

2018 Sustainability Report

Sustainable Growth



Map of Business Activities



- | | | | |
|--------------------------------------|-----------------------|---|-----------------------------|
| 1 Block A Aceh | 6 South Sokang Block | 11 Simenggaris Block | 16 HQ MEDCOENERGI |
| 2 Geothermal Sarulla | 7 Bangkanai * | 12 Senoro-Toili Block | 17 Tanjung Jati B |
| 3 Riau IPP (MRPR) | 8 West Bangkanai * | 13 South Sumatra Cluster (South Sumatra Block, Rimau Block and Lematang Block) | 18 Geothermal Ijen |
| 4 Batam IPP (MEB, DEB, TM2500, ELB) | 9 Bengara Block | 14 Sumatra IPP (MPE, EPE and Singa) | 19 Batu Hijau |
| 5 Block B Natuna | 10 Tarakan Block | 15 Mini Hydro | 20 Madura Offshore Block * |
| | | | 21 Sampang Block * |

International Assets



Oil & Gas

- Production
- Development
- Exploration



Power

- Power Installed
- Power Development



Mining

- Mining Production
- Mining Development
- Mining Exploration

* This report covers the calendar year 2018 and does not yet include sustainability data and information on Ophir Energy plc which was acquired in Q2 2019.

For further information,
please visit

www.medcoenergi.com

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Chairman's Welcome



“

MedcoEnergi is a leading energy and natural resources company with a strong commitment to sustainable development

”

Muhammad Lutfi
President Commissioner

At MedcoEnergi, our sustainable growth as a competitive energy and natural resources company depends on the strong foundation of our commitment to sustainable development. We have come a long way since we published our first sustainability report in 2006, and we now have an ambitious five year road map in place that will guide our efforts through 2021.

The process of designing this road map involved taking a look at best international practices, which led to the creation of a new sustainability policy, and action plans across a wide range of areas including health and safety, environment and social impact, human capital and governance. Through these efforts, our approach to sustainability is becoming much more integrated across our organization.

This report tells the next chapter of our sustainability journey during 2018, including our achievements, our remaining and new challenges, and our plans for the future. Our journey takes place in the broader context of global and national sustainability issues. The complex and interconnected challenges of poverty, human rights, environmental degradation, and climate change are global, but also tangible in the local communities where we work, and it is important to us to be actively involved as part of the solution.

At the local level, we can contribute by creating jobs, supporting new businesses, organizing and funding environmental protection efforts with our employees and local partners. At the global level, we can help by developing renewable energy sources, and by engaging with the United Nations Framework Convention on Climate Change (UNFCCC) discussions on climate change, in which I was fortunate to take part as a member of the

Indonesian delegation to the Conference of the Parties (COP) 24 meeting in Katowice, Poland. We are also finding ways to support the Government of Indonesia in contributing to the United Nations Sustainable Development Goals (UN SDG), through partnerships that include non-governmental organizations (NGOs), the private sector, and civil society. We aspire to be part of the solution to the global challenges we are facing, and I am pleased to see the commitment shown by the Board of Directors and MedcoEnergi's executives to this goal.

This report shares the concrete progress that MedcoEnergi has made in the past year in strengthening the foundation of our sustainability efforts, which we expect will enable sustainable growth for the years to come. We are committed to being a good corporate citizen by protecting the environment, carrying out our social responsibility, and upholding governance in our daily operations. I welcome you to be part of our journey, and encourage your participation in helping to make our vision reality, together.



Muhammad Lutfi
President Commissioner

Letter from the Board



2018 was a year of strong operational performance across our oil and gas, power, and mining businesses. We were able to meet our goal of maintaining low-cost production, successfully delivering two major projects with Block A Aceh and Sarulla geothermal, and we received 20-year extensions for two Indonesian Production Sharing Contracts (PSCs).

These operational successes were enabled by our achievements in sustainability. As part of our commitment to meet the expectations of our stakeholders, we work alongside communities to pursue social and economic goals, contributing to empowerment in the areas where we operate. Completing the development of the Block A Aceh project was contingent on our successful implementation of the Environmental and Social Action Plan. Extension of the Rimau and Tarakan PSCs was made possible by the extensive environmental and social programs that we have implemented over many years of operating these PSCs. Our efforts add value to local communities and increase the confidence of our shareholders, investors, and stakeholders.

At the same time, our operational achievements support our sustainability commitments. Bringing

additional geothermal units online at Sarulla delivers on our commitment to increasing renewable energy sources and reducing emissions, and we now have close to 1,500 MW of gross operating installed capacity in gas, geothermal, and hydroelectric power plants. Additional geothermal assets are also being explored in Ijen, East Java and Bonjol, West Sumatra.

We are creating sustainable value for our stakeholders through sustainable growth. The three pillars of our MedcoEnergi Sustainability Policy—Leadership of and by Our Employees, Environmental and Social Development, and Sustainable Livelihoods and Community Development—represent our priorities and major categories of work, and each of them has associated goals and action plans. This report shares our efforts to achieve these goals, and the milestones of our journey towards sustainable growth.

In 2018, we met our Health, Safety and Environment (HSE) goal of measuring and reporting all Scope 1 emissions, continued implementing our Health, Safety, and Environmental Management System, and completing Occupational Health Hazard Assessments. In the area of governance, all of our employees completed Anti-Corruption training and we reviewed our security personnel management system to align with Indonesian regulations, international standards and best practices. In addition, Medco E&P Natuna Ltd was certified under the ISO 37001 Anti-Bribery Management System (ABMS).

Of course, we also face challenges in achieving our sustainability goals. In 2018, we were deeply saddened by a fatality at one of our new operations. This is not acceptable and reinforced the importance of rigorous safety efforts and continuous improvement with the goal of accident-free operations. We also need to be responsive to current developments and adapt accordingly. For example, we are assessing the

impact of expanding US, EU, and UN sanctions and understanding the steps we need to take in response for our training and compliance programs.

In 2019 and beyond, we will continue to strengthen these sustainability efforts. We will maintain our goal of best-in-class HSE performance. We will continue to build a competent workforce and equip them with MedcoEnergi values. We will generate electricity, developing and operating IPPs in natural gas, geothermal, and other renewables. As MedcoEnergi expands our presence in Southeast Asia with the acquisition of Ophir, there is an exciting opportunity to create enhanced scale and new growth opportunities.

Our sustainability efforts and operational performance are interdependent, and strong performance in both is mutually reinforcing as we pursue sustainable growth and create value for our stakeholders. We look forward to continuing this journey in 2019, and appreciate your participation and support.



Hilmi Panigoro
President Director

About This Report

Reporting Period, Scope, and Boundaries

This report covers MedcoEnergi's sustainability activities and performance in the material topic areas during the period of 1 January to 31 December 2018. In some areas, we will include descriptions of activities in the first half of 2019 where there is a connection to or outcome of our efforts in 2018. The report covers the sustainability initiatives of MedcoEnergi assets as presented in the Operations Map in the opening page. The list of MedcoEnergi assets in the calculations for all data and information disclosed and assured, is provided in the Appendix page 73.

The Ophir Assets are not covered in this report yet since the acquisition was completed in Q2 2019 and they will be covered in our 2019 Sustainability Report.

Please contact investor.relations@medcoenergi.com for queries related to the report.

Reporting Framework

This Sustainability Report is prepared in accordance with the 2016 Global Reporting Initiative (GRI) Standard (Core option). We use definitions as set out in the GRI Standards for the Performance Data in the Appendix of this report, unless otherwise stated.

The GRI Content Index can be found in the Appendix page 96 of this report.

Reporting Progress

Action Plan Implementation Update

This year's Sustainability Report provides progress updates on the action plans we established to achieve our sustainability commitments and short, medium and long term objectives. A summary of the achievements and challenges of implementing our action plans can be found on page 7.

External Assurance

We engaged KAP Purwantono, Sungkoro & Surja (a member firm of Ernst & Young Global Limited) to perform limited assurance on selected information disclosed in this report to enhance our sustainability reporting. Please refer to the "Independent Limited Assurance Statement" attached to the Appendix of this report for details.

The number of indicators disclosed and assured has increased from 31 in the last report to 55 in this report. We will continue enhancing our disclosure, once reliable and consistent data collection can be assured, by gradually increasing the number of indicators.

About MedcoEnergi

2018 Sustainability Performance

Highlights



Assets Environment

All assets are now measuring and reporting Scope 1 emissions.



Assets OHS

All assets completed occupational health hazard assessments and developed Occupational Health & Safety (OHS) Management Plans.



Security

All assets completed reviews of our security services management system to align with Indonesian regulations, international standards and best practices.

Lowlights



Truck Mounted Crane

A subcontractor was struck by a Truck Mounted Crane resulting in a fatality at Block A Aceh. Refer to Case Study on page 66.



Barge

There was an oil spill of 2,239 bbls following a barge collision at the Port of Tanjung Api-api, South Sumatra. Refer to Case Study on page 56.



Bribery

All employees have completed Anti-Corruption training and signed Statements of Adherence. This is now done on an annual basis.

Medco E&P Natuna has been independently certified for ISO 37001 Anti-Bribery Management System.



Block A Aceh

The Block A Aceh project successfully implemented its Environmental and Social Action Plan.

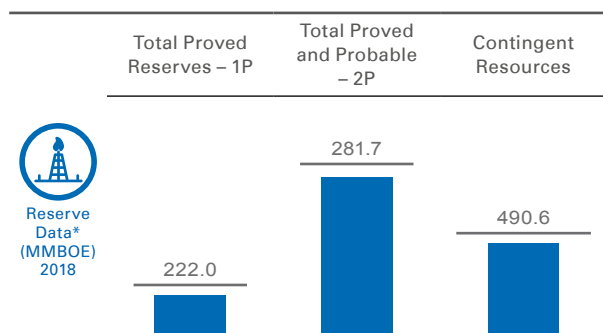
Operational Highlights

PT Medco Energi Internasional Tbk (MEI) was established in 1980 as one of Indonesia's first drilling contractors, and since then has transformed into an integrated energy and natural resources company with businesses in the oil, gas, power, and mining sectors.

Oil & Gas

Oil and gas exploration and production (E&P) is one of MedcoEnergi's core businesses. Daily production in 2018 was 85,000 barrels of oil equivalent per day (BOEPD) with a total capacity of over 100,000 BOEPD. Medco E&P manages exploration, development, and production activities directly or jointly with its partners.

In 2018, Medco E&P completed the commissioning and first gas sales from Block A Aceh, received 20-year extensions for both the Rimau and Tarakan PSCs, and acquired Ophir Energy plc in Q2 2019.



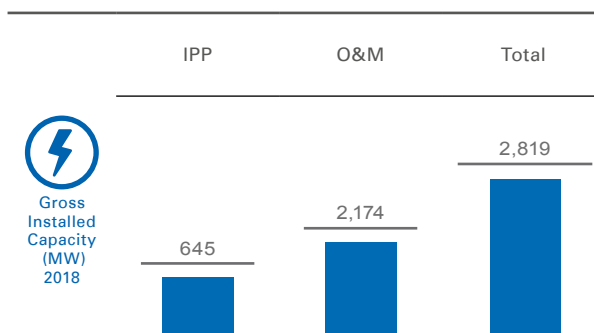
*) excluding Ophir Energy plc



MedcoEnergi Oil and Gas Operations in Block B Natuna

Power

Following the completion of Unit 3 of the 330MW Sarulla geothermal facility, Medco Power owns and operates 645 MW of gross installed capacity under Independent Power Producer (IPP) arrangements. Medco Power also manages over 2,174 MW through contracts for operation and maintenance. Medco Power made progress with other geothermal assets, exploring Ijen, East Java and signing a new concession in Bonjol, West Sumatra.



MedcoEnergi Power Operations in Batam Island

Mining

MedcoEnergi acquired a stake in PT Amman Mineral Nusa Tenggara (AMNT) in 2016, which extracts ore from the Batu Hijau mine in Sumbawa. The Batu Hijau mine site includes processing facilities, a 137.5 MW coal-fired power plant and a 50 MW diesel power plant, a deep-water port with ferry terminal, and air services and a town site for housing.

In 2018, AMNT produced 141.9 Mlbs of copper and

70.9 Koz of gold from stockpiled ore, and began the development of Phase 7. The first production from Phase 7 is expected in 2020.

AMNT is also developing an on-site smelter in line with the Indonesian Government's priorities for regional growth. Outotec has been appointed to develop the Front-End Engineering Design.



MedcoEnergi Mining Operations in Port of Benete, Sumbawa

Ophir acquisition and integration

At the end of 2018, MedcoEnergi announced the proposed acquisition of Ophir Energy plc (Ophir) and with the support of Ophir shareholders, the transaction process was concluded in May 2019. This move will create enhanced scale, diversification and growth opportunities for the benefit of our stakeholders, including employees, partners, and host countries.

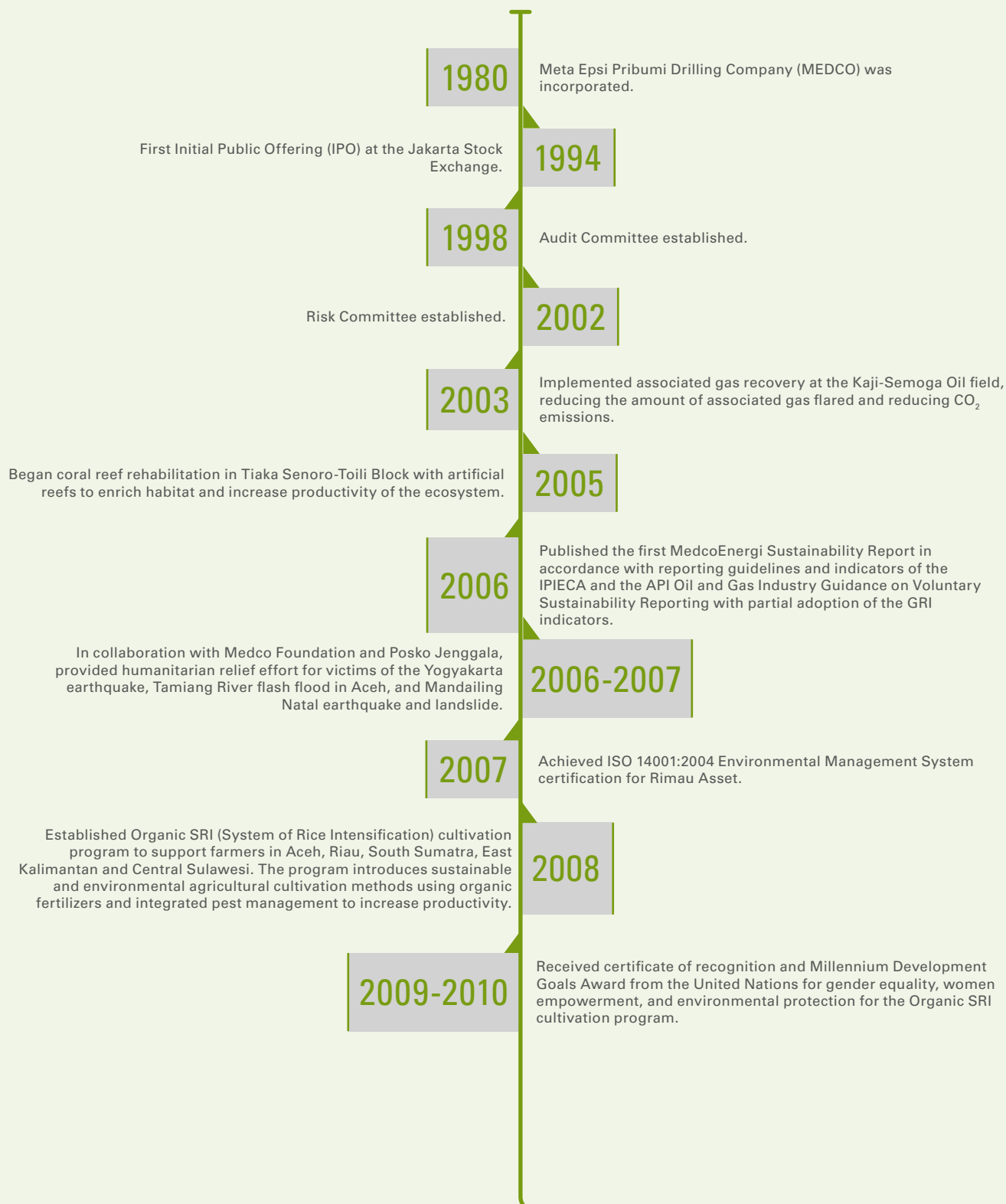
We are excited to learn from and incorporate Ophir's sustainability program with its existing GHG policy and ongoing piloting of Scope 1 to 3 emissions

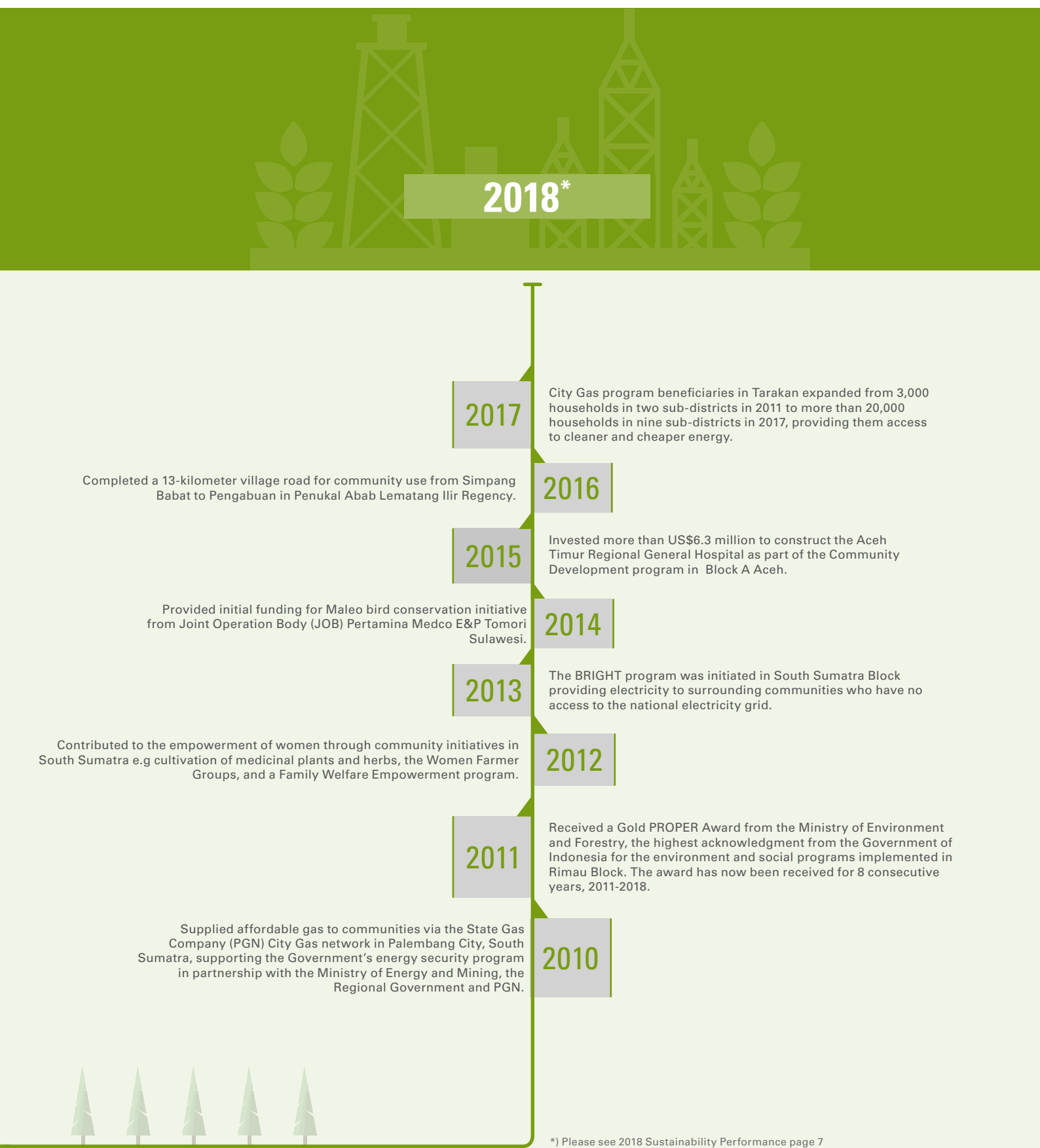
measurement and calculation using tools developed by Ophir. This will advance our efforts to achieve our sustainability objectives and action plans.





