrently served as Director or other executive officer of the Company.



Penjelasan terkait komposisi Dewan Komisaris, pelaksanaan tugas masing-masing Komite di bawah Dewan Komisaris dan mekanisme penilaian kinerja Dewan Komisaris selama tahun 2015 disampaikan dalam Laporan Tahunan 2015 PT Vale Indonesia Tbk. Informasi terkait komposisi Direksi, mekanisme, proses dan hasil penilaian kinerja Direksi, serta hal-hal lain mengenai Direksi disampaikan terpisah dalam Laporan Tahunan 2015 PT Vale Indonesia Tbk.

Explanation related to the composition of the Board of Commissioners, the duty implementation of each Committee's under the Board of Commissioners and mechanisms the Board of Commissioners' performance assessment during 2015 is presented in the 2015 Annual Report of PT Vale Indonesia Tbk.

Information related to the composition of the Board of Directors, mechanisms, processes and results of performance assessment of the Board of Directors, as well as other matters concerning the Board of Directors is presented separately in the 2015 Annual Report of PT Vale Indonesia Tbk.

Direksi

Direksi bertanggung jawab atas pengelolaan Perusahaan secara efektif, efisien, dan berhati-hati, dengan berfokus pada pertumbuhan yang berkelanjutan. Direksi PT Vale terdiri dari Presiden Direktur, seorang Wakil Presiden Direktur dan dua orang Direktur.

Board of Directors

The Board of Directors is responsible for managing the company effectively, efficiently, and carefully, by focusing on sustainable growth. PT Vale's Board of Directors consists of a President Director, a Vice President Director and two Directors.



Fasilitas penghasil energi uap
dengan kapasitas 28 MW

Steam-generating energy facility
with 28 MW capacity

Indeks Isi GRI 4.0 & Suplemen Sektor Tambang dan Logam [G4-32]

GRI 4.0 Content Index & Mining and Metal Sector Supplement

Standar Pengungkapan Umum General Standard Disclosures				
Indikator Indicators	Uraian Description	Halaman Page(s)	Referensi Silang dengan Laporan Tahunan Tahun 2015 Cross-Reference with Annual Report 2015	Penjaminan Eksternal External Assurance
Strategi dan Analisis Strategy and Analysis				
G4-1	Pernyataan dari Direksi Statement from BOD	6	89, 98	✓
G4-2	Uraian Dampak, Risiko dan Peluang Description of Key Impacts, Risks, and Opportunities	6	291	-
Profil Organisasi Organizational Profile				
G4-3	Nama Organisasi Name of The Organization	5	Sampul Belakang/Back Cover	✓
G4-4	Merek, Produk, dan Layanan Jasa Primary Brands, Products and Services	5	22, 119	✓
G4-5	Lokasi Kantor Pusat Location of Headquarter	5	Sampul Belakang/Back Cover	✓
G4-6	Jumlah Negara Tempat Beroperasi Number of Countries Operations	5	21, 22	✓
G4-7	Kepemilikan Saham dan Bentuk Hukum Ownership and Legal Form	5	22	✓
G4-8	Pasar Terlayani Markets Served	5	161	✓
G4-9	Skala Organisasi Organizational Scale	1, 5	15	✓
G4-10	Jumlah dan Komposisi Pegawai Number and Composition of Employees	49	194-196	✓
G4-11	Pekerja Terlindungi Perjanjian Kerja Bersama (PKB) Employees Covered by Collective Bargaining Agreements	50, 58	-	✓
G4-12	Rantai Pasokan Organisasi Organizational Supply Chain	30, 34	-	✓
G4-13	Perubahan Signifikan Organisasi Significant Changes of Organization	36	-	✓
G4-14	Pendekatan Pencegahan Melalui Manajemen Risiko Precautionary Approach Through Risk Management	60	289, 291	✓
G4-15	Kepatuhan Pada Prinsip-prinsip dan Inisiatif Eksternal Compliance with External Charters, Principles, or Other Initiatives	47	-	✓
G4-16	Keanggotaan dalam Asosiasi Memberships in Associations	97	-	✓
Aspek Material dan Pembatasan Material Aspects and Boundaries				
G4-17	Daftar Entitas List of Entities	10	64, 169	✓
G4-18	Proses Menentukan Isi Laporan dan Pembatasan Process for Defining The Report Content and Boundaries	16, 17	-	✓
G4-19	Daftar Aspek Material List of Material Aspects	23	-	✓