MedcoEnergi's Sustainability Journey





2018*

2017

City Gas program beneficiaries in Tarakan expanded from 3,000 households in two sub-districts in 2011 to more than 20,000 households in nine sub-districts in 2017, providing them access to cleaner and cheaper energy.

Completed a 13-kilometer village road for community use from Simpang Babat to Pengabuan in Penukal Abab Lematang Ilir Regency.

2016**2015**

Invested more than US\$6.3 million to construct the Aceh Timur Regional General Hospital as part of the Community Development program in Block A Aceh.

Provided initial funding for Maleo bird conservation initiative from Joint Operation Body (JOB) Pertamina Medco E&P Tomori Sulawesi.

2014**2013**

The BRIGHT program was initiated in South Sumatra Block providing electricity to surrounding communities who have no access to the national electricity grid.

Contributed to the empowerment of women through community initiatives in South Sumatra e.g cultivation of medicinal plants and herbs, the Women Farmer Groups, and a Family Welfare Empowerment program.

2012**2011**

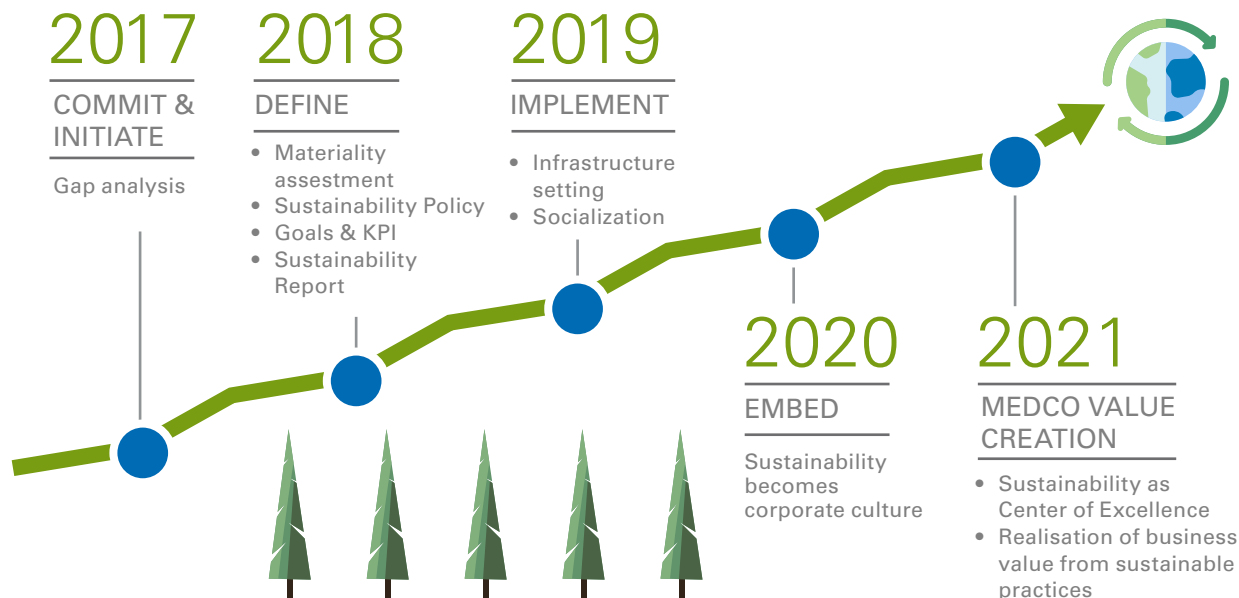
Received a Gold PROPER Award from the Ministry of Environment and Forestry, the highest acknowledgment from the Government of Indonesia for the environment and social programs implemented in Rimau Block. The award has now been received for 8 consecutive years, 2011-2018.

Supplied affordable gas to communities via the State Gas Company (PGN) City Gas network in Palembang City, South Sumatra, supporting the Government's energy security program in partnership with the Ministry of Energy and Mining, the Regional Government and PGN.

2010

*) Please see 2018 Sustainability Performance page 7

Sustainability Strategy and Management



MedcoEnergi's 5 years sustainability road map defines our journey towards sustainable growth

Sustainability and Materiality

Our sustainability strategy continuously adapts to external expectations, from regulatory bodies, policymakers and communities. Understanding and addressing these expectations throughout our operations and value chain is essential to ensure that we are responding to emerging issues.

Materiality Assessment Process

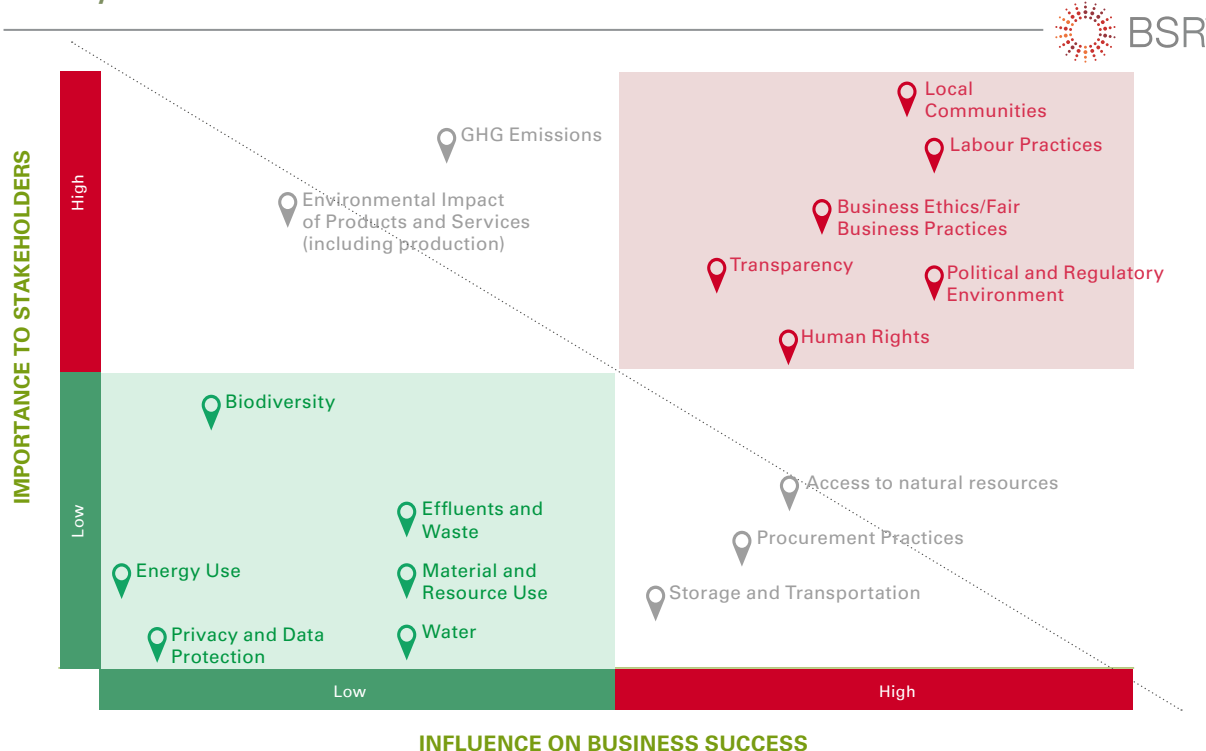
Materiality assessment is a useful standard industry process for prioritizing critical environmental and social issues. Each issue is evaluated for the potential impact on corporate performance, including corporate reputation, financial performance and potential environmental and social impacts.

MedcoEnergi completed a materiality assessment with Business for Social Responsibility (BSR) in January 2018. Using international standards and practices, MedcoEnergi and BSR compiled a comprehensive set of environmental, social, and governance (ESG) issues potentially relevant to our operations. The priority issues were identified through inclusive and extensive internal and external stakeholder engagement, including local and central government, community, business partners, financial institutions, and civil society organizations.

The results of the materiality assessment are presented in page 13, highest priority issues are below:



Materiality Assessment Results



Sustainability Policy

MedcoEnergi must generate benefits for our stakeholders in a sustainable manner. This means maintaining technical excellence and operational efficiency, and conducting our affairs transparently and with integrity so that we maintain our social license to operate. These elements are enshrined in our core Corporate Values and Good Corporate Governance Principles which we uphold vigorously.

Our business operations and interactions have the potential to cause significant environment and social impacts. We must have robust risk identification and ESG management policies and procedures in place to ensure good stewardship. We are committed to operating in an ethical, sustainable manner, protecting the health and safety of our employees, safeguarding the environment, and listening and acting in response to the needs of our stakeholders wherever we operate. This includes local communities, business partners and our supply chain, and regulatory authorities, and from each of these we expect the same high standards.

We will achieve our vision by investing in three priority pillars:

- **Leadership of and by Our Employees:**
Our people are our most valuable asset. They

are the keystone of our operations and our future success. Therefore we must recruit diverse talent from all backgrounds who possess the right skillsets and ethical values. We are committed to maintaining a healthy, safe workplace built upon a culture of mutual respect. To be successful we will develop the capacity of all of our employees while recognizing and rewarding individual performance and expecting personal accountability. All levels of our management are expected to set clear directions towards our expectations.

- **Environmental and Social Development:**
As a responsible corporate citizen, we are committed to comply with all applicable laws and regulations and align our health, safety, and environmental management with industry best practice and relevant international standards. We regularly set and monitor our goals and performance to achieve zero injuries, illnesses, environmental incidents, and the reduction of waste and emissions. We seek to continually strengthen our operational excellence through enhancing our safety culture, stakeholder engagement, environmental stewardship, and the ongoing adoption and development of best practices. We are committed to complying with

all applicable laws and regulations, to respecting human rights in line with the UN Guiding Principles (UNGP) for Business and Human Rights and the Voluntary Principles on Security and Human Rights (VPSHR), and to learning from and applying industry best practice and relevant international standards.

- Sustainable Livelihoods and Community Development:
MedcoEnergi endeavors to be a leading company

on social practices and responsibility wherever we operate. We engage regularly, openly, and honestly with stakeholders to share, hear, and understand each party's views and concerns. We respond by making community investment decisions in a strategic, fair and transparent manner as we seek to empower and support the creation of self-reliant communities aligned with the UN Sustainable Development Goals (SDG).



Our sustainability strategy supports the achievement of the UN Sustainable Development Goals. The sustainability initiatives presented in this report are mapped against the SDG targets in Appendix page 70 of this report.

Sustainability Management

A comprehensive review of our existing environmental and social sustainability management policies and procedures conducted in 2017 confirmed MedcoEnergi's strengths in areas such as robust commitments to ethical and professional conduct, continuous improvement, and trust and transparency throughout the organization. Areas for improvement included better standardization and integration of environmental and social management tools and practices across the organization.

A materiality assessment identified priority issues of the most relevance for MedcoEnergi and our stakeholders (see page 12-13 for more information). We used the findings from the materiality assessment to revise our Sustainability Policy and define three priority pillars of investment. Our

Sustainability Roadmap for each of these three pillars includes clear aspirations and commitments for short-, medium- and long-term action plans for the entire organization.

In 2018, MedcoEnergi established a Corporate Sustainability and Risk Management Division (CSRMD) to strengthen and advance the agenda on sustainability and risk management. The CSRMD Division is tasked with establishing the infrastructure needed for sustainability and risk management and implementing the Board's agenda. The mandate includes strategic policy formulation, implementation, and monitoring and evaluation.

Stakeholder Engagement

Proactive communication with stakeholders means that MedcoEnergi has the opportunity to understand their expectations, priorities, and concerns, as well as to convey information about our activities and programs. This communication is made possible through diverse channels such as community relations activities, government and non-government organization (NGO) relationships, media gatherings, supply chain communication forums, and shareholder meetings. We engage with stakeholders to understand their perspectives and feedback on our programs related to business development, community development, social welfare improvement, and environmental conservation. Transparency and openness contributes to our business viability and community support.

We continue to build partnerships with key stakeholders in sustainability, in part by participating in national and international events, including the Sustainable Development Goals (SDG) Annual Conference in December 2018 held by the Ministry of National Development Planning (Bappenas) in Jakarta and the Responsible Business Forum on Sustainable Development in Singapore in October 2018. MedcoEnergi also contributed to the Indonesia Pavilion at the Conference of the Parties (COP) 24 of the United Nations Framework Convention on Climate Change (UNFCCC) in Katowice, Poland in December 2018, and was part of the Indonesian delegation led by the Ministry of Environment and Forestry.

Memberships in Industrial Associations and Other Organizations

MedcoEnergi actively participates in several associations to strengthen stakeholder engagement and to collaboratively address challenges.

We are active members of the following associations:

Name of Associations	Position/Role
Indonesian Renewable Energy Society / Masyarakat Energi Terbarukan Indonesia	Chairman of the Board of Supervisors
National Committee of Sustainability Reporting, Energy Sector	Chairman
Indonesian Petroleum Association (IPA)	President
IPA - Ethics & Compliance Committee	Chairman
Indonesian Business Council for Sustainable Development (IBCSO)	Member
Auditors Forum of SKK Migas-KKKS	Steering Committee
Public Relations Forum of SKK Migas-KKKS	Steering Committee
Chamber of Commerce and Industry	Vice Chairman of Renewable Energy
Indonesian Energy Efficiency and Conservation Society	Advisory Board
Indonesian Oil and Gas Industry Compensation Association (Asosiasi Praktisi Remunerasi Migas Indonesia / APRIMI)	Member
Indonesian Employers Association (Asosiasi Pengusaha Indonesia / APINDO)	Member
Indonesian Geothermal Association (INAGA) (Asosiasi Panasbumi Indonesia / API)	Member
Indonesian Electricity Society (Masyarakat Ketenagalistrikan Indonesia / MKI)	Member
Independent Power Producers Association of Indonesia (Asosiasi Produsen Listrik Swasta Indonesia / APLSI)	Member

Our Stakeholder Groups

MedcoEnergi's stakeholders are diverse and include our shareholders; our employees; our contractors, suppliers and business partners; the local and central governments of host countries and regulators; banks and investors; rating agencies; the public; consumers and the media.

Shareholders:



The GCG Guidelines require that we protect the interests of shareholders. We have regular communications in the form of a General Meeting of Shareholders where we present

the Company's annual results and adopt strategic resolutions, including the appointment and termination of Commissioners and Directors and material decisions regarding investments and divestments and other major corporate actions. Management has regular engagement with investors.

Employees:



MedcoEnergi holds regular meetings with members of the Worker's Union, to ensure an open line of communication about employee aspirations and the

ability of MedcoEnergi to meet those aspirations. Communication forums are also an effective way to resolve matters pertaining to employee relations and employment.

Banks and Investors:



We work with banks that adhere to the Equator Principles ("EP Lenders") to fund our projects, such as in Senoro Toili Block, Block A Aceh, Sarulla, and Riau. We follow the Equator Principles,

which includes establishing an environmental and social (E&S) management plan and management system for activities and operations, and we provide periodic monitoring reports.

In 2019 we successfully implemented the Environmental and Social Action Plan for Block A Aceh.

For capital market investors, we provide data on ESG indicators upon request and in our Sustainability Report.

Contractors, Suppliers, and Business Partners:



The principles of the GCG Guidelines and our Core Values guide all of our engagements with contractors, suppliers, and business partners.

The Code of Ethics is communicated

externally with all of our business partners. To support the local economy in areas where we operate, MedcoEnergi contracts local businesses to supply goods and services and forges strong relationships that are mutually beneficial. We communicate our procurement policies and rules to local suppliers and encourage their participation in bids, and we prioritize small to medium-sized suppliers for procurements of up to US\$ 1 million.

Our Vendor Performance Management System and e-Procurement platform provide transparency and accountability in the procurement process.

Government and Regulators:



MedcoEnergi engages the government and regulators in various ways, including consultation and cooperation with

government agencies to strengthen policies and activities related to Corporate Social Responsibility, Environment, Security, and Ethics and to mitigate adverse impacts on environmental, social and health issues. We also conduct consultations with the government on issues related to employment, workforce recruitment, and termination.

In addition, we are cooperating with the government to manage labor migration flows, bolster the capacity of local communities, as well as develop and empower local economies.

Public:



Effective engagement with individuals and organizations affected by our projects and operations is integral to our long-term survival and success.

Stakeholder engagement plans for each subsidiary include public consultation and information disclosure as well as grievance mechanisms and management. Our community empowerment programs in and around the communities where we operate provide another form of engagement, through a participatory model of stakeholder involvement that we use in design and implementation of our activities.

MedcoEnergi is also active in Corporate Social Responsibility (CSR) Forums in several districts, which are liaison among companies, local governments, communities, and NGOs to create synergy in our CSR programs. We also involve communities, academics, experts, and NGOs in monitoring and evaluating our programs.

Media:



We conduct media engagement at the local and national level to keep journalists updated on our current activities, with media gatherings, knowledge sharing, and press conferences. We have also held trainings for journalists on the oil and gas industry to increase their technical understanding and we have a journalism certification program with Indonesian Journalist Association (*Persatuan Wartawan Indonesia*).

Consumers:



MedcoEnergi supports consumers with our production both directly and indirectly. We contribute to government objectives of increasing the use of natural gas as a viable

source of energy for Indonesia by enhancing our operational activities in gas fields, which supports generation of electricity. We also contribute to food security by providing gas to the fertilizer sector, such as to state-owned PT PUSRI which produces urea fertilizers for farmers throughout South Sumatra. We contribute to the compressed natural gas program for Company vehicles in Jakarta metropolitan area (Jakarta, Bogor, Depok, Tangerang, Bekasi) and the City Gas Program in Palembang, Tarakan, and Sekayu in Musi Banyuasin district.