Indikator	Uraian	Halaman	Referensi Silang dengan Laporan Tahunan Tahun 2015	Penjaminan Eksternal
	Indicators	Page(s)	Cross-Reference with Annual Report 2015	External Assurance
G4-20	Batasan Aspek Material di Dalam Organisasi Material Aspect Boundaries Within Organization	23	-	✓
G4-21	Batasan Aspek Material di Luar Organisasi Material Aspect Boundaries Outside Organization	23	-	✓
G4-22	Pernyataan Kembali Restatement	20	-	✓
G4-23	Perubahan Pelaporan Bersifat Signifikan Significant Changes from Previous Reports	10, 20	-	✓
Pelibatan Pemangku Kepentingan Stakeholders Engagement				
G4-24	Daftar Pemangku Kepentingan Stakeholders List	92	301	✓
G4-25	Dasar Identifikasi dan Seleksi Pemangku Kepentingan Basis for Identification and Selection of Stakeholders	92	-	✓
G4-26	Proses Pendekatan pada Pemangku Kepentingan Approach to Stakeholders' Engagement	16, 17, 92, 94	-	✓
G4-27	Topik Kunci dan Respon Organisasi Key Topics and Organization Response	60, 92, 94	-	✓
Profil Pelaporan Report Profile				
G4-28	Periode Pelaporan Reporting Period	10	-	✓
G4-29	Tanggal Penerbitan Laporan Terdahulu Date of Most Recent Previous Report	10	-	✓
G4-30	Siklus Pelaporan Reporting Cycle	10	-	✓
G4-31	Kontak Contact Point	11	-	✓
G4-32	Indeks Isi GRI GRI Content Index	11, 105	-	✓
G4-33	Penjaminan Assurance	11	-	✓
Tata Kelola Governance				
G4-34	Struktur Tata Kelola Governance Structure	102	221	✓
G4-36	Penunjukan Pejabat Pelaksana Kegiatan Terkait Topik Ekonomi, Lingkungan dan Sosial Appointed an Executive Level Position for Economic, Environmental and Social Topics	40, 41, 80	-	—
G4-48	Pengesahan Pelaporan Reports Approval	21	-	—
Etika dan Integritas Ethics and Integrity				
G4-56	Nilai-nilai, Prinsip, dan Norma Organisasi Organizational Values, Principles and Norms	4, 101	38	✓

Standar Pengungkapan Khusus Specific Standard Disclosures					
Aspek Material Material Aspects	DMA* dan Indikator DMA* and Indicator	Uraian Description	Halaman Page(s)	Referensi Silang dengan Laporan Tahunan Tahun 2015 Cross-Reference with Annual Report 2015	Penjaminan Eksternal External Assurance
Kinerja Ekonomi Economic Performance					
Kinerja Ekonomi Economic Performance	G4-DMA*	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	30	-	✓
	G4-EC1**	Nilai Ekonomi Langsung Dihasilkan dan Didistribusikan Direct Economic Value Generated and Distributed	27, 28	112, 113	✓
	G4-EC3	Kewajiban Perusahaan Terhadap Penyediaan Pensiun Organization's Defined Benefit Plan Obligations	53, 54	-	✓
Dampak Ekonomi Tak Langsung Indirect Economic Impacts	G4-EC7	Pembangunan dan Dampak Investasi Infrastruktur Development and Impact of Infrastructure Investment	83	328-349	—
	G4-EC8	Dampak Ekonomi Tak Langsung Indirect Economic Impacts	34, 83	328-349	—
Praktik-praktik Pengadaan Procurement Practices	G4-EC9	Proporsi Pemasok Lokal Proportion on Local Suppliers	32, 34, 85	-	✓
Lingkungan Environment					
Penggunaan Material Material Usage	G4-EN1	Material Terpakai Berdasarkan Jenis dan Berat Material's Used by Weight and Volume	61	-	✓
	G4-EN2	Percentase Material Terpakai Berasal dari Proses Daur Ulang Percentage of Material Used That Are Recycled	61	-	✓
Energi Energy	G4-EN3**	Energi Terkonsumsi di Dalam Perusahaan Energy Consumption within The Organization	67, 68, 70	-	✓
	G4-EN5	Intensitas Energi Energy Intensity	70	-	—
	G4-EN6	Pengurangan Konsumsi Energi Reduction of Energy Consumption	70, 71	-	—
Keanekaragaman Hayati Biodiversity	MM1	Jumlah Kawasan Tambang yang Direhabilitasi Management of Biodiversity	62	-	—
	MM2	Pengelolaan Keanekaragaman Hayati Management of Biodiversity	62	-	—
Air Water	G4-EN8	Total Pengambilan Air Berdasarkan Sumber Total Water Withdrawal by Source	64	-	—
	G4-EN9	Sumber Air Terpengaruh karena Pengambilan Air Water Sources Affected by Withdrawal	64	-	—

* DMA = Pengungkapan oleh Manajemen | Disclosure on Management Approach

** Diungkapkan secara penuh | Fully disclosed

Aspek Material Material Aspects	DMA* dan Indikator DMA* and Indicator	Uraian Description	Halaman Page(s)	Referensi Silang dengan Laporan Tahunan Tahun 2015 Cross-Reference with Annual Report 2015	Penjaminan Eksternal External Assurance
Emisi Emissions	G4-DMA	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	58, 59, 71	-	✓
	G4-EN15	Emisi Gas Rumah Kaca Langsung (GRK) (Scope 1) Direct Greenhouse Gas (GHG) Emissions (Scope 1)	72	-	✓
	G4-EN16	Emisi GRK Bersumber Energi Tidak Langsung (Scope 2) Energy Indirect Greenhouse Gas (GHG) Emissions	72	-	—
	G4-EN18	Intensitas Emisi GRK Greenhouse Gas (GHG) Intensity	73	-	—
	G4-EN19	Penurunan Emisi GRK Reduction on Greenhouse Gas (GHG) Emissions	72	-	—
	G4-EN21**	Emisi SOx, NOx, dan Lainnya NOx, SOx and Other Emissions	72	-	✓
Efluen dan Limbah Effluent and Waste	G4-EN22	Total Air Terbuang Berdasar Kualitas dan Tujuan Total Water Discharge by Quality and Destination	66	-	—
	G4-EN23**	Jenis Limbah dan Metode Pengolahannya Type of Waste and Disposal Method	73, 74, 75	-	✓
	G4-EN25	Pengangkutan Limbah B3 Hazardous Waste Transportation	74	-	✓
	G4-EN26	Pengaruh Pembuangan Air Limbah Pada Keanekaragaman Hayati Impact of Waste Water Discharge on Biodiversity	65, 66	-	—
	MM3	Jumlah overburden, tailing, dan slag Total Amount of Overburden, Tailing, and Slags	73, 74	-	—
Transportasi Transport	G4-EN30	Dampak Transportasi Pada Lingkungan Environmental impacts of transportation	76	-	—
Umum dan Kepatuhan General and Compliance	G4-EN31	Total Biaya Perlindungan dan Investasi Lingkungan Total Environmental Protection Expenditure and Investment	64	-	✓
Penilaian Lingkungan terhadap Pemasok Supplier Environmental Assessment	G4-EN32	Percentase Pemasok yang di Evaluasi terkait Kriteria Lingkungan Percentage of Suppliers Screened for Environmental Criteria	34	-	—
Sumber Daya Manusia Human Resources					
Ketenagakerjaan Employment	G4-LA1	Jumlah Pekerja Baru dan Tingkat Turnover Number of New Employee and Turnover	48, 49	185, 194-196	—
	G4-LA2	Manfaat untuk Pekerja Benefit for Employee	53	-	—
Hubungan Ketenagakerjaan Management Relations	MM4	Jumlah Demonstrasi Number of Strikes and Lock-outs	35	-	—