Medco Power (MPI) plays a role in developing clean energy sources and expanding consumer access to electricity in remote areas. Through investments in natural gas, geothermal and other renewable energy sources, MPI is generating energy for consumers and contributing to the government initiative to add 35,000 MW of power supply capacity. MPI's efforts to develop electricity infrastructure in remote and underdeveloped regions of Indonesia provide a crucial input for the engine of economic growth in those areas, benefiting consumers in multiple ways.



Media gathering is one form of our engagements with local and national media to keep the journalists updated with current activities in MedcoEnergi

Thriving Communities with Better Livelihoods

Our Approach and Commitment

MedcoEnergi believes that sustainable business growth can only be achieved by integrating the needs of communities into our business activities. The communities to which MedcoEnergi belongs expect to thrive alongside us, as our business grows. We invest in the long term improvement of community livelihoods and the environment to ensure that we are actively supporting and contributing to the positive development of local communities. Much of the investment via our 2018 community development programs are part of continuous engagements which were initiated several years ago.

MedcoEnergi endeavors to be a leading company on social practices and responsibility wherever we operate. We engage regularly, openly, and honestly with stakeholders to share, hear, and understand each party's views and concerns. We make community investment decisions in a strategic, fair, and transparent manner as we seek to empower and support self-reliant communities in alignment with the UN Sustainable Development Goals.

We are committed to complying with all applicable laws and regulations, to respecting human rights in line with the UN Guiding Principles on Business and Human Rights and the Voluntary Principles on Security and Human Rights, and to learning from and applying industry best practice and relevant international standards.

Our efforts in this area support the realization of SDG 1 (Target 1.4), SDG 2 (Targets 2.3, 2.4, and 2.a), SDG 3 (Target 3.9), SDG 4 (Targets 4.1, 4.2, 4.3, 4.4, and 4.c), SDG 5 (Targets 5.5 and 5.a), SDG 6 (Targets 6.1 and 6.b), SDG 7 (Targets 7.1, 7.2, and 7.b), SDG 8 (Target 8.3), SDG 9 (Target 9.1), SDG 11 (Targets 11.2, 11.5, and 11.7), SDG 12 (Target 12.5), SDG 14 (Targets 14.7 and 14.b), SDG 15 (Targets 15.2 and 15.5), and SDG 17 (Target 17.17).

Our Objectives

We implement our community development approach in line with the following objectives:

Local communities:

As part of our operations, we engage with communities and provide positive benefits. All assets will have stakeholder engagement plans and grievance mechanisms to ensure that we understand community needs and that communities understand our constraints.

Social and economic impacts:

We assess and prioritize each community's needs, in order to support community development in a sustainable way.

Security practices:

We provide a secure working environment through security risk assessments on all assets and compliance with best practice security management regulations. We leverage knowledge of all employees and contractors regarding security risks, and we ensure that all Memoranda of Understanding with public security forces include a human rights clause.

Stakeholder engagement:

We engage key stakeholders in government organizations, non-government organizations, and the media to develop good partnerships and enhance our understanding of expectations.

Stakeholder Engagement

MedcoEnergi engages regularly with stakeholders with openness and honesty to build relationships and understand stakeholder views and concerns. Clear and appropriate communication with local communities regarding the potential risks and impacts of MedcoEnergi's operations is essential to ensure that trust is maintained and operations go smoothly. Community development programs build and improve relationships with stakeholders. Demonstrating the value and community benefits of MedcoEnergi's contributions to employment and social and economic infrastructure is also an important aspect of building stakeholder relationships.

Some of the assets have prepared and implemented a Stakeholder Engagement Plan (SEP) to manage ongoing engagement with local communities and other relevant stakeholders. The remaining assets will have completed plans within 12 months.

At Lematang Block, Rimau Block, South Sumatra Block, and Tarakan Block, stakeholder mapping and engagement are the basis for implementing and monitoring hundreds of intensive community engagement efforts in 63 villages.

Block A Aceh is now fully operational and the SEP is being implemented. The SEP provides guidance on the relevant Indonesian legal and regulatory framework and international standards. It also contains a historical record of consultations conducted by the Company, stakeholder mapping and engagement strategy, and monitoring and review.

Block B Natuna has a detailed Stakeholder Database, Stakeholder Relationship Analysis, and SEP, and manages its CSR programs according to ISO 26000 - Guidance on Social Responsibility, similar to other MedcoEnergi's oil and gas assets. The guidance requires that the empowerment of communities is based on sustainable development principles and management of stakeholder expectations.

In 2018, Block B Natuna implemented a Stakeholder Engagement Record system to record local community complaints and evaluate issues and concerns. The Company also routinely approaches related authorities, NGOs and youth organizations to discuss and respond to negative opinions observed on social media.

MPI developed an SEP at the corporate level and in PT Mitra Energi Batam (MEB) and PT Energi Listrik Batam (ELB), in line with national and International Finance Corporation (IFC) requirements. This was implemented in 2018 in all MPI assets, and community grievance mechanisms were established and included in this SEP at the subsidiary and Corporate level.



Direct engagement with community members such as in the Tanaman Obat Keluarga (TOGA) program above is critical to build open and honest relationships and understand their concerns.

Needs Assessment and Participatory Processes

Understanding and engaging directly with local communities is an essential component of designing our community programs and SEP, to ensure that activities are planned in line with the capacity, resources, and needs of the Company and the communities.

MedcoEnergi companies often work together with local university and NGO partners to identify local community expectations and needs, through participatory surveys and social mapping activities that draw on local wisdom and understand social condition and needs. This information is analyzed and applied in the design of social investment programs and initiatives. MedcoEnergi respects each community's right to determine their future.

MPI uses a participatory approach to capture community needs, and optimizes the role of local forums to develop programs in line with community needs. Among the forums are District Leadership Coordination Forum (*Forum Komunikasi Pimpinan Daerah / FORKOPIMDA*), Local Youth Organization (*Karang Taruna*), local NGOs, community-based organizations, and local events such as the Development Planning Council Meeting (*Musyawarah Perencanaan Pembangunan / Musrenbang*).



Direct engagement with local communities such as in the Trigona Bees program above is key in designing community programs.

Community Development

MedcoEnergi programs aim to nurture local potential, increase productivity, and improve welfare through the principles of sustainable development, in alignment with the UN Sustainable Development Goals.

We invest in infrastructure that creates public health, transportation, economic development, and sociocultural benefits. In 2018, we contributed US\$969,644 to infrastructure, these included projects for drilling clean water wells, drainage systems, housing for vulnerable groups, evacuation routes, solar street lamps, constructing roads and bridges, mosque and school renovation, village libraries and public areas, sports facilities, organic plant nurseries, and farming infrastructure.

MedcoEnergi also seeks to develop sustainable livelihoods in the communities in ways which improve quality of life and preserve local ecosystems. In 2018 we invested approximately US\$1,483,575 in livelihood projects including agriculture (cultivation of crops, such as rice, vegetables, rubber, mushrooms, herbal medicine), livestock commodities (honey and dairy goats), and aquaculture (organic catfish cultivation). We also funded entrepreneurship training, fishery ecotourism development, training for mosque management, teacher training, student transportation support, and development of a paper recycling business. We provided approximately US\$625,420 in charitable contributions to improve the quality of local health and education services, provide emergency disaster relief, and support for people with disabilities.

These efforts support the realization of SDG 1 (Target 1.4), SDG 2 (Targets 2.3 and 2.a), SDG 4 (Targets 4.1, 4.2, 4.3, 4.4, 4.b), SDG 8 (Target 8.3), SDG 10 (Target 10.2), and SDG 11 (Targets 11.2, 11.7).

Our total contribution in 2018 was over US\$3.1 million across all types of project investments and donations. The contribution in 2017 was higher to complete ongoing infrastructure development activities in South Sumatra Block and Block B Natuna and increased activities of community development program in Block B Natuna.

Program	2016* (US\$)	2017 (US\$)	2018 (US\$)
Infrastructure	249,318	1,202,234	969,644
Sustainable Livelihoods	195,138	1,188,590	1,483,575
Others	600,888	741,709	625,420
TOTAL	1,045,343	3,132,533	3,078,639

*The figures in 2016 do not include AMNT; the acquisition of AMNT by MedcoEnergi was completed in 2017.



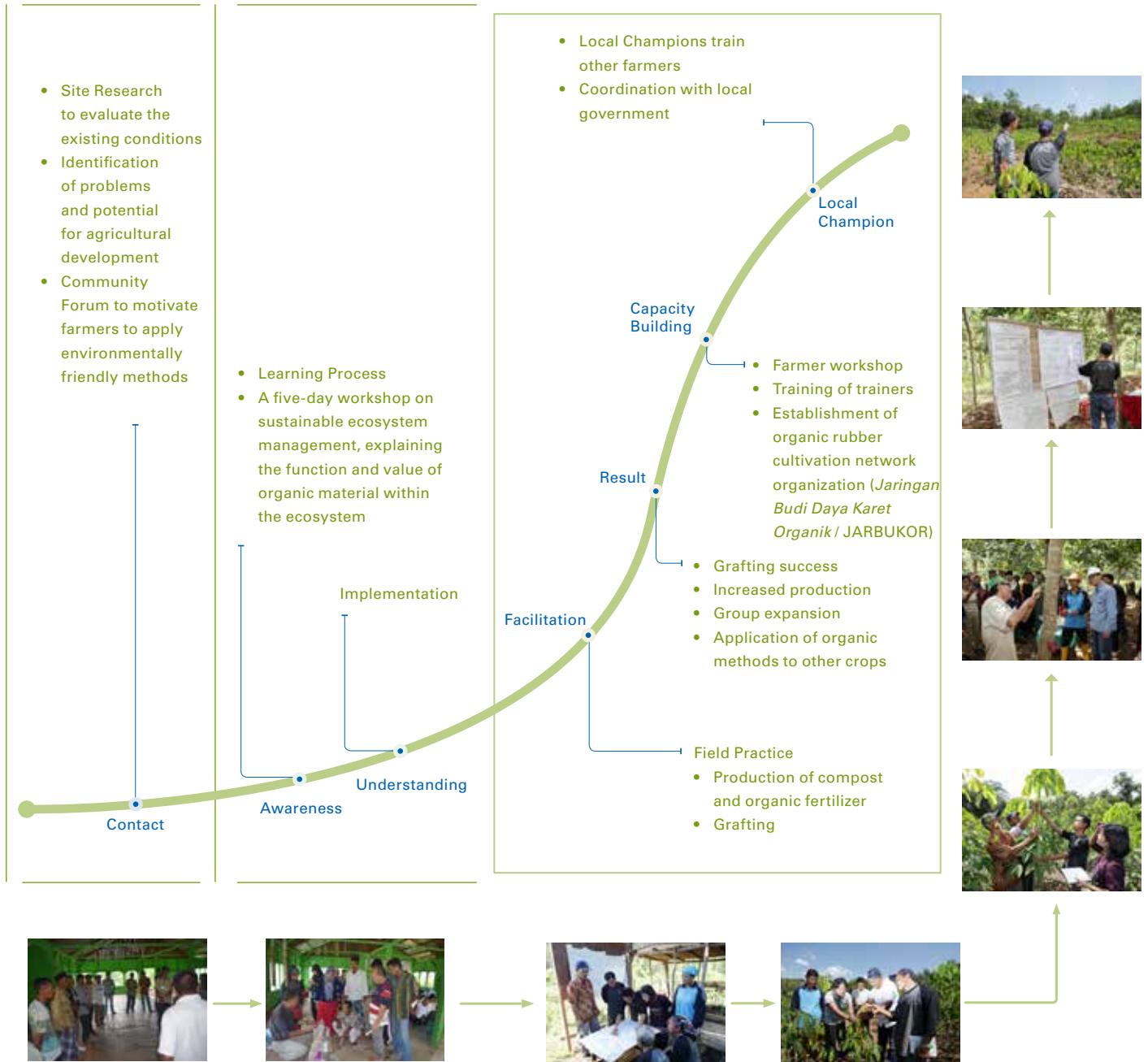
One of the Community Development Programs for organic catfish cultivation in Rimau, South Sumatra

Helping Communities to Grow

We have integrated S-Curve principles within our community engagement and development process, as illustrated in page 22. The S-Curve concept describes the different phases a community goes through in the process of adopting new technology. Stakeholder engagement occurs at several points throughout this process, with additional technical support provided by Aliksa Foundation, an Indonesian based foundation focusing on sustainable agriculture and community empowerment.

This process has enabled MedcoEnergi to build strong social ties with our local communities through activities which are underpinned by mutual understanding and cooperation.

S-Curve Adoption Technology



MEDCOENERGI

The adoption of S-curve principles in the organic rubber agriculture programs in South Sumatra and Block A Aceh.

Implementation of Community Programs

Our community programs build communication, relationships, and partnerships through empowerment. The broad range of activities in 2018 are shown below.

Rimau Block



Construction & Infrastructure

Construction of village administrative offices, village libraries, school fences, and a Literacy House (*Rumah Literasi*). Village roads, facilities for tourism, places of worship, transportation facilities.



Agriculture

Support for the cultivation of organic rubber, mushrooms, herbal medicine, sweet corn. Farming freshwater fish, poultry, dairy goats.



Education & Public Health

Creative Teacher Training, educational games and supplies for schools, counselling, public health checkups.



Business

Trade and business economic development, small-medium enterprises empowerment, distribution of business equipment and capital. Facilitation of skills training for home industries' workers.

Block A Aceh



Construction & Infrastructure

Water wells at Indra Makmu Vocational School. Housing for vulnerable groups. Renovation of place of workshop and Islamic boarding schools (*pesantren*) facilities. Construction of sewers.



Agriculture

Support for the cultivation of SRI organic rice, organic rubber, vegetables and herbal medicine, Trigona bees, sheep and goats.

South Sumatra Block



Construction & Infrastructure

Embankments, farm road construction, road repairs, road conditioning. Reservoir construction for organic rice fields, schools, piers, bathing pools, electricity meters. Libraries, places of worship, social and public facilities.



Agriculture

Support for the cultivation of SRI organic rice, organic rubber, vegetables and herbal medicine, mushrooms, honeybees, dairy goats. Farmer training to become facilitators for the expansion of program.



Education & Public Health

Creative Teacher Training.



Business

Facilitation of skills training for home industries' workers.

Lematang Block



Construction & Infrastructure

Village road repairs, water wells, residential toilets, religious facilities, waste disposal facilities.



Agriculture

Support for the cultivation of environmentally friendly agriculture, honeybees, freshwater fish, dairy goats. Agricultural facilities and infrastructure.



Education & Public Health

Facilitation of Creative Teacher Training for early childhood development education, educational facilities, healthy living campaigns.



Business

Facilitation of skills training for home industries' workers.

Tarakan Block



Construction & Infrastructure

Improvement of social and public facilities, support to industrial waste park (*Sampah Semesta*), program facilities, environmental learning center.



Agriculture

Support the strengthening of organic farming.



Education & Public Health

Support for educational facilities and healthy living campaigns.



Business

Funding a campaign for healthy living.

Block B Natuna



Construction & Infrastructure

Extension of jetty for mooring boats, drainage system, solar based street lighting, street boat signage, and improvement of health clinic.



Aquaculture

Support for cultivation of Grouper and introduction of sustainable fishing methods, avoiding the use of explosives and preventing overfishing.



Business

Support to small-medium enterprises for anchovy production and homestay businesses.



Education & Public Health

Funding the scholarship for tourism and medical subjects, *Adiwiyata* environmental school, capacity building for community based tourism, English class.

Tunisia



Agriculture

Drilled water wells and created irrigation zone, supporting farmers and agricultural services.



Education & Public Health

Funding the renovation and refurbishment of a computer center for people with disabilities.

Oman



Construction & Infrastructure

Support for road repair and construction for the communities.



Education

Support for the Oman 1st Commercial Week Event at Sultan Qaboos University.

Medco Power Indonesia



Construction & Infrastructure

Improvement of road in Cibalapulang Mini-Hydro Power Plant.



Environment

Support for mangrove planting, garbage cleaning and the delivery of solar lamps in Tanjung Piayu, Batam.



Education & Public Health

Support to elementary school educational activities, provision of textbooks, HIV/AIDS prevention campaign, anti-drug socialization with Indonesian National Anti-Narcotics Agency.

AMNT



Agriculture

Support to honeybee cultivation with Trigona bees in the reclamation area.



Education & Public Health

Support to agricultural commodity enterprises, small business development, revitalization of tourism.

Program Highlights

Empowering Women Villagers in Rimau Block

MedcoEnergi supports the empowerment of women in its community initiatives. Women have been involved in cultivating medicinal plants and herbs through the Tanaman Obat Keluarga project (TOGA) in South Sumatra, as part of the evolution of Women Farmer Groups around Rimau Block, and the Family Welfare Empowerment program (Pembinaan Kesejahteraan Keluarga - PKK) begun in 2011. This activity has now expanded to seven villages in Musi Rawas and Musi Banyuasin. In 2018, the women's groups began producing and marketing a variety of products from the herbs they cultivated, such

as powder and ice cream. There are now 23 self sustaining women's group with 297 members in total, all initiated by MedcoEnergi.

We have invested in the TOGA program with support for production facilities, marketing, infrastructure, and the establishment of cooperatives to enable expansion. The development of the TOGA program is aligned with SDG 1 (Target 1.4), SDG 2 (Targets 2.3, 2.4, 2.a), SDG 5 (Targets 5.5 and 5.a), SDG 9 (Target 9.1).



The TOGA program empowers women in villages to become self-reliant and entrepreneurs in medicinal plants and herb cultivation business.

Supporting Eco-friendly Agriculture Education in Block A Aceh

In 2018, MedcoEnergi invested in making a local vocational high school in East Aceh into a center of eco-friendly agriculture learning, and training local facilitators for the expansion of environmentally friendly agricultural programs. The program will contribute to new employment opportunities in the area, and produce village facilitators.

The cooperation with this educational institution by the Company supports SDG 4 (Targets 4.3 and 4.4), ensuring the quality of inclusive and equitable education and lifelong learning opportunities for all.

Bringing Electricity to Remote Villages in South Sumatra Block

The BRIGHT Program supplies electricity to households in five villages without access to the national electricity grid around South Sumatra Block. Between 2011 and 2018, the expanding electricity network reached 696 households in five villages in Musi Rawas, South Sumatra. Electricity is generated from a power plant fueled by gas that otherwise would be flared, which also reduces emissions by approximately 872 tons of CO₂e*

per year. The program was initiated in partnership with the Musi Rawas Regency Government and the Indonesian government agency BPMIGAS former name of SKK Migas.

In recognition of the success of the BRIGHT program, MedcoEnergi received the Energi Pratama Award in 2015 from the Ministry of Energy and Mineral Resources (ESDM).