* DMA = Pengungkapan oleh Manajemen | Disclosure on Management Approach

** Diungkapkan secara penuh | Fully disclosed

Aspek Material Material Aspects	DMA* dan Indikator DMA* and Indicator	Uraian Description	Halaman Page(s)	Referensi Silang dengan Laporan Tahunan Tahun 2015 Cross-Reference with Annual Report 2015	Penjaminan Eksternal External Assurance
Keselamatan dan Kesehatan Kerja (K3) Occupational Health and Safety (OHS)	G4-DMA	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	40, 41	-	■
	G4-LA5	Keterwakilan Pekerja dalam Komite Bersama K3 Workforce Represented in Formal OHS Committee	42	-	■
	G4-LA6	Jenis dan Tingkat Kecelakaan Kerja Types and Rates of Injury	42, 44	355	✓
	G4-LA7**	Pekerja dengan Risiko Tinggi Kesehatan Kerja Workers with High Risk of Working Diseases	41	-	✓
	G4-LA8	Topik K3 dalam PKB OHS Topics in Formal Agreement with Trade Unions	45	354	✓
Pelatihan dan Pendidikan Training and Education	G4-LA9	Rerata Jam Pelatihan Per Pegawai Per Tahun Average of Training Hours per Year per Employee	52	186, 188, 189	■
	G4-LA11	Percentase Pegawai Penerima Penilaian Kinerja Percentage of Employees Receiving Performance Review	55	-	■
Keberagaman dan Kesetaraan Kesempatan Diversity and Equal Opportunity	G4-LA12	Keberagaman Pejabat Tata Kelola Diversity Composition of Governance Bodies	48, 49	-	■
Penilaian Ketenagakerjaan pada Pemasok Supplier Assessment for Labor Practices	G4-LA14	Percentase Pemasok yang Dievaluasi Percentage of Suppliers Screened for Labor Criteria	34, 35	-	■
	G4-LA15	Dampak Signifikan Praktik Ketenagakerjaan Pada Rantai Pasokan Significant Impacts for Labor Practices in The Supply Chain	35	-	■
Penanganan Keluhan Masalah Ketenagakerjaan Labor Practices Grievance Mechanisms	G4-LA16	Mekanisme Penyelesaian Kasus Ketenagakerjaan Grievance Mechanism For Labor	35	-	■
Hak Asasi Manusia Human Rights					
Hak Masyarakat Asli Sekitar Indigenous Rights	MM5	Wilayah Operasi yang Dekat dengan Daerah Masyarakat Asli Operations Taking Place In or Adjacent to Indigenous' People Territories	90	-	■
	MM6	Perselisihan Mengenai Lahan Land Use Disputes	90	-	■
	MM7	Mekanisme Pengaduan Perselisihan Penggunaan Lahan Land Use Grievance Mechanisms	85, 90	-	■
Kemasyarakatan Society					
Masyarakat Lokal Local Communities	G4-DMA	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	80	-	■
	G4-SO1	Pengembangan Masyarakat Lokal Local Community Development Program	81, 83, 94	-	■
	G4-SO2**	Potensi Dampak Terhadap Masyarakat Lokal Significant Impacts on Local Community	85	-	✓

* DMA = Pengungkapan oleh Manajemen | Disclosure on Management Approach

** Diungkapkan secara penuh | Fully disclosed

Aspek Material Material Aspects	DMA* dan Indikator DMA* and Indicator	Uraian Description	Halaman Page(s)	Referensi Silang dengan Laporan Tahunan Tahun 2015 Cross-Reference with Annual Report 2015	Penjaminan Eksternal External Assurance
Anti-korupsi Anti-corruption	G4-DMA	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	100	-	■
	G4-SO3	Jumlah dan Persentase Operasi Berisiko Signifikan Terkait Korupsi Total and Percentage of Operation Related to Corruption	100	-	■
	G4-SO4**	Komunikasi dan Pelatihan mengenai Kebijakan dan Prosedur Anti-korupsi Communication and Training on Anti-corruption Policies and Procedures	100	43, 225	✓
	G4-SO5	Insiden dan Tindakan Anti-korupsi Incidents of corruption and actions taken	101	-	✓
Penilaian Dampak Sosial dan Penanganannya Supplier Assessment for Impact on Society	G4-SO9	Penilaian Pemasok Baru Terkait Dampak Sosial New Supplier Screening Related to Impacts on Society	34	-	■
Mekanisme Keluhan terhadap Dampak pada Masyarakat Grievance Mechanisms for Impacts on Society	G4-SO11	Mekanisme Pengaduan Terkait Dampak Sosial Grievance Mechanism For Society Impacts	87	-	■
Tanggung Jawab Produk Product Responsibility					
Kesehatan dan Keamanan Konsumen Customer Health and Safety	G4-PR1	Evaluasi Keamanan dan Kesehatan Produk Health and Safety Product Assessment	26	-	■
Pencantuman Label Produk dan Jasa Product and Service Labeling	G4-PR4	Jumlah Insiden Ketidaksesuaian Informasi Terkait Produk Total number of Incidents of Non-compliance with Product Regulations	29	-	■
Rencana Pascatambang (Aspek Spesifik Sektor Tambang dan Logam) Closure Planning (Mining and Metals Sector Specific Aspect)					
Rencana Pascatambang Closure Planning	DMA	Pengungkapan Pendekatan Manajemen Disclosure on Management Approach	62	-	■
	MM8	Pertambangan Kecil dan Ilegal di Sekitar Wilayah Operasi Artisanal and Small-scale Mining	63	-	■
	MM9	Pemindahan Resettlement	90	-	■
	MM10	Wilayah yang Memiliki Rencana Pascatambang Operations with Closure Planning	62	-	■

* DMA = Pengungkapan oleh Manajemen | Disclosure on Management Approach

** Diungkapkan secara penuh | Fully disclosed

Daftar Singkatan

Abbreviation List

AFMA	ASEAN Federation of Mining Association
CSMS	Contractor Safety Management System
CAR	Critical Activity Requirements
EMS	Environmental Management System
FPP	Fatality Prevention Program
GCG	Good Corporate Governance
GRK/GHG	Gas Rumah Kaca/Green House Gasses
GRI	Global Reporting Initiative
HSD	High Speed Diesel
HSFO	High Sulfur Fuel Oil
LBI	Local Business Initiative
LGS	Lamella Gravity Settler
MHS	Major Hazard Standard
OHS	Occupational Health and Safety
PNI	Promote National Interest
PMDM	Program Mitra Desa Mandiri
PPLI	Prasadha Pamunah Limbah Industri
PTPM/ICDP	Program Terpadu Pengembangan Masyarakat/Integrated Community Development Program
RPS/SMP	Rencana Pengembangan Sosial/Social Management Plan
SRG	Sustainability Repoting Guidelines
TSS	Total Suspended Solid
WBS	Whistleblowing System

Lembar Umpan Balik

Feedback Form

Laporan ini merupakan Laporan Keberlanjutan 2015 PT Vale Indonesia Tbk, yang merupakan laporan terpadu untuk memberikan gambaran kinerja keuangan dan keberlanjutan. Kami mengharapkan masukan, kritik dan saran dari Bapak/Ibu/Saudara.

This is the 2015 Sustainability Report of PT Vale Indonesia Tbk that provides an overview of financial and sustainability performance. We are looking forward to receive any inputs, critics and suggestions from you.

1. Laporan ini sudah menggambarkan informasi aspek material bagi Perusahaan.

The report has illustrated information on the Company's material aspect.

Sangat Tidak Setuju Strongly Disagree **Netral** Neutral **Setuju** Agree

2. Laporan ini sudah menggambarkan informasi positif dan negatif Perusahaan.

The report has described positive and negative information of the Company.

Sangat Tidak Setuju Strongly Disagree **Netral** Neutral **Setuju** Agree

3. Laporan ini mudah dimengerti.

The report is comprehensible.

Sangat Tidak Setuju Strongly Disagree **Netral** Neutral **Setuju** Agree

4. Aspek material apa yang paling penting bagi anda: (nilai 1=paling penting s/d 8=paling tidak penting)

Material aspect(s) which is (are) the most important to you: (score 1=most important up to 8=Least important)

- | | |
|---|-------|
| • Kinerja Ekonomi Economic Performance | () |
| • Energi Energy | () |
| • Emisi Emission | () |
| • Limbah Cair dan Padat Effluent & Waste | () |
| • Kesehatan dan Keselamatan Kerja (K3) Occupational Health & Safety | () |
| • Komunitas Lokal Local Community | () |
| • Anti-korupsi Anti-corruption | () |
| • Pascatambang Closure Planning | () |

PROFIL ANDA | YOUR PROFILE

Nama Lengkap :
Full Name

Pekerjaan :
Occupation

Nama Lembaga/Perusahaan :
Institution/Company's Name

Golongan Pemangku Kepentingan Stakeholders Group	<input type="checkbox"/> Pemerintah Governance	<input type="checkbox"/> Masyarakat Community	<input type="checkbox"/> Perusahaan Corporate
	<input type="checkbox"/> Industri Industry	<input type="checkbox"/> LSM NGO	<input type="checkbox"/> Lain-lain, mohon sebutkan..... Others, please state

PT Vale Indonesia Tbk

The Energy Building, 31st Floor
Jl. Jenderal Sudirman Kav. 52-53
Jakarta 12190, Indonesia
Tel: +62 21 524 9000
Fax: +62 21 524 9020

Mohon kirimkan kembali lembar umpan balik kepada :
Please return this feedback form to:

PT Vale Indonesia Tbk

Plaza Bapindo, Citibank Tower, 22nd floor

Jalan Jendral Sudirman Kav. 54-55

Jakarta 12190, Indonesia

Tel: +62 21 524 9000

Fax: +62 21 524 9020

www.vale.com/indonesia

PT Vale Indonesia Tbk

The Energy Building, 31st Floor

Jl. Jenderal Sudirman Kav. 52-53

Jakarta 12190, Indonesia

Tel: +62 21 524 9000

Fax: +62 21 524 9020

www.vale.com/indonesia