*) The concentration of CO₂ that would cause the same level of radiative forcing (the difference between sunlight absorbed by the Earth and energy radiated back to space) as a given type and concentration of greenhouse gas.



The initial formal launching ceremony of the BRIGHT program in 2013 attended by local government officials and Medco E&P South Sumatra Block Leadership. The program continued until 2018 providing electricity to 696 households in five villages in Musi Rawas, South Sumatra.

Medco E&P has been preparing for the transition to transfer the responsibility of providing electricity to the Government since 2016, and allocated IDR700 million to install meters for the 696 beneficiary households so that these households can connect to the national grid.

This program is a direct contribution to SDG Goal 7 (Targets 7.1 and 7.b), SDG 9 (Target 9.1) and SDG 17 (Target 17.17).

Empowering Sustainable Honey Bee Businesses in Lematang Block

In Lematang Block, a honeybee cultivation program has been in place since 2016 and now has groups in Sumaja Makmur and Aur Duri in South Sumatra. MedcoEnergi invests in training on honeybee cultivation, product diversification, facilities, and packaging equipment. Support from local governments also enhances the cultivation and marketing of honey in the region.

The honeybee program contributes to forest conservation and supports SDG 2 (Targets 2.3, 2.4, and 2.a), SDG 4 (Target 4.3), SDG 15 (Target 15.5), and SDG 17 (Target 17.17) to protect, restore and improve the sustainable utilization of terrestrial ecosystems,

manage forests sustainably, restore degraded land, and stop biodiversity loss.

Managing Waste in Tarakan Block

One of the flagship programs for Tarakan is waste management, including the industrial waste park “Sampah Semesta” and environment-based education that has been implemented since 2006. In cooperation with the Tarakan City Government, the program established integrated waste management in Tenguyun Market, and an organic and hydroponic farming training center. The company invests in improving management capacity, training facilities, and program sustainability. This program supports SDG 3 (Target 3.9), SDG 12 (Target 12.5) and SDG 17 (Target 17.17).

Harnessing the Sun and Improving Drainage for Villages in Block B Natuna

In Block B Natuna, the need for public facilities to help meet basic needs such as water, electricity, and transportation is still a priority. These programs support SDG 7 (Targets 7.1, 7.2, 7.b), SDG 9 (Target 9.1), SDG 11 (Target 11.2), and SDG 17 (Target 17.17).

Solar lighting for public areas

Electricity for public lighting is scarce in remote areas, where there is no national grid and villages are powered by the Village Diesel Power electricity network for 12-16 hours a day. The Anambas Islands Regency has three electricity sources: the PLN national grid, Village Diesel Power, and solar power. Lighting on the jetty is needed for illuminating the entrance to the docks at night, and is vital for fishermen safety. In 2017-2018, Block B Natuna installed a network of solar lighting, with 70 units for 20 villages on three islands. The units are located at fishing docks, dangerous roads, and public spaces such as mosque and community health centers, improving community safety. Assistance is given through in-kind grants, and the community is responsible for maintaining the panels and batteries. Block B Natuna also assisted with installation of 64 traffic signs.

drainage, the community is no longer experiencing flooding and even during heavy rains, rainwater can flow directly to the sea.

Village drainage system

Payakmaram has a population of 720 people and is adjacent to the Matak Operation Base. Without a decent drainage system, some of the villages experienced seasonal flooding, mosquitos and water borne diseases. Medco E&P constructed a 200-meter drainage system of reinforced concrete. The drainage system has two control doors that are managed by the community. With the improved



One of the solar lighting installed at the fishing docks improving safety of fishermen and community at night in Anambas Island.

Mangroves and Environmental Quality in Riau

In 2018, MPI supported mangrove planting, garbage cleaning, and the delivery of solar lamps to the Red Mangrove group in Tanjung Piayu Batam, Riau Islands. This activity supports SDG 15 (Targets 15.2 and 15.5).

Cultivating Trigona Bees in the Batu Hijau Reclamation Area

In 2018 AMNT introduced a new social responsibility approach, with a shift from philanthropy and infrastructure development to sustainable economic independence that helps the local community to be self sustaining.

AMNT supports honey cultivation with Trigona bees in the reclamation area in Sekongkang subdistrict. Honey cultivation is an indicator of successful reclamation and empowers the community with alternative sources of income for the local economy.

Honey cultivation pilot program began in May 2018 with 50 bee boxes placed in the nursery area for six months. On average, one Trigona bee box can produce about one liter of honey per year, for a price of about IDR300,000 per liter, creating a significant source of income.

Honey cultivation in the reclamation area also assists with pollination and ecosystem growth and diversity. Forest honey is a special commodity of the area, but only found in the wild, while Trigona honey can be cultivated close to the community. Trigona bees are a stingless species of bee and do not depend on the pollen of flowers, so they can be bred in any location where there is a source of resin or rubber from trees for propolis.

This program in Batu Hijau reclamation area supports SDG 2 (Targets 2.3, 2.4 and 2.a), SDG 4 (Target 4.3) and SDG 15 (Target 15.5).

Case Study

Case Study: Emergency Disaster Relief for Banten and Lampung

MedcoEnergi provided emergency disaster relief in response to the devastating volcanic activity of Mt. Krakatau that lead to an earthquake and tsunami in Banten and Lampung on 22 December 2018. A joint disaster response team consisting of personnel from MedcoEnergi and Medco Foundation* was dispatched to provide aid in the form of:

1. Eight medical doctors, four nurses, two rescue personnel, five pharmacists, and twenty disaster response personnel;
2. Medical support for 1,165 victims and psychosocial counseling for 128 children in the most severely affected areas of Banten;
3. Distribution and logistics support, shelter, food, clean water, access to sanitation, school supplies, water wells;

4. Rescue and evacuation of victims, employees, and their family members trapped in the disaster area.

*) Medco Foundation is an independent non-profit organization of MedcoEnergi companies and groups focusing on disaster relief and community-based development supported by donations.



Medical personnel performing health checkup to the tsunami disaster survivors in Banten.

Understanding Our Impact

MedcoEnergi seeks to generate positive social impacts for local communities, whether through new job opportunities and boosting local income, or through building civil society awareness. We cooperate with academics, expert consultants, and NGOs in our monitoring and evaluation efforts, to monitor our performance and to obtain expert advice and insight on how we can continuously improve our programs.

Social Return on Investment (SROI)

SROI is a method to calculate the financial value of a program's impact. This informs decisions on the choice of programs, strategies, budgeting, and scale of each program. Measuring this value is another way to communicate program benefits in a clear and consistent way. This tool also supports risk management, opportunity identification, and improves the value of the programs.

In Kampung Bilis, SROI is used by the Social Investment Indonesia Foundation (*Yayasan Sahabat Investasi Indotama / YSII*) to evaluate the impact of activities between 2016 and 2018 based on guidelines from the organization Social Value International. The benefits in Kampung Bilis include profits from sales of packaged anchovy products and fish crackers, increased opportunity to catch fish, savings in fuel cost, increased capacity of *bagan* (blanket nets), improved fish catch quality, development of home industry, and additional income from increased packaging jobs.

Based on SROI calculation, the present value of total outcome is IDR2,378,341,661, total investment is IDR858,041,148, and SROI value from 2016 to 2018 is 2.77. This means that for every investment of one IDR, the benefit over three years of the program is IDR2.77. These efforts support the realization of SDG 8 (Target 8.3), SDG 14 (Target 14.7 and 14.b) and SDG 17 (Target 17.17).

Kampung Bilis is a part of a program named KASTURI (*Karya Anambas Tumbuh Mandiri*), through which Block B Natuna supported 60 entrepreneurs of fish cages and fish processing from Micro, Small, and Medium Enterprises for seafood products, anchovies, threadfin bream, ready-served food, and fish crackers around Anambas.

Sustainable Livelihood Impact Assessment in Belibak

In 2018, Medco E&P conducted an economic development program for marine resources and maritime tourism, aligned with the development priorities of the District Government of Anambas and Block B Natuna. In Belibak, Medco E&P helped establish a Tourism Awareness Group, the development of Malay traditional dance, and eight homestay locations in local community homes.

The results of a Sustainable Livelihood Impact Assessment (SLIA) showed that the Tourism Village program created a positive impact on the physical condition of the village and social change for the villagers of Belibak, with improvements in natural, physical, financial and social assets of the village. There is increased public awareness of the potential of tourism, increased confidence, and a commitment

by villagers to allocate their village budget to the development of tourism. The local government and provincial government have now formally established Belibak as a tourist village.



The colorful maritime tourism village of Belibak, Anambas Island

Beneficiaries' testimonies

Testimonies from beneficiaries on the impact of MedcoEnergi's Community Development Programs include the explanations below from Srihadi of Trijaya Village, South Sumatra, one of the farmers of the SRI Organic Rice program and Tina of Sukoharjo Community Unit 2 (*Satuan Pemukiman 2*) in Kikim Timur District, South Sumatra. For more details of their testimonies and from other beneficiaries, please see our videos on our website www.medcoenergi.com/id/subpagelist/view/3



Srihadi: "... by implementing SRI the harvest volume increased ... 6-7 tons per hectares..."



Tina: "...the Medco E&P empowerment program develops the women groups of the Sukoharjo village....."

Security

Protection of human rights is a core component of our relationship with local communities. We are committed to respecting human rights and we adhere to the international Voluntary Principles on Security and Human Rights (VPSHR) and Indonesian government standards. Our security personnel are trained to deal with sensitive issues such as illegal tapping of pipelines in an appropriate way, aligning with international standards and best practice. Our security program supports SDG 16 (Target 16.1).

Medco E&P Security Management

In 2018, progress was made in developing a Security Risk Assessment (SRA), Security Management Plan (SMP), and Security Risk Policy (SRP). The goal is to complete SRA Implementation and Monitoring; Pilot Projects for Major and Critical Assets (Onshore and Offshore); and SMP Socialization, Training and Audits for all E&P assets by the end of 2019.

VPSHR training for security personnel, public affairs, and security departments were conducted by an international training provider, with simulations of local unrest on site and role play of community leader, security leader, management, and national Human Rights Commission. Mediation skills training was also provided.

Third-party security providers are required to train their personnel in various competencies, which include: Basic and Advanced Security Training Inspection Procedures, Case Investigation, Emergency Response Plan, Demonstration Handling, Explosives Handling and Human Rights modules.



Field and HQ staff participating in the pilot VPSHR Training. Future trainings are being designed for field staff and security officers.

Security at Block A Aceh and Block B Natuna

The Company has developed a Security Management Plan (SMP) to manage community-related security incidents. The SMP includes elements such as consultation and disclosure of information on procedures to prevent and manage security incidents in a manner which respects human rights; inclusion of specific training on human rights and security management in the workforce induction curriculum for security officers; and maintenance of a grievance

mechanism which is accessible by all local community members to report concerns they may have related to security arrangements.

In 2018 the most significant success was the demobilization of local workers in Block A Aceh during the transition phase from construction to production. It was a well-planned program to enhance worker awareness that there will be personnel reduction, along with many CSR activities to support their transition.

Medco Power Security Management

MPI has a Security Management Plan which guides its efforts to secure plants, people, and property, as well as community security, while maintaining compliance with our human rights commitments. The management plan regulates the relationship between MPI security and third-party contractors and affiliated companies, clearly defining each party's respective role and responsibilities. In 2018, MPI completed the implementation of an internal and external training program on human rights for security personnel.



Locally-hired security personnel training to prevent and manage security incidents in a manner which respects human rights.

Action Plan

The following action plan was designed to enable us to meet our Commitments and Objectives and continue to strengthen our relationships with local communities and other key stakeholders. We are measuring, monitoring, and reporting our progress and performance against these plans.

	Short Term Actions	Medium-Long Term Actions	Status
Local Communities	Develop grievance mechanisms manual and supporting business processes	Socialize and implement grievance mechanisms for internal and external parties, for all assets	Developed Health, Safety and Environment Management System (HSEMS) at Oil & Gas and Power assets which include grievance mechanisms
	Develop and implement stakeholder engagement plans for all assets		Developed stakeholder engagement plans in Block A Aceh, South Sumatra Block, JOB Senoro, MEB - DEB, and ELB.
	Develop Social Management System (SMS) for all assets		Developed SMS for Block A Aceh, JOB Senoro, and Medco Power.
	Complete standardization of community satisfaction survey methodology	Implement community satisfaction survey and establish baseline score and determine target score	Established community satisfaction survey methodology for Oil & Gas subsidiary but has yet to be standardized.
		Achieve target community satisfaction score	
	Conduct community needs mapping and determine community development pillar and strategy	Develop strategic partnerships with government and non-government organizations to expand the impact of existing programs and to enable synergy of community development programs in priority pillars across all business units	Completed community needs mapping and established priority pillars.
		Develop and leverage Public Private Partnerships (PPPs) with external organizations to expand impact	Developed and leveraged Public Private Partnership (PPP) with Ministry of Forestry, UNFCCC, and local government for electricity support.
Infrastructure	Enhance Medco's existing employee volunteer program and expand program to all business units to strengthen the company's relationship with local communities	Implement broader employee volunteer pilot program	Implemented employee volunteer programs such as SAHABAT in Rimau Block, South Sumatra Block, and Lematang Block, and teaching program in Block B Natuna.
		Review employee volunteer pilot program results and expand program to other assets	
Security	Review security provider company compliance vs. PERKAP 24/2007 re security management plan for all assets	Complete security risk/threat assessment for all assets	Monitored using Community Satisfaction Index (<i>Indeks Kepuasan Masyarakat / IKM</i>) and SROI.
		Establish and implement security policy, risk management plans and training in reference to the Voluntary Principles on Security & Human Rights (VPSHR) for all assets	
Key Stakeholder Engagement	Engage key stakeholders in government organizations, non-government organizations and mass media to develop good partnerships		Continued engagements with government and NGOs, and also carried out programs for the mass media.

Our Employees Reflect Our Values

Our Approach and Commitment

Our people are our most valuable asset. They are the keystone of our operations and our future success. Therefore, we must recruit diverse talents from all backgrounds who possess the right skillsets and ethical values. We are committed to maintaining a healthy, safe workplace built upon a culture of mutual respect. To be successful we will develop the capacity of all of our employees while recognizing and rewarding individual performance and expecting personal accountability. All levels of our management are expected to set clear directions towards our expectations.

Our Objectives

Diversity:

We are committed to provide equal opportunities for employment regardless of background. All employees are recruited and provided with career advancement and remuneration on the basis of job requirements, individual performance, and competence.

Inclusion:

We have a policy to prioritize hiring and development of local people.

Strategic Activities

Our Human Resources strategy is designed to attract, develop, retain and motivate the best talent in line with our workforce needs. In 2018, we implemented activities in six key areas that align with the Company's business priorities.

These efforts support the realization of SDG 8 (Targets 8.2, 8.5, 8.6, and 8.8), SDG 10 (Targets 10.1, 10.2, and 10.3), and SDG 16 (Target 16.b).

1. Organizational integration:

Following the acquisition of Block B Natuna, an integration process to improve the organizational effectiveness was finalized in 2018. We completed functional integration of Business Support functions which include Information Services, Human Resources, Audit & Integrity Compliance, Finance, Supply Chain Management, and Relations. Medco E&P office relocation activities took place in Q2 2019, with more than 700 Block B Natuna employees relocated to the Company's headquarters. To ensure smooth implementation, we conducted a series of informal gatherings with 21 divisions to communicate the integration and relocation plan, and held 17 skip-level meetings

involving 266 employees. We also conducted bi-monthly meetings with onshore and offshore labor unions, and completed an Offshore Operation Forum.

Organizational transformation is also being conducted at MPI to improve coordination with subsidiaries, including the establishment of four business platforms: Operation and Maintenance (O&M) Services, Gas Power and Operations, Geothermal Assets, and Renewable Assets. MPI also strengthened corporate support functions to ensure the smoothness of operations, resulting in more integrated business processes and a more aligned and transparent procurement process.



Informal morning gatherings called “Angkringan pagi” to convey office integration and relocation plans by management proved to be effective and was welcomed by staff. The relocation of around 700 Block B Natuna employees to MedcoEnergi’s Headquarters was safely and successfully completed in 2019.

2. Build Block A Aceh’s organizational capacity and capability:

Block A Aceh gas commissioning was completed in Q1 2019. We supported Block A Aceh’s readiness for its first commercial sales in Q3 2018 and subsequent full operations by hiring 22 new staff members, and conducting a Technician Development Program.

3. Strengthen functional excellence for the Medco E&P organization:

Medco E&P centralized all technical support for assets into the E&P Technical Support organization. Medco E&P also strengthened site-level external relations capabilities to improve our engagement with local stakeholders.

4. Enhance ability to retain and motivate key talent:

The Company established a development program to improve managers’ coaching capability and reactivated the Worker-Management bipartite forum (Lembaga Kerja Sama) to foster effective communication with employees. We also created financial retention programs to retain high-potential and critical employees.

MedcoEnergi employees receive competitive remuneration based on individual performance and level of responsibility. This includes salary and allowances, performance incentives, and benefits in the form of leave, medical and education assistance, pension programs, and life insurance.



Winners of the MedcoEnergi Award competition recognizing employees for their innovations to improve business performance.

The Company also improved our competitiveness in the market by putting in place an Employee Share Award Plan (ESAP) and Management Share Award Plan (MSAP). Further information on ESAP and MSAP are in the Company’s Annual Report, page 87.

In 2018, as part of the effort to elevate employee engagement and motivation, employees with significant contributions to the company’s success received a MedcoEnergi Award. This award recognizes employees for innovations that improve business performance in areas such as technology, HSE, security, cost efficiency, and production.

5. Strengthen our talent pipeline to ensure sustainability:

MedcoEnergi designed and implemented several talent development programs in 2018. We developed succession planning in key subsidiary Director, Vice President, and Senior Manager positions, and utilized accelerated development programs to enhance our organizational strength in Finance and Operations. We also worked with academic institutions and local authorities to develop future talent for the power business, as demand for talent is increasing due to the rapid growth of the power industry.

6. Reinforce MedcoEnergi organizational values:

The Company’s values are the behaviors that employees are expected to demonstrate in their daily activities. Induction programs are provided for staff at newly acquired assets to ensure

these values are embedded in the organization. The Company also undertook a Culture Value Assessment through a series of Focus Group Discussions with managers and staff to identify gaps between current and desired culture and to determine initiatives to close the gaps.

Organizational values are reinforced at AMNT through an initiative called "United We Can" ("Bersatu Bisa") which is designed to facilitate awareness of AMNT's

vision, mission and core values, and to encourage the commitment of each individual in the organization to find new ways to improve operational effectiveness and efficiency. An Integrated Communication Strategy was used to introduce the vision, mission and core values to a variety of target audiences. This included communication through newsletters and videos, in-person events, a workshop on value creation, and recognition of successful value creation initiatives.

Human Resources Management

Recruitment

Hundreds of workers have been recruited since 2016 to meet the demand for qualified talent. MedcoEnergi gives equal opportunities to men and women and recruits employees on the basis of individual skills and abilities. Male workers are still hired in greater numbers than women, but the number of female workers recruited is also increasing. Many female employees hold senior roles, or are assigned as technical engineers or non-technical workers at our operation sites. We also have several female employees who have positions in governance bodies. Additional statistics on the composition of our workforce are available in the Appendix page 79-80.

Hiring local employees is a priority for MedcoEnergi, as part of our engagement with local communities. At our field sites, we work to balance local employment and development priorities with recruitment of non-local talent to fill critical, skilled positions.

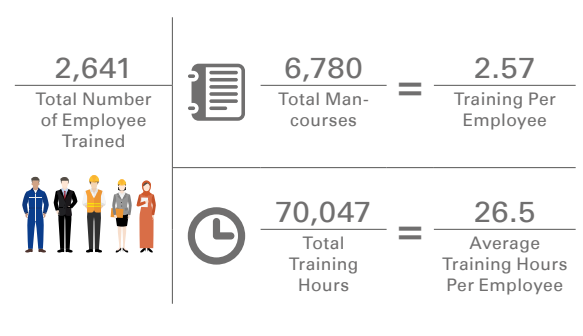
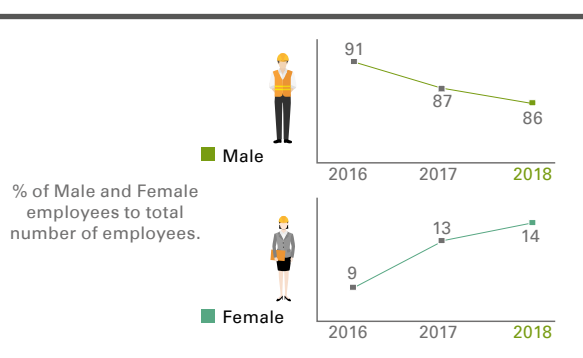
These efforts support the realization of SDG 5 (Targets 5.1 and 5.5), SDG 8 (Targets 8.2, 8.5, 8.6, and 8.8), SDG 10 (Targets 10.2 and 10.3), and SDG 16 (Target 16.b).

Training and Development

We are committed to providing clear career advancement opportunities for our employees, based on principles of equality and objectivity. MedcoEnergi strives to create an environment that encourages our employees to broaden their knowledge. We have policies and procedures that facilitate learning opportunities and personal development programs through training in professional knowledge, leadership, and management.

Training

In 2018, our total investment in employee education and training was over US\$2,000,000 (over US\$750 per employee), an increase of 15% compared to 2017.



To strengthen our leadership pipeline, we also implemented the MedcoEnergi Talent Development Program with several key activities:

- Talent Mapping of 568 potential leaders to map their performance and potential for growth.
- Succession Planning to identify potential successors for 42 key positions.
- Individual Development Planning to discuss with individual employees and determine career aspirations and development gaps and actions to be taken.
- Talent Monitoring to review progress and development outcomes for high-potential employees and adjust the development plan as necessary to align with business challenges.

We provide three types of training and development programs for employees:

1. Accelerated Development

We delivered four competency accelerated development programs in 2018:

- Finance and Accounting Apprentice Program Batch one and two with a total of eight new hires, to sustain our Finance and Accounting organizations.
- Block A Aceh Technician Development Program with a total of 40 participants who were hired from various areas in Aceh, particularly East Aceh, to support the operational readiness of Block A Aceh.



Locally hired technician receiving in classroom trainings as part of the Technician Development Program in Block A Aceh

- Supervisor Development Program for Rimau Block, South Sumatra Block, and Lematang Block that has trained 17 supervisors, and Tarakan Multi-Skill Development Program

with 14 participants, to address specific competency gaps in our field organizations.

2. Leadership Competence

We conducted three levels of leadership training to develop our people to lead at the individual, team and business levels. We are working to further develop high-potential employees to enhance their strategic thinking and leadership collaboration, and with INSEAD Business School created an annual MedcoEnergi Senior Leadership Development program.

Development of employee leadership is also part of AMNT's "*Bela Negara*" program, a state defense program that aligns with the President's national defense plan for 2018-2019. The program is designed to not only develop leadership, but also to enhance professionalism and dedication.

3. Technical Competence

Competency assessments in petroleum engineering, drilling engineering, surface facilities engineering and geoscience are used to create individual development plans, with independent study, training, coaching and domestic and international assignments.

The Company strongly believes that competent and engaged employees who represent MedcoEnergi Core Values, are the key to sustaining our growth. We continuously invest in the competency development of our people, in both Leadership and Technical areas. In 2018, we conducted a total of 6,780 training man-courses, with an average participation of 2.57 times per employee.

The above training and development efforts support the realization of SDG 4 (Targets 4.3 and 4.5) and SDG 10 (Target 10.2).

Industrial Relations

MedcoEnergi is fully committed to maintaining peaceful industrial relations with a proactive approach to communication. Regular meetings with the Labor Union are used to find common understanding, with agreed terms formally adopted in Collective Labor Agreements (CLAs). The CLAs provide employees with guidance on their rights and responsibilities under national labor laws and regulations, including but not limited to days and working hours, overtime, annual leave, compensation, and benefits. Current CLAs include:

PT Medco Energi Internasional Tbk (MEI) Collective Labor Agreement (*Perjanjian Kerja Bersama*) 2017 - 2019

- Developed based on negotiations between MEI and the Labor Union of the Company.

PT Medco E&P Indonesia (MEPI) Collective Labor Agreement (*Perjanjian Kerja Bersama*) 2018- 2020

- Developed based on negotiations between MEPI and the Labor Unions of Soka, Rimau, Tarakan, Lematang Assets and the Jakarta Office.

Medco E&P Natuna Ltd. (Block B Natuna) Collective Labor Agreement (*Perjanjian Kerja Bersama*) 2018 - 2020

- Developed based on negotiations between Block B Natuna and the Labor Union of Block B Natuna.

PT Amman Mineral Nusa Tenggara (AMNT) Collective Labor Agreement (*Perjanjian Kerja Bersama*) 2017 - 2018

- Developed based on negotiations between AMNT and the Labor Union of AMNT.

These efforts support the realization of SDG 8 (Target 8.8).

Contribution to Industry

Since 2009, Special Task Force for Upstream Oil and Gas Business (SKK Migas) and the Human Resources community in the oil & gas industry have organized an annual Indonesia Human Resources Summit (IHRS), as a place to develop HR professionals and enhance their networks. The goal is to bring creative ideas and updated technology to address challenges in human resources, and contribute to Indonesia's human development in the face of global competition.

In 2018, MedcoEnergi hosted the IHRS summit with SKK Migas and PT Pertamina Hulu Energi. The theme of IHRS 2018 was "Humanizing Technology in Managing Tomorrow's People". The event was attended by a record 800 participants, and featured 19 local and international speakers, including Hilmi Panigoro, President Director of MedcoEnergi and Sri Mulyani Indrawati, Minister of Finance of the Republic of Indonesia, as keynote speakers. The diverse speakers represented various companies and non-profit institutions.

This supports the realization of SDG 17 (Target 17.17).



The Minister of Finance of the Republic of Indonesia, Sri Mulyani Indrawati, giving the keynote speech at the IHRS 2018.

Action Plan

The following action plan was designed to enable us to meet our Commitments and Objectives and continue to empower our employees and improve their overall wellbeing. We are measuring, monitoring, and reporting our progress and performance against these plans.

	Short Term Actions	Medium-Long Term Actions	Status
Diversity	Establish MedcoEnergi policy related to diversity and anti-discrimination in compliance with ILO Conventions and local laws.		Initiated study on regulatory requirements.
		Revise MedcoEnergi's Human Resources manual and guidelines to clarify the Company's standards and expectations on diversity and anti-discrimination.	Initiated study on regulatory requirements.
		Set diversity-related targets to ensure successful implementation of the policies.	Set diversity targets on female representation in managerial positions.
Employment	Establish MedcoEnergi policy related to the hiring of local community members.		Policy related to the hiring of local community members is in place for Block A Aceh.
	Maintain retention of high-potential MedcoEnergi employees, as indicated by overall retention rate and high-potential employee retention rate.		Retention rate of high potential employees met the Company's target.

Corporate Governance

Our Approach and Commitment

Sustainable business practices rely on a foundation of effective and ethical corporate governance, and a culture of transparency and compliance. MedcoEnergi's corporate governance approach incorporates our Corporate Values and Good Corporate Governance Principles, and includes specific commitments and actions to address various issues such as corruption and human rights.

A strong culture of transparency and compliance is essential for enabling and ensuring ethical business practices. As MedcoEnergi grows, we are building a more systematic approach across the organization with consistent and transparent management policies and procedures. All of these efforts support the realization of the UN SDG 4 (Target 4.7), SDG 12 (Target 12.6), SDG 16 (Targets 16.3, 16.5, 16.6, and 16.7), and 17 (Target 17.17).

Corporate Values



Professional

All employees must conduct themselves in a professional manner by, among others:

- Competent in one's area of expertise;
- Possessing a "champion spirit";
- Continuously seeking self-improvement;
- Having professional ability and knowing one's limit.



Ethical

All employees must conduct themselves in an ethical manner by, among others:

- Conducting business fairly with high integrity;
- Applying the highest ethical standards at all time;
- Understanding and following the Company's business ethics and Good Corporate Governance policies.



Open

All employees must make efforts to promote transparency by, among others:

- Encouraging informality and openness in communication at all levels;
- Building an environment of trust among the employees and management in MedcoEnergi;
- Behaving with respect, open mind, and proper work ethics.



Innovative

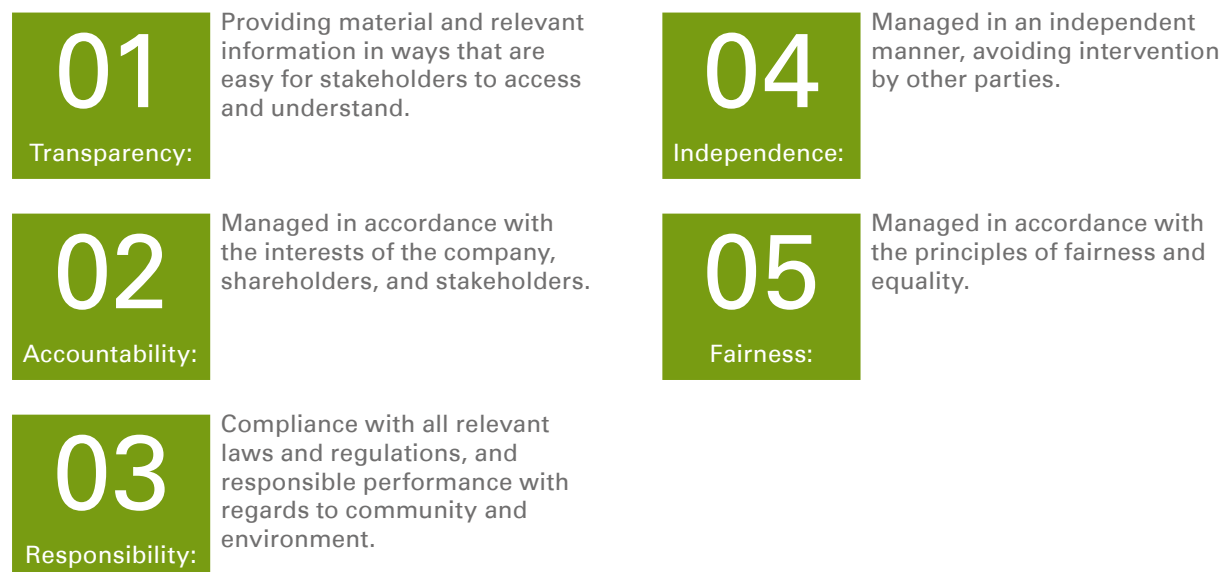
All employees must cultivate the spirit of innovation by, among others:

- Building a culture of trail-blazers;
- Continuously search for innovative solutions to achieve better, safer, more cost-effective, and faster outcomes;
- Possessing intellectual maturity.

Good Corporate Governance Principles

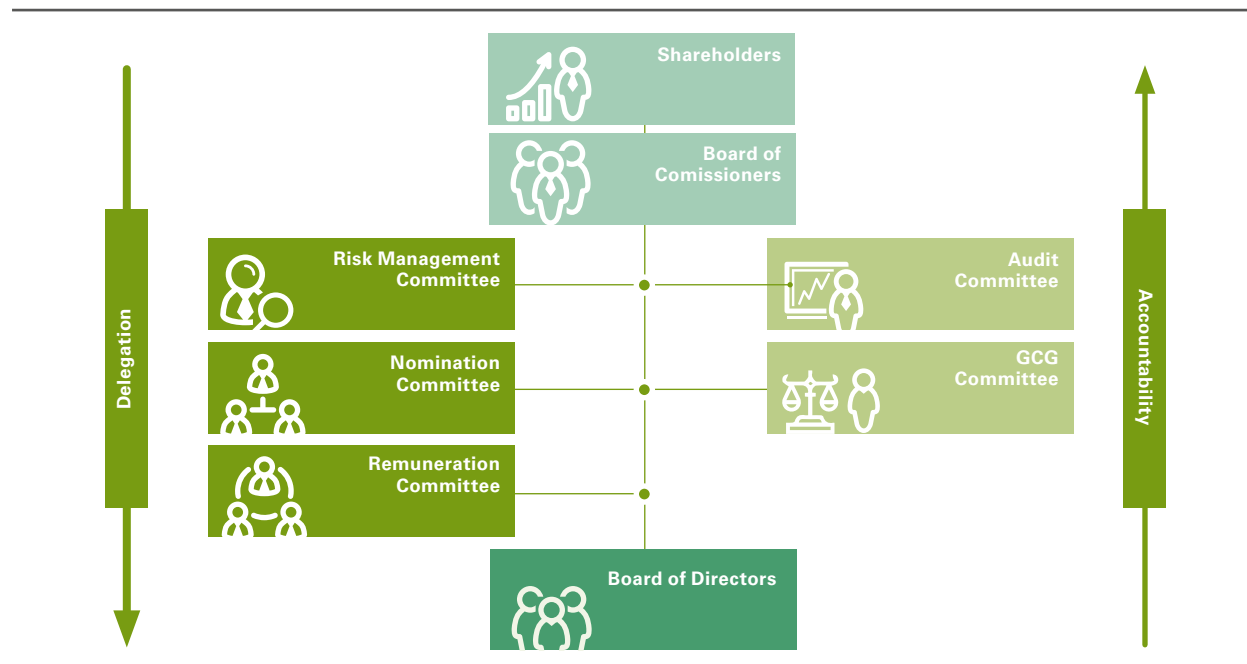
MedcoEnergi implements Good Corporate Governance (GCG), a set of principles which apply across all subsidiaries and business units, supported by our GCG Principles and Code of Conduct.

MedcoEnergi's Good Corporate Governance Principles



Every individual at MedcoEnergi must understand and adhere to the GCG and Code of Conduct (CoC) guidelines which serve as a guide for all employees and business partners regarding proper and ethical attitudes and behavior when interacting with stakeholders. In the event of any discrepancy between local norms, laws, and regulations, the higher standard is applied.

Corporate Governance Framework



To ensure effective implementation of the GCG Guidelines and Code of Ethics, MedcoEnergi has defined the following roles and responsibilities:

Board of Commissioners (BOC)

Supervises the Board of Directors (BOD) and ensures the implementation of Good Corporate Governance, risk management, and internal control. The BOC chairs the General Meeting of Shareholders, makes recommendations about remuneration for members of the BOC and BOD, and monitors execution of internal and external audits.

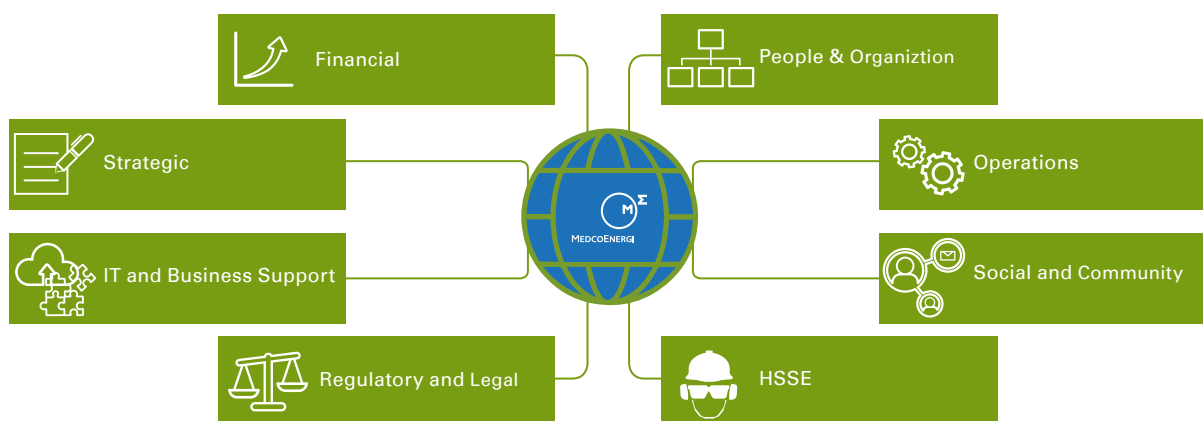
The Board of Commissioners is assisted by the Audit Committee, Nomination and Remuneration Committee, Risk Management Committee, and Good Corporate Governance Committee.

Board of Directors (BOD)

Responsible for managing MedcoEnergi pursuant to the interests and objectives of shareholders. The BOD guides and manages MedcoEnergi in accordance with the Company's strategies and business objectives, formulates and implements business strategy and an annual Work Program and Budget, and implements a risk management process.

Risk Management

Risk Universe of MedcoEnergi



The Company implements an Enterprise Risk Management (ERM) Framework with reference to international standard ISO 31000 across the organization. The ERM framework is intended to cover all types of risk that might affect MedcoEnergi. This includes Strategic, Financial, Operations, People and Organization, Information Technology and Business Support, Regulatory and Legal, Health, Safety, Security and Environment, as well as Social and Community risks. The sustainability development roadmap was developed based on the Risk Management framework.

Ethics and Compliance

MedcoEnergi operates in several countries that rank poorly in Transparency International's 2018 Corruption Perception Index, which means it is essential to maintain high standards for ethics and compliance. Our reputation is critical to secure access to natural resources, access to financing, and social license to operate, in order to assure our continued ability to grow both in Indonesia and globally.

Our goal is to operate in compliance with all policies, permits, regulations, and laws. MedcoEnergi has a strong reputation as a publicly listed company with a solid track record in corporate governance. MedcoEnergi is currently active in the Indonesian Petroleum Association, serving as the chair of the Ethics & Compliance Committee. We are working to foster a culture of integrity within Indonesia's oil and

gas industry including adoption of effective Anti-Bribery Management Systems. We are actively involved in the Anti-Corruption Working Group working with the Indonesian Corruption Eradication Commission (*Komisi Pemberantasan Korupsi - KPK*) and Indonesian Petroleum Association, and we provide technical assistance to others in the industry.

We are also aware that we need to be up to date with developments in various regulations that has an implication to our business. This include sanction risks to the energy sector with the introduction of sanction rules by International Organization as well as International Governments. This is an ongoing assessment as how such rules, such as the US sanctions, will impact our business and what actions need to be made.

Case Study

Certification of ISO37001:2016 Anti-Bribery Management System (ABMS) for Medco E&P Natuna Ltd.

Managing corruption is an essential component of ethical operations, and we do so through our Anti-Bribery Management System (ABMS), by clearly communicating our expectations to vendors, and by ensuring that employees understand and implement our Anti-Bribery and Corruption (ABC) policy.

Indonesia's Anti-Corruption Laws (No. 31 Year 1999, No. 20 Year 2001) establish a legal requirement to eradicate bribery and corruption in any form, and the Supreme Court Regulation No. 13 Year 2016 states a requirement to prevent any corporate criminal liability.

Certification of Medco E&P Natuna Ltd's (operator of Block B Natuna) ABMS implementation under ISO37001 is an important step that provides assurance to management, investors, employees, customers and other stakeholders regarding the measures that are in place to control and prevent bribery risks.

The certification process was initiated in 2017 by MedcoEnergi's Audit & Integrity Compliance (A&IC)

function. We established an anti-bribery policy and commitment, policies on Gifts & Entertainment and Government Hosting, and financial and non-financial controls. We put in place procedures for raising concerns, investigations, and audits, and conducted awareness sessions and an in-house training. In February 2018, we conducted a Professional Evaluation and Certification Board (PECB) ISO37001 Lead Auditor Certification Course in February 2018, certifying 15 participants as Lead Auditors.

The ISO37001 Certification for Medco E&P Natuna Ltd was successfully completed in Q2 2019. This Certification is the first time awarded to a Production Sharing Contractor (PSC) in the Oil and Gas sector in Indonesia.

The plan is to expand the certification for Medco E&P procurement process and Medco Power head office.



Internal Ceremony of receiving the ISO 37001:2016 ABMS Certification attended by SKK Migas and Medco E&P Natuna Management. The ABMS Certification is the first awarded to a PSC in the Oil and Gas sector in Indonesia.

Socioeconomic Compliance

Transparency is critical for us to ensure and demonstrate our ethical actions with regards to vendors, government agencies and local communities. In 2018, there were no material penalties or sanctions imposed on any of the Company's business units for regulatory violations or compliance issues.

In 2018, activities carried out by the Company to support compliance include several Awareness-raising campaigns for local communities and partners on Ethics and Compliance.

There are internal and external channels available to allow employees and external stakeholders to raise ethical concerns in a confidential manner. We employ third-party organizations to operate whistleblower mechanisms to allow employees and external stakeholders to confidentially raise business ethics or compliance related concerns directly with the Board of Directors.



Corporate Hotlines

- Deloitte Direct Website
- Deloitte Email

: <https://lapor-medcoenergi.tipoffs.info/>
: lapor-medcoenergi@tipoffs.com.sg



E&P Hotlines

- Email
- Consultation
- Phone/SMS

: lapor-medcoepia@medcoenergi.com
: ethics&compliance@medcoenergi.com
: 08118 383 919



Medco E&P Natuna Hotlines

- Email
- Phone

: mepnethicshotline@medcoenergi.com
: 021 8082 4222

Commitment to Eradicate Corruption

Indonesia's Anti-Corruption Law No. 31 Year 1999 and Law No. 20 Year 2001 include a legal requirement to eradicate bribery and corruption in any form, and the Supreme Court Regulation No. 13 Year 2016 sets out the procedures for handling criminal offences committed by corporations.

MedcoEnergi's business operations require frequent interactions with government and non-government officials, creating exposure to risks of bribery and corruption. MedcoEnergi strictly abides by Indonesia's anti-corruption laws and similar legislation in the other countries in which we operate. Our Good Corporate (GCG) Guidelines and Code of Conduct (CoC) describe our commitment to prevent corruption in any form in our business operations.

MedcoEnergi requires that its employees and business partners, including joint venture partners, agents, distributors, representative offices, contractors, and suppliers, comply with all anti-corruption regulations and policies. Any individual in MedcoEnergi found to have provided or accepted bribes or engaged in other acts of corruption is subject to disciplinary action.

The Company has implemented a number of anti-corruption initiatives, both internally and externally, including the implementation of the Ethics Liaison Officer Program and Fraud Risk Assessment workshops, and has begun the process of certifying Medco E&P Natuna Ltd. with the ISO 37001:2016 Anti-Bribery Management System which was completed in 2019. Over the next three years, the ISO 37001:2016 ABMS certification will also be implemented for the Company's procurement department and Medco Power.

Ethics Liaison Officer (ELO) Program

MedcoEnergi established the ELO Program as an extension of communicator of the Audit & Integrity

Compliance (A&IC) function as a way to help build an ethical compliance culture. The ELO personnel, which rotate every year, are expected to champion campaigns to ensure compliance with all applicable business ethics and policies.

The first ELO Program, which consisted of 27 ELO personnel, was implemented in Block B Natuna as a pilot project. Block B Natuna provided ELO personnel with training on the MedcoEnergi CoC, policies and procedures. Since the program commenced in January 2018, employees and ELO personnel have showed enthusiasm to continue maintaining high integrity to ethical standards. More than 120 sessions on business ethics were conducted in 2018 in Jakarta and Block B Natuna field operations.

For 2019, the ELO program will be expanded to other MedcoEnergi businesses in the Corporate group, Rimau Block, South Sumatra Block, Lematang Block, Block A Aceh, and Oman Block.



One of the Ethics Liaison Officer (ELO) facilitating a workshop on MedcoEnergi CoC, policies and procedures attended by Block B Natuna staff in Jakarta office.

Fraud Risk Assessment (FRA) including Bribery Risk

MedcoEnergi's efforts to prevent corruption include Fraud Risk Introduction, Fraud Risk Assessments, and Audit Programs.

In our FRA workshops, employees identify business activities that are vulnerable to fraud and bribery and develop plans to mitigate risk, assess internal controls, and comply with regulations and professional standards.

In 2018, FRA activities were held for MPI subsidiaries in Batam, Palembang, and Jepara. Block B Natuna held a discussion forum on procurement fraud risk, and a series of evaluations were conducted for Rimau Block, South Sumatra Block, and Lematang Block.

Annual Declaration and Assurance Process

To strengthen MedcoEnergi's commitment to Good Corporate Governance (GCG) and the Code of Conduct (CoC), all Directors and employees complete an annual certification in the form of a Statement of Adherence (SoA). They are required to read and understand the GCG and CoC Guidelines, and managers are responsible to provide appropriate explanation to all personnel to help them understand and implement the GCG and CoC in their daily operations. Everyone must first pass an online evaluation of their knowledge before signing the SoA.

Managing Conflict of Interest (Col) is a critical factor for an effective Anti-Corruption Program. The Association of Certified Fraud Examiners, the global anti-fraud professional association, states that Col is the root cause of corruption, and Global Reporting Initiative (GRI) guidelines require that anti-corruption efforts include managing potential Col.

Col has been included in the MedcoEnergi CoC since 2004, and in 2016, Internal Audit created a reliable mechanism for MedcoEnergi employees to declare, mitigate, and monitor Col. In 2018, the reporting and monitoring system for Col was enhanced and automated as part of MedcoEnergi's Business Process Management system.

Communication and Education Internal Initiatives

MedcoEnergi continues to implement our Anti-Bribery Management System (ABMS) in line with international best practices, and regularly conducts internal communication and education activities on business, ethics, and anti-corruption. Additional internal initiatives in 2018 include:

- Establishing specific guidelines on gifts and entertainment and Col. Company-wide socialization was conducted to increase awareness that all gifts and entertainment are to be reported as part of the ABMS.
- Extensive socialization on Anti-Corruption Policy and Procedure for more than 1,200 employees and contractors during August-December 2018. During the socialization sessions, the Company's Audit & Integrity Compliance provided detailed explanation of the following:
 1. Business Sustainability and Corporate Crime Liability;
 2. Types of Corruption Crime Actions based on local law Undang-undang No.31/1999 Jo Undang-undang No.20/2001;
 3. Col.

At the end of each session, participants explored three case studies related to Col.

MedcoEnergi's celebration of World Anti-Corruption Day on 10 December 2018 was attended by 150 employees and contractors.

Vendor Engagements on Anti-Corruption and Bribery

MedcoEnergi currently completes 20 vendor audits per year, and this number will expand over the next three years to cover all bribery risks related to procurement at Corporate, Block B Natuna, and MPI. We continue to communicate to vendors regarding:

- MedcoEnergi's gift and entertainment policy during holiday seasons and ISO37001 ABMS Certification
- Senoro-Toili's Business Ethics, GCG & FRA
- Api Metra Graha's (AMG-Medco's affiliate) Anti-Corruption Workshop: Corporate Crime Prevention & Col Risk Deterrence
- Block B Natuna's Ethics Training to Corporate Social Responsibility (CSR) Stakeholders.

External Initiatives

- In 2018, external compliance initiatives included a Contractor Compliance Survey, Contractor Anti-Bribery and Corruption (ABC) Audits, and a Contractor Compliance Maturity Assessment Program.
- The Contractor Compliance Assistance Program, in collaboration with other international PSCs, supports contractors to develop and enhance their anti-bribery and corruption programs.
- MedcoEnergi, through the IPA Ethics & Compliance Committee, is part of the anti-corruption advisory committee for the oil and gas sector that was set up by the Corruption Eradication Commission (*Komisi Pemberantasan Korupsi*).

- A discussion with GERAK ("*Gerakan Anti Korupsi*"), a leading corruption watch NGO in Banda Aceh, was held in November 2018 on anti-corruption risks and education programs and the opportunity for collaborative efforts.

Internal and External Audits

MedcoEnergi uses internal auditing at the corporate and subsidiary level to evaluate and improve the effectiveness of our risk management, control, and governance processes.

Human Rights

We are committed to respecting human rights and we adhere to the Voluntary Principles on Security and Human Rights and Indonesian government standards. Protection of human rights is a core component of our relationship with local communities.

Indonesian Law No. 39/1999 concerning Human Rights states that human rights are basic rights bestowed by God on human beings, are universal and eternal in nature, and for this reason must be protected, respected and upheld, and may not be disregarded, diminished, or appropriated by anyone whatsoever.

Human Rights at Block A Aceh

Review of potential human rights issues at Block A Aceh were conducted at the beginning of the project, as part of the Environmental and Social Impact Assessment (ESIA) and Environmental and Social Action Plan (ESAP). Potential impacts identified included security issues related to workforce

recruitment, workforce demobilization (following construction), and project (upon completing operations).

An independent assessment and field visit in 2018 found no issues related to human rights.

PT Medco Power Indonesia and Human Rights

Medco Power has applied IFC Performance Standards since 2012 and undergone audits at IFC's request. The most recent IFC audit in 2017 reported no issues related to human rights violations.



Lenders Consultant's most recent review visit to Block A Aceh coinciding with the first harvesting ceremony of the SRI Organic Rice community empowerment program in partnership with the local Aceh government. These types of visits have been conducted since the beginning of the project to verify the fulfillment of ESIA and ESAP requirements.

Public Policy

MedcoEnergi has a strict policy, included in our GCG Guidelines and CoC, that we do not support any political party, and make no contributions or donations in any form to any political party or affiliated organization in any location where we operate. Nevertheless, we fully respect the freedom of every individual working in MedcoEnergi to participate in political processes and support a choice of parties or candidates without any influence whatsoever. Individuals actively participating in political activities, including participating as members in a political party or campaigning for an election, must do so in accordance with company regulations and policies. Internal communications regarding donations and contributions are issued

to all employees, in particular before elections take place. Employees who make donations to a political candidate or political party in their personal capacity must declare them using the annual declaration of Col.

MedcoEnergi also strictly adheres to a principle of non-discrimination in the design and implementation of community development programs, including operational support programs (Program Pendukung Operasi, PPO) approved by SKK Migas. All of our programs are free from discrimination on the basis of ideology, political party, ethnicity, religion, or race.

Action Plan

The following action plan was designed to enable us to meet our Commitments and Objectives and continue to improve our management of corporate governance issues. We are measuring, monitoring and reporting our progress and performance against these plans.

	Short Term Actions	Medium-Long Term Actions	Status
Anti-corruption:	Require all employees to sign an annual anti-corruption declaration after demonstrating their knowledge through an online evaluation.	Employees have signed anti-corruption declaration on an annual basis.	
	Conduct regular training on hosting government officials, Fraud Risk Assessment (FRA) for MedcoEnergi employees, and share about anti-corruption programs in the oil and gas Forum.	The training on hosting government and FRA workshops are completed. The Company's anti-corruption program and sustainability initiatives were shared at the IPA Ethics & Compliance Committee in 2018.	
	Establish piloting of Ethics Liaison Officer (ELO) program in Q1 2018 for Block B Natuna, with more than 30 officers in each department or field.		
	Expand the ELO program at Rimau Block, South Sumatra Block, Lematang Block, and Block A Aceh in Q4 2018.	The ELO personnel expanded from 27 to more than 40.	

	Short Term Actions	Medium-Long Term Actions	Status
	Implement and obtain ISO 37001:2016 ABMS certification for Block B Natuna.		Process started in 2018 and successfully completed in 2019.
	Implement and obtain ISO 37001:2016 ABMS certification for procurement process and Rimau Block, South Sumatra Block, and Lematang Block.		Implementation and certification has been initiated following Block B Natuna's ISO certification completion in 2019.
	Implement an obtain ISO 37001: 2016 ABMS certification for Power assets.		Preparation and resource planning initiated.
	Conduct Anti-Bribery and Corruption (ABC) vendor audits (minimum of 20 vendor audits per year).		20 vendor audits completed and program annually repeated
	Establish standard for vendor due diligence process.		Procedures and standards developed.
	Through the IPA Ethics & Compliance Committee, advance engagement with government authorities on anti-corruption practices in the oil and gas industry.		In collaboration with KPK, Transparency International Indonesia (TII) and IPA, facilitated Corporate Crime Prevention Event with participants from various functions from oil & gas industry. In addition, representing IPA, meeting with National Strategic Team providing feedback on permits simplification and transparency.
Business Ethics	Carry out CoC Assurance: Statement Of Adherence (SOA) self-test.		
	Automate CoI Deterrence.		SoA self test and CoI at Corporate level are completed and program annually repeated.
	Standardize CoC Practices related to SoA Declaration, CoI Declaration, Governance & Ethics Policy, Government Voting Policy, Contribution & Donation Policy.		Completed the required alignment at Corporate and Medco E&P.
	Ensure alignment between audit and compliance practices at the corporate level.	The Company implements continuous improvement compliance program in area of vendor due diligence and disciplinary action related to retaliation clauses in CLA across the group.	Completed the audit and compliance practice alignment at Corporate level. Vendor due diligence is still ongoing. Medco E&P CLA have retaliation clauses to reinforce disciplinary actions.
	Standardize vendor due diligence process for Medco E&P assets.		
	Reinforce disciplinary actions related to CoC Violations in the Collective Labour Agreement (CLA) for Medco E&P assets.		
	Finalize and implement a standardized, rigorous compliance program (covering prevention – detection – response) across MedcoEnergi.		Implemented one CoC standard across MedcoEnergi, ABMS implementation in key overseas assets, and standardized 3rd party risk management.
Human Rights	Develop human rights policy and framework.		Initiated study on regulatory requirements.
	Conduct human rights training for relevant employees and vendors.		Conducted training for security guards that includes human rights component.
	Conduct human rights assessment for major assets.		Initiated study on regulatory requirements.
Public Policy	Develop accountability mechanism to monitor MedcoEnergi's public policy statements versus execution, and agenda versus implementation.		Completed the accountability mechanism and reporting to BoD.
Socioeconomic Compliance	Through the IPA Ethics & Compliance Committee, support industry efforts to increase simplification and transparency around social and environment permits for Medco E&P assets.		Ongoing authority engagement under the National Anti-Corruption Strategy Forum.

Enhancing Environmental Management

Our Approach and Commitment

As a responsible corporate citizen, we are committed to comply with all applicable laws and regulations, and aligning our health, safety and environmental management with industry best practice and relevant international standards. We regularly set and monitor our goals and performance to achieve zero injuries, illnesses, environmental incidents, and the reduction of waste and emissions. We seek to continually strengthen our operational excellence through enhancing our safety culture, stakeholder engagement, environmental stewardship, and the ongoing adoption and development of best practices.

Our Objectives

We implement our environmental protection approach in line with the following objectives:

Environmental compliance:

MedcoEnergi will implement policies and practices that keep us in full compliance with all environmental laws and regulations, as well as other relevant industry standards and requirements such as those of the International Finance Corporation (IFC) and the Asian Development Bank (ADB).

Our goal is to set a good example in environmental management, with safe and efficient operation and production. We want to improve our environmental performance and contribute to the sustainable development of Indonesia.

Improving MedcoEnergi's energy footprint is part of our environmental management strategy, and we take steps to reduce our energy use, develop renewable energy sources and reduce the carbon footprint of existing and planned operations. Our environmental management systems enable us to minimize our emissions and waste and support ecosystem and community health in the areas surrounding our operations.

MedcoEnergi is committed to comply with all relevant legal and regulatory requirements wherever we operate. We carefully track any changes in requirements from the government and international lenders to ensure that our environmental management is aligned with the highest standards.

The efforts described in this chapter support the realization of SDG 3 (Target 3.9), SDG 6 (Targets 6.3, 6.4, 6.6, and 6.b), SDG 7 (Targets 7.2, 7.3, 7.a, and 7.b), SDG 12 (Targets 12.2, 12.4, and 12.5), SDG 13 (Target 13.2), SDG 14 (Targets 14.1, 14.2 and 14.5) and SDG 15 (Targets 15.1, 15.2, 15.4, and 15.5).

Management Systems

All MedcoEnergi assets implement a Health, Safety, and Environment Management System (HSEMS), which was developed in reference to ISO 14001 and OHSAS 18001 and covers a range of operations, risk, and crisis management. The Company has adopted ISO 14001 for our oil and gas, power, and mining assets. Several assets are also certified for ISO 14001:2015:

- **Oil and gas:**
Rimau Block, South Sumatra Block, Lematang Block, Tarakan Block, and Block B Natuna.
- **Power:**
Tanjung Jati B (TJB), PT Energi Listrik Batam (ELB), PT Medco Energi Batam (MEB).

In addition to adhering to ISO management systems, MPI complies with IFC Performance Standards 2006, which is aligned with ADB and Equator Principles standards. MPI is in the transition process from OHSAS 18001 to ISO 45001, and will be fully compliant with ISO 45001 by 2020.

- **Mining:**
Batu Hijau has implemented a certified ISO14001 environmental management system since 2009, and in 2018, AMNT obtained an ISO14001:2015 certificate for its environmental management system. AMNT also implements the mining safety management standard based on the ministerial regulation of ESDM No. 26 year 2018 and Decree of the Minister of ESDM No. 1827 year 2018.



A field technician conducting routine checks and monitoring of field data as part of the HSEMS.

Environmental Compliance

Medco Energi continues to improve our environmental compliance efforts by conducting monthly internal inspections that involve related government agencies. The Environmental Hotline and On-Call Duty Program are available 24 hours a day to respond to environmental incidents. All incidents are recorded for management and resolution.

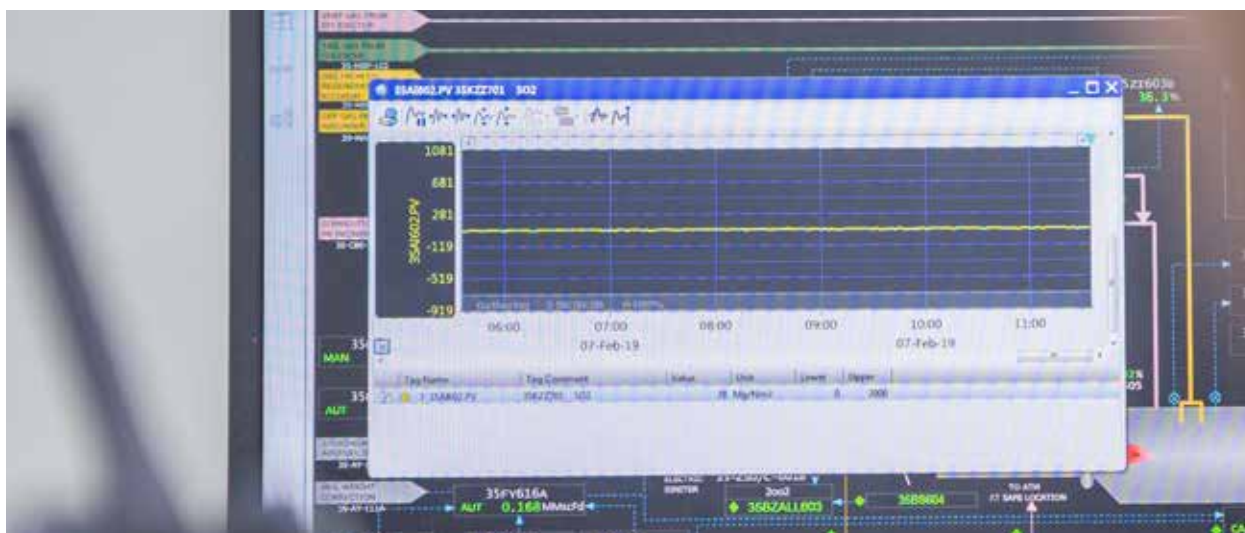
During 2016-2018, there were zero incidents of non-compliance with environmental laws or regulations that resulted in material monetary fines, non-monetary sanctions, or cases brought through dispute resolution mechanisms across all business units.

The spill incident in Rimau Block in 2018 did not result in monetary fines, non-monetary sanctions or any dispute. MedcoEnergi HSE team was requested to share the lessons learned of the spill handling in SKK Migas-Production Sharing Contractors (PSC) HSE Forum.

In addition to compliance with government standards, MedcoEnergi's new major projects also comply with relevant international standards. PT Medco Ratch Power Riau (MRPR) complies with the Asian Development Bank (ADB) environmental and social safeguard framework and the International Finance Corporation (IFC) principles, while Block A Aceh complies with the Equator Principles.

Emissions Reduction

MedcoEnergi has action plans to address climate change and reduce the amount of CO₂ generated from our business operations. We have initiatives in place to reduce our fuel consumption, transition some energy use from conventional fuel to gas, and absorb CO₂ through revegetation.



The use of IT systems in emissions monitoring becomes important to ensure reliability of data management. We are continuously improving our data management to be more integrated and reliable.

Oil & Gas	2016	2017	2018
Direct (Scope 1) GHG emissions: CO ₂ , CH ₄ , N ₂ O (Metric tons of CO ₂ equivalent)	297,159.16 ^a	1,170,529.05 ^b	1,162,507.63 ^b
GHG emissions intensity (ton CO ₂ e/1000 TOE HC product)	99.27 ^a	205.21 ^b	237.12 ^b
SO _x (ton/year)	6.73 ^c	16.89 ^d	14.88 ^d
NO _x (ton/year)	3,150.67 ^c	13,770.76 ^d	14,149.41 ^d
PM (ton/year)	247.05 ^c	340.31 ^d	341.20 ^d
VOC (ton/year)	1,323.11 ^c	2,054.91 ^d	1,508.95 ^d

a. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan)

b. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan, Block B Natuna)

c. Domestic: Rimau, SSB, Lematang, Tarakan

d. Domestic: Rimau, SSB, Lematang, Tarakan, Block B Natuna

We lower emissions from our E&P facilities through initiatives such as flare gas recovery, substitution of onsite diesel engines, rerouting of gas distribution, and use of infrared cameras for fugitive emissions management. However, in 2017 and 2018 emissions from the oil and gas business rose mainly due to the inclusion of the newly acquired offshore operation in the Block B Natuna. Our emissions reduction efforts include driving tracking systems to reduce diesel consumption, optimization of crew changes,

and offshore operations support. We also absorbed 186,241 tons of CO₂e through revegetation.

As part of our continuous improvement efforts, Medco E&P conducts energy audits, GHG verification and opportunity analysis, benchmarking of emissions reduction and energy efficiency in the oil and gas sector as described further in the Action Plans in page 60.

Power	2016	2017	2018
Direct (Scope 1) GHG emissions: CO ₂ , CH ₄ , N ₂ O (Metric tons of CO ₂ equivalent)	740,350.66	855,549.90	905,626.77
GHG emissions intensity (ton CO ₂ e/ MWH)	0.53	0.54	0.55
SO _x (ton/year)	289.62	337.24	411.82
NO _x (ton/year)	560.79	704.25	948.25
PM (ton/year)	143.46	156.31	192.17
VOC (ton/year)	Not applicable		

Mining	2016	2017	2018
Direct (Scope 1) GHG emissions: CO ₂ , CH ₄ , N ₂ O (Metric tons of CO ₂ equivalent)	1,417,272	1,255,167	1,320,452

Mining	2016	2017	2018
GHG emissions intensity (ton CO ₂ e/1000 TOE HC product)	1.43	2.17	3.67
SO _x (ton/year)	916	1,130	999
NO _x (ton/year)	1,991	2,004	2,270
PM (ton/year)	238	242	257
VOC (ton/year)	Not applicable		

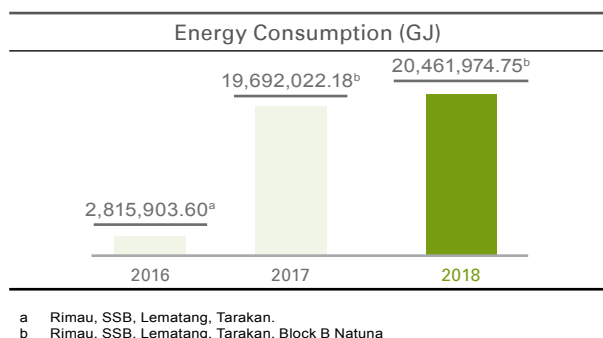
The increase of GHG emissions by 5% in 2018 compared to 2017 is due to the increased use of diesel fuel for heavy equipment in the ramp up operations. AMNT has also made a public commitment to implement projects that reduce greenhouse gas emissions and improve energy efficiency. At the Batu Hijau site, coal and fuel combustion for electrical power generation used for mining operations and facilities creates emissions of SO₂, NO_x, and particulate matter. Fugitive emissions of coal and fly ash dust can be generated during storage and handling, and emissions are generated from other stationary and mobile sources, such as pumps that circulate the mine water and hauling trucks in the mine pit area. Environmental protection actions taken at the site include using coal with

low sulfur and ash content, controlling particulate emissions with filters, and using water sprays to minimize dust during transport and handling. AMNT is developing a world class smelter and the Elang site prospect and is evaluating a combined-cycle, gas-fired power plant using LNG as its fuel to support its operation and expansion. Additionally, AMNT signed a Heads of Agreement (HoA) with MPI in February 2019 whereby Medco Power will develop a Solar PV Power Plant in Sumbawa Island and provide renewable energy to AMNT to reduce usage of power generated using fossil fuels and reduce the emissions for its Batu Hijau mining operation.

Energy Efficiency

MedcoEnergi implements energy audits to evaluate energy consumption and identify opportunities for energy saving, resulting in recommendations to improve energy efficiency programs which are then adopted.

Oil & Gas



In 2017 and 2018 energy consumption from the oil and gas business increased mainly due to the inclusion of the newly acquired offshore operation in the Block B Natuna.

Mining

AMNT manages water in the reclamation area to ensure that the water requirements for mining production do not interfere with the availability of clean water for the community. This includes construction of a clean water transfer facility in 2018 which diverts clean surface water from a catchment which previously flowed into the mine acid collecting pond and was pumped to a processing facility, and instead is now transferred into natural rivers. Permission to release surface water into the Tongoloka River from the expanded catchment area was given by the West Sumbawa Regent Decree No. 506 Year 2018. The diverted water catchment area will continue to be expanded as the reclamation area increases over the next five years. Diverting surface water from the reclamation area to the Tongoloka River reduces the pumping electricity load from the mine acid collecting pond by around 870 MWh every year.

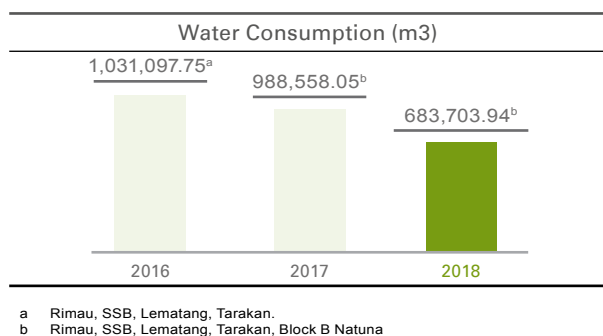
Water and Effluent

MedcoEnergi actively participates in water conservation as a priority of our environmental management programs.

Water Consumption

Oil and Gas

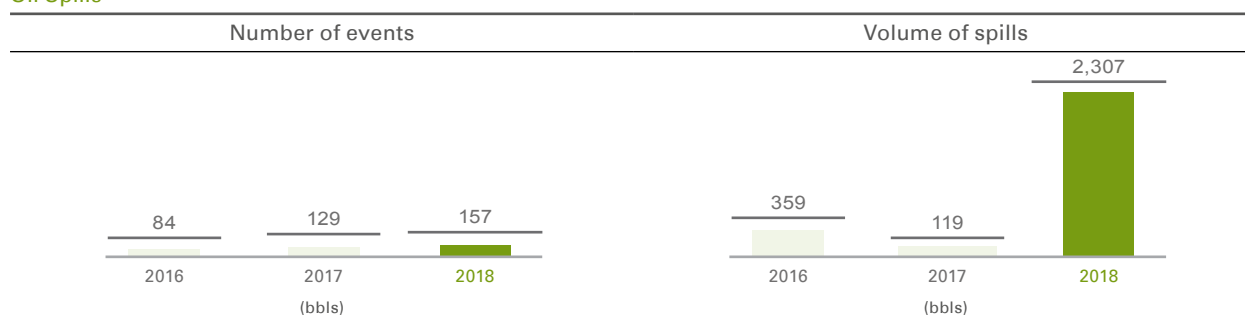
MedcoEnergi does not use significant amounts of water in its primary operational activities for oil and gas production. Water consumption is only used in supporting activities, such as in the mess area and offices. Efforts and innovations aimed at water efficiency are being performed continuously, especially to recycle water, utilize rainwater, and reduce rainwater runoff, leading to a reduction of water consumption.



The implementation of water conservation programs has gradually reduced the water consumption from four of our E&P domestic blocks (South Sumatra Block, Lematang Block, Tarakan Block, and Block B Natuna) by 31%, from 988,556.05 m³ in 2017 down to 683,703.94 m³ in 2018. The programs for water conservation include a water injection program to maintain reservoir pressure, utilization of domestic WWTP-treated water, shower c/w stopper usage, decreasing condenser temperature on the amine system, recirculating WWTP-treated water as a chemical solvent, increasing water infiltration through revegetation as part of Climate Change Adaptation and Disaster Mitigation Action with Tarakan City government, and separator and hydrocyclone optimization.

Effluent

Oil Spills



The number of spills increased over the last two years, caused by equipment damage, mostly pipeline corrosion and external factors (e.g. the barge collision incident). We had one accident in 2018 related to our oil shipment operations. A contracted barge tanker en route from Tengguleng Terminal to Bangka Marine Terminal (BMT) carrying 13,382 bbls light crude oil collided with a coal barge at Tanjung Api-Api estuary. This accident caused damage to the side of the oil barge and spilling approximately 2,239 bbls of crude oil into the river. In August 2019, the barging operations were decommissioned and the oil is now shipped via a dedicated pipeline. Other than this specific accident, even though the number of incidents increased, the volume of oil spills decreased. Some of the measures put in place

are a pipeline integrity assessment program and continued pipeline replacement to prevent oil spills due to pipeline corrosion. Integrated corporate responsibility, community enhancement, and close communication with the local community are also implemented to reduce pipeline vandalism and oil theft attempts.

We will continue to strengthen our risk management systems and upgrade our workplace conditions, and we will continue working to extend the robust health and safety practices from our oil and gas business unit to the other parts of our businesses, to our Joint Venture partners, and to our contractors and subcontractors.

Case Study

Oil Spill in South Sumatra

Until August 2019, MedcoEnergi used crude oil barges to ship crude from our Rimau Asset in South Sumatra from Tengguleng (Banyuasin Regency) to the Port of Tanjung Api-api. In August 2019 the barging operations were decommissioned and the oil is now shipped via a dedicated pipeline.

However, on 26 March 2018, a tugboat pulling an oil barge collided with a stranded coal barge, causing damage to the side of the oil barge and spilling approximately 2,239 bbls of crude oil into the river.

The MedcoEnergi Emergency Response Team (EMT) was immediately activated and secured the area with the cooperation of local security forces. We used aerial surveillance pictures to assess the extent of the oil spill and established an oil spill recovery plan. Boats, oil booms, skimmer, and dispersants were deployed on the same day, and a barge was

sent to recover the remaining crude oil. Local and National Government Agencies were immediately notified. Two days after the accident, the situation was declared safe and under control. The spill was effectively managed within 48 hours.

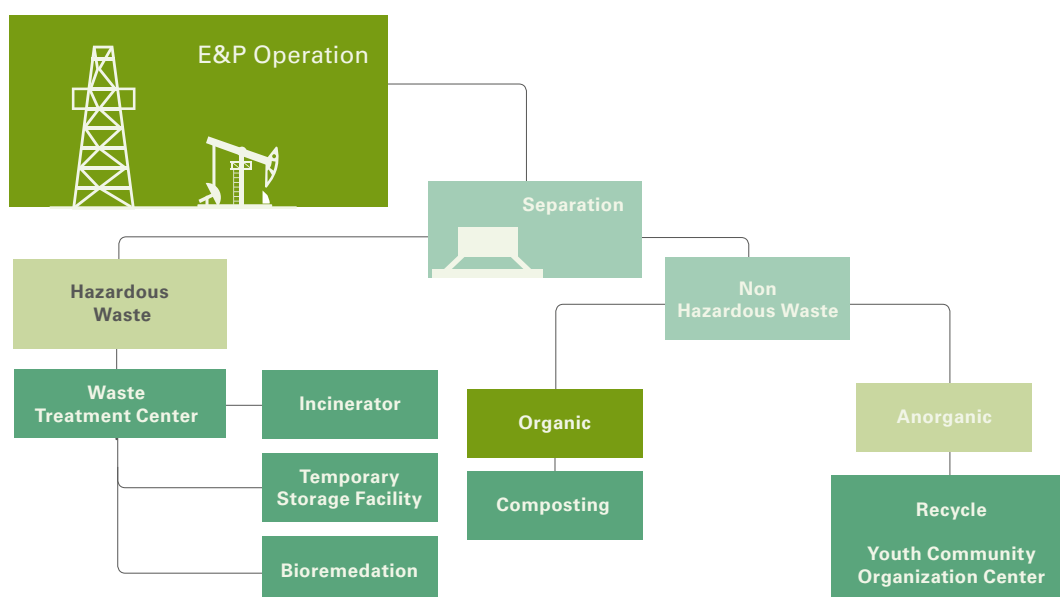


Oil Boom deployment at the area of accident to contain the oil spill

Waste Management

MedcoEnergi minimizes waste generation through the consistent implementation of waste reduction and recycling programs.

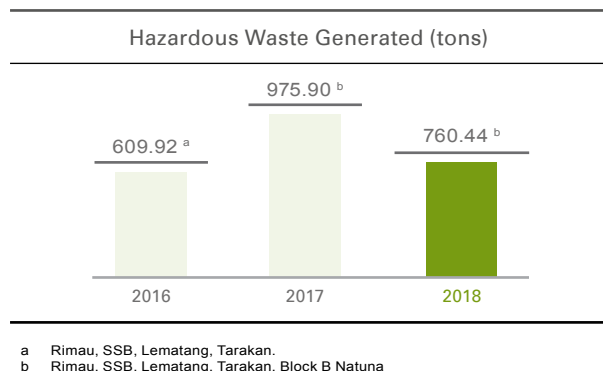
Waste Management Chart



Management of Hazardous Waste

MedcoEnergi focuses on the reduction and prevention of hazardous waste generation, as well as appropriate storage and disposal of such waste. Spill prevention is managed through routine maintenance and inspections of machines and pipelines. Hazardous waste is kept in certified temporary storage facilities before being sent to a certified third party for treatment and disposal.

Oil & Gas



The Company has successfully managed Block B Natuna's mercury removal system, which is utilized to absorb naturally-occurring mercury in gas sold into Singapore and Malaysia. The system uses catalysts that remove up to 99.99% of mercury, and the spent catalysts are then sent for approved treatment. The guard bed used for the mercury removal is changed out every two years. During the two year period the hazardous waste accumulated and increased as observed in 2017 and decreased in 2018 after the change out of the guard bed. Improvement efforts are ongoing to optimize the system and reduce waste.

The implementation of hazardous waste reduction programs in Medco E&P has gradually reduced the volume of hazardous waste from three of our E&P domestic blocks (South Sumatra Block, Lematang Block, and Tarakan Block) by 22.08%, from 975.9 tons in 2017 down to 760.44 tons in 2018.

Medco E&P waste reduction programs include:

- Green supply chain management with Extended Producer Responsibility that enables return of used chemical packaging to suppliers for reuse
- Reduction of contaminated soil through risk-based maintenance
- Optimization of oil filter replacement by doubling service life through preventive maintenance

- Quality-based Lube Oil Replacement Program
- Central printing systems and returning print cartridges to suppliers
- Use of aerobic microorganisms at WWTP to minimize the sludge produced
- Reducing the use of fresh amine and used amine amount through amine solvent monitoring system to maintain the solvent service life
- Replacement of rags with materials that have better absorption
- Optimization of gas-absorbent catalysts containing heavy metals

In the mining sector, the obligations of mining companies to reduce and utilize hazardous waste is set out in Government Regulation No. 101 Year 2014. The utilization of sludge in the Santong Water Treatment Plant (WTP) in Sumbawa, West Nusa Tenggara is additional and goes beyond regulatory obligations. The Santong WTP has added lime and NaHS to neutralize the mining water pH, and the resulting sludge is sent to the plant to become concentrate. An additional benefit is that the process reduces pollution, and the treated water of Santong WTP has a lower dissolved metal concentration.

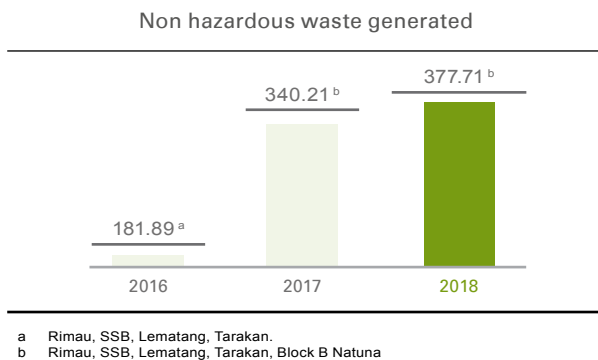
Non-Hazardous Waste Management

In our management of non-hazardous waste, we look for opportunities to reduce, use, and recycle waste products. These opportunities exist in our technical operations as well as for general waste streams. For example, PT Medco Energi Batam, a subsidiary of MPI, invested in a chlorinator machine which can use, reduce, and reprocess waste from sea water reverse osmosis for use as the chemical raw material NaOCl. NaOCl is widely used to prevent the development of unwanted microorganisms in cooling tower basins and sea water intakes.

For general waste, our management efforts target organic waste, plastic waste, and paper waste. We encourage employees to adopt daily habits such as using reusable water bottles and utensils and using electronic rather than paper documents. MedcoEnergi also composts household organic waste for use as organic fertilizer. Most of the organic waste from MedcoEnergi's assets is turned into compost through integrated environmental conservation programs in local communities. At Rimau Block, MedcoEnergi has a facility that

uses both conventional and modern composting methods, and finished compost is used in reforestation activities.

Oil & Gas



Throughout the business, the implementation of non-hazardous waste 3R (Reuse, Reduce, Recycle) efforts has been carried out continuously. However there was an 11.2% increase of non-hazardous waste, from 340.21 in 2017 to 377.71 in 2018, mainly due to project escalation in 2018 which generated waste through activities such as drilling and jetty repair in Block B Natuna.

In the communities where we operate, collective waste management efforts can reduce waste and generate revenues. The Rimau Block cooperates with *Bank Sampah* (Waste Bank) in South Sumatra and the youth community center of Lais Village in Musi Banyasin Regency (*Karang Taruna Lais/ KATALIS*) to recycle inorganic waste (such as plastics) into resins and souvenirs. This activity, along with waste reduction campaigns, was able to reduce domestic waste by approximately 29.7% at Rimau Block. The Lematang Block implements a Ferro Silica Sand 3R Program in the water treatment plant, and reduced domestic waste around 21.5% at Lematang Block.

In Jepara, TJB Waste Bank is working in cooperation with village-owned enterprise “AMUKTI” from Tubanan to collect domestic waste from TJB and the community of Tubanan and sort and sell the waste to processors. The revenue will be used for collective financing of WiFi for educational purposes and the enhancement of public knowledge. Internet access in Tubanan will improve public welfare, in part through educational opportunities for school children, increased purchases in stores with WiFi devices, and increased income from online retail. This project is the first collective financing of WiFi

implemented in the power plant sector in Indonesia and is verified by Sepuluh Nopember Institute of Technology. The impact includes a diversion of non-B3 (non-toxic and non-hazardous) solid waste of 5.57 tons through segregation and processing.

Innovative approaches to organic waste include identifying business value for their use. AMNT used coconet coconut fibers to prevent erosion on slopes during the reclamation phase, produced by a local business unit in West Sumbawa. Using coconet is non-toxic and non-hazardous, improves soil retention, and promotes the recycling of coconut fiber waste. During 2018, AMNT purchased 9,000 rolls of coconet, and from 2015 to 2018, the total amount of coconut fiber waste recycled to become coconet was 436 tons, saving IDR 9.32 billion due to lower material cost. In addition to reducing environmental impacts, this product creates added value for entrepreneurs in the form of new business opportunities and increased income for workers, improving the prosperity of local communities.

Biodiversity and Conservation

Support for biodiversity protection is part of MedcoEnergi’s commitment to maintaining environmental standards, including biodiversity protection policies and programs that contribute to environmental conservation initiatives.

For Rimau Block, our biodiversity program involves planting a forest for the preservation of 21 endangered native plants on 7.2 hectares of company land. The preserve is a safe haven and food source for wildlife, so birds and animals such as monkeys, squirrels, long-tailed macaques, weasels, squirrels, and deer are expected to benefit. Reforestation also improves ecosystem function in the surrounding landscape, for example by preventing soil erosion and improving water quality in the nearby tributary.

In partnership with regional governments, MedcoEnergi supports conservation programs such as mangrove conservation, protection of the Proboscis Monkey in Tarakan, and the rehabilitation of Rambang Dangku National Park in cooperation with the Environmental Conservation Board of South Sumatra. MedcoEnergi’s affiliated company, PT Donggi Senoro LNG, supports conservation of the endangered Maleo, a bird species endemic to Sulawesi, in cooperation with the Natural Resources

Conservation Body (*Balai Konservasi Sumber Daya Alam/BKSDA*) of Central Sulawesi. This cooperation includes establishment of an ex-situ conservation area and breeding program. Maleo conservation activities have also been implemented by Senoro Toili Block since 2014.



Conservation of the endangered Maleo, a bird species endemic to Sulawesi, in cooperation with the Natural Resources Conservation Body of Central Sulawesi

MedcoEnergi conducted an Environmental Sensitivity Assessment Mapping program on Eastern Matak Island. Although the Block B Natuna operational area is offshore and does not have a direct impact on Eastern Matak Island, we carry out mapping and periodic verification to ensure that the integrity of the coastal ecosystem is maintained. Biodiversity protection programs are in place on Matak Island, with activities such as biodiversity awareness campaigns and observation of marine mammals and reptiles, especially turtles.

AMNT is committed to understanding biodiversity in its operating context and developing management plans to minimize potential impacts. Biodiversity conservation and development efforts carried out include the placement of artificial coral reefs (reefballs) in sea waters around the project area and outside the Batu Hijau, and restoration of the Batu Hijau operations area.

Reefball placement is proven to improve the ability of coral reefs to rehabilitate naturally in damaged sandy locations that have no coral reefs. Placement of artificial reefballs is being carried out in the waters around West Sumbawa. Placement in Lawar Bay has shown to increase hard coral cover from 8-11% to 25-34% in two years.

This AMNT initiative has become the subject of many research projects and has received international recognition from the Reef Ball Foundation, a US based publicly supported non profit and international environmental NGO.

AMNT has also added reefball near natural coral reefs on the Monyet Beach in the area of Benete Bay, with 94 reefballs placed in sandy locations that have no coral reefs. There were 77 reefballs deployed in 2018, with a total of 1,959 reefballs deployed in this area.



Biodiversity conservation by AMNT through placements of artificial coral reef balls in surrounding sea waters around Batu Hijau

As part of AMNT mining operations, reclamation activities are being carried out on cleared areas, as specified in Indonesia Energy Mineral Resources regulation No. 18 2018. The reclamation is carried out on areas used to prevent erosion and maintain slope stability, reshaping the structure and diversity of vegetation based on pre-mining conditions and supporting the return of important plant species. Results of monitoring conducted in the Batu Hijau reclamation area show a recovery in environmental quality as indicated by improved soil fertility, improved local climate, diversity of tree species, and the presence of native Batu Hijau wildlife such as deer, partridges, civets, bats, eagles, and other wildlife. As of December 2018 AMNT has reclaimed 700 ha of land out of 2,722 ha of land cleared for mining areas and supporting facilities. More than 950,000 trees and 90 species of native Batu Hijau trees have been planted in the reclamation area, some for production purposes and economic value, and some for ecological and conservation value.



One of the reclamation area (forest and green area at the center of picture) in Batu Hijau. The still active mining area at the back of picture still seen as open fields will become similar reclamation area in the future.

Other MedcoEnergi conservation efforts have been implemented by Medco Power, including a campaign to prohibit the hunting of endangered animals such

as leaf monkey (langur) and armadillo in Medco Ratch Power Riau and Sumatra tiger and orangutan in Sarulla. The campaign is communicated in every safety induction.

In December 2018, Medco Power subsidiary ELB conducted mangrove tree planting, marine debris cleanup, and the delivery of solar lamps to Red Mangrove (Bakau Merah) located in Tanjung Piayu Batam, Riau Island. ELB employees worked together with Red Mangrove activists, fostering employee awareness of environmental protection. These activities were selected due to concerns about the status of Batam's mangrove forests and the presence of plastic waste. Mangrove planting and marine debris cleanup by ELB employees will take place on an annual basis, and in the next 5-10 years the rehabilitated mangrove forest should help to prevent erosion.

Action Plan

The following action plan was designed to enable us to meet our Objectives for emissions reduction and environmental compliance, strengthening our environmental performance across all of our operations. We are measuring, monitoring, and reporting our progress and performance against these plans in our sustainability reporting as explained in the previous paragraphs.

	Short Term Actions	Medium-Long Term Actions	Status
Environmental Compliance	Ensure that all new major projects comply with international standards, where relevant.	Continue implementing Health Safety Environment Management System (HSEMS) by all assets.	MedcoEnergi's new major project, PT Medco Ratch Power Riau (MRPR) complies to environmental and social safeguard framework of ADB. HSEMS has also been developed and implemented.
		Obtain ISO 14001:2015 certification for Block A Aceh (in addition to Rimau Block, Lematang Block, South Sumatra Block, Tarakan Block, and Block B Natuna).	Processed certification contract, workshop for EMS implementation, and evidence preparation required.
		Conduct baseline analysis and determine opportunities for improvement to further lower GHG intensity.	Benchmarking with the Ministry of Environment and Forestry (KLHK) data for Oil & Gas and to PLN for Power sector. Study and baseline analysis will follow.
		Conduct baseline analysis and determine opportunities for improvement to further lower energy intensity.	
		Conduct baseline analysis and determine opportunities for improvement to further lower water consumption and waste generation (hazardous and non-hazardous).	Benchmarking with the Ministry of Environment and Forestry (KLHK) data for Oil & Gas and to PLN for Power sector. Study and baseline analysis will follow.
		Obtain Green PROPER rating for all new assets within 4 years.	Being assessed and identifying challenges and opportunities.
Emissions	Calculate Scope 1 emissions for all assets.	Disclose for all assets:	Disclosed the energy consumption, water consumption, waste and hazardous waste generated, waste utilization and recovery to KLHK, SKK, and Directorate of Environment (DLH).
		Energy consumption	
		Water consumption	
		Waste and hazardous waste generated	
		Waste utilization and recovery	
		Low pressure gas utilization	

Safe and Health at Work, Every Day

Our Approach and Commitment

As a responsible corporate citizen, we are committed to comply with all applicable laws and regulations, and aligning our health, safety, and environmental management with industry best practice and relevant international standards. We regularly set and monitor our goals and performance to achieve zero injuries, illnesses, environmental incidents, and the reduction of waste and emissions. We seek to continually strengthen our operational excellence through enhancing our safety culture, stakeholder engagement, environmental stewardship, and the ongoing adoption and development of best practices.

Our Objectives

We implement our health and safety approach in line with the following objectives:

Occupational Health and Safety:

Medco Energi will maintain a safe and healthy working environment, demonstrated by having zero fatalities, maintaining lower than industry average rates for Lost Time and TRIR (Total Recordable Incident Rate), and by completing occupational health hazard assessments for all assets.

Our aim at MedcoEnergi is having safe and reliable operations, where each employee and contractor leaves the worksite each day safe and in good health.

We strive to maintain the highest standards, as part of our workplace culture and as an essential requirement for long-term business sustainability. Our health and safety management approach aligns with government regulations and international lender requirements.

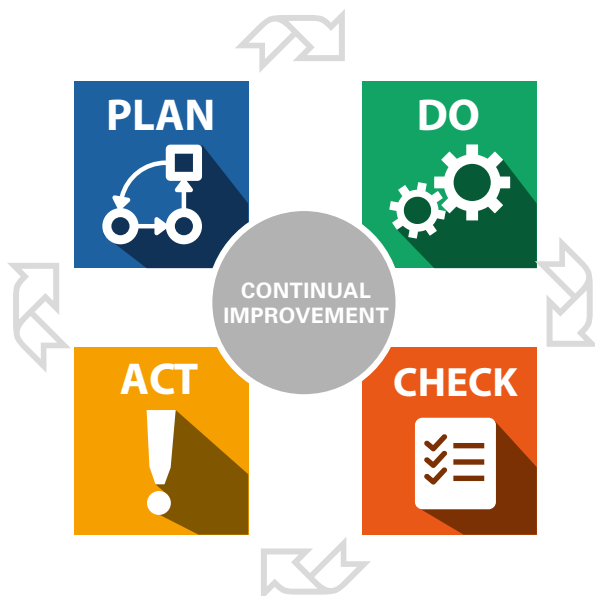
MedcoEnergi adheres to all prevailing laws and regulations related to Health, Safety, and Environment (HSE), as well as to various international standards and practices, and integrates the HSE management system into daily activities. MedcoEnergi provides HSE training to employees and contractors to mitigate the risks of accidents that could endanger employees of both MedcoEnergi and of our contractors, as well as the communities surrounding our operations.

Our efforts in this area support the realization of SDG 3 (Targets 3.4, 3.6, 3.8, and 3.9) and SDG 8 (Target 8.8).

Health, Safety, and Environment Management System

MedcoEnergi implements a Health, Safety, and Environment Management System (HSEMS) as a systematic approach to identify, assess, control, and monitor the operational risks to the business, employees, contractors, stakeholders, and the environment. Every asset and business unit is required to plan, coordinate, and monitor the implementation of Health, Safety, and Environment (HSE) programs throughout their operations. Contractors and suppliers are required to refer to this Management System for the minimum requirements of HSE Management while working at MedcoEnergi.

We developed the HSEMS based on international standards for management systems: ISO 14001:2015 (Environmental Management Systems) and OHSAS 18001:2007 (Occupational Health and Safety Assessment Series), IFC requirements, and the Equator Principles. Our E&P assets are certified for ISO 14001:2015, and Rimau asset is certified for OHSAS 18001:2007. Medco Power is in the process of transitioning from OHSAS 18001 to ISO 45001, and will be fully implementing ISO 45001 by 2020. The majority of Medco Power assets are Occupational Health Safety Management System / OHSMS (*Sistem Manajemen Keselamatan Kesehatan Kerja / SMK3*) certified by the Ministry of Manpower.



HSEMS Rev. 03 - 15 Elements

1. Leadership
2. Planning & Administration
3. Risk Evaluation
4. Structure & Responsibility
5. Compliance Assurance
6. Training, Competence & Awareness
7. Communication & Campaign
8. Risk Control
9. Asset Management & Operation Integrity
10. Contractor Management
11. Emergency Preparedness
12. Learning from Events
13. Risk Monitoring
14. Audit
15. Result & Review

HSE performance is monitored and reviewed by management on a weekly basis to ensure effective implementation of HSE programs at all areas of operation and to identify recommendations for continuous improvement.

Safety Leadership and Workforce Engagement

To instill a strong HSE culture throughout the company, MedcoEnergi's management team regularly undertakes HSE Tours at operating assets. The management team takes part in dialogue with the site workforce on HSE expectations and guidance, addressing any at risk behaviors or conditions and reinforcing positive safety behaviors. Our leaders and supervisors in Fields and Platforms has a compulsory and routine program, written in HSE Key Performance Indicators (KPI), to share the lessons learned and findings on OHS to all Operations team. We believe this program will influence and improve our safety cultures.



SAFETY BADGE

"Saya memberi kewenangan kepada pemegang Safety Badge ini untuk menghentikan dan/atau menolak melakukan segala tindakan yang tidak aman"

Direktur Utama
PT. Medco E&P Indonesia



Ronald Gunawan








- TAHU PEKERJAANNYA
- TAHU BAHAYANYA
- TAHU RISIKONYA

SETIAP ORANG ADALAH PEMIMPIN DALAM HSE

Saya wajib menghentikan tindakan tidak aman

Sebagai pengamat keselamatan, lakukan hal-hal berikut:

- Amati proses kerja dan lingkungan sekitar (pastikan anda dalam posisi aman) dan segera hentikan pekerjaan jika membahayakan.
- Perkenalkan diri Anda dengan ramah.
- Tunjukkan Safety Badge ini dan jelaskan tujuan Anda.
- Hargai tindakan aman dan diskusikan tindakan yang tidak aman.
- Sepakati penyebab tindakan yang tidak aman serta tindakan perbaikannya.
- Catat dan laporkan melalui Safety Card.

! Dalam Kondisi Darurat, segera hubungi
(+62-21-2995 3999)

The Medco E&P Safety Badge attached to employees' ID giving staff the direct authority to stop or refuse any unsafe work. The badge enforces the '3T' golden rules.

To enhance the safety culture, MedcoEnergi implements a Safety Card program to encourage personnel to communicate with each other about at-risk behaviors or conditions. The Safety Card Reporting System includes a simple checklist to guide observation, discussion, and online reporting. MedcoEnergi also works with contractors to enhance worker knowledge of HSE Rules (Golden Rules and Life Saving Rules). In addition, we are continuously working to improve HSE performance through training for employees and contractors, risk management, HSE Campaigns, and reinforcing process safety management.

MPI introduced a new safety card with 3T Golden Rules (Know the Task, Know the Hazard, Know the Risk Mitigation) on safety and Life Saving Rules on environment and health issues. As an incentive, there is an HSE Card Award every month to promote behavior-based safety. Implementation started in 2018 to encourage employees to submit a minimum of one card per week at the operations area and two cards per month at the head office. In 2019, HSE card submissions numbers will be incorporated into company KPIs.

MedcoEnergi protects the right of workers to be fully informed about hazards in their workplace by ensuring that all workers have received the necessary information and training to enable them to perform their work in a safe and environmentally responsible manner. Workers have the right to refuse unsafe work without fear of reprisal, and have the ability to participate fully in the establishment and implementation of occupational health and safety policies, procedures, investigations, and risk assessments.



Safety card report forms

LIFE SAVING RULES

1. Siapkan diri kerja
2. Gunakan alat pelindung diri
3. Patuhi aturan keselamatan berkendara
4. Pastikan isolasi energi dilakukan
5. Siapkan rencana pengangkatan
6. Lakukan pengelasan kadar gas dan udara
7. Gunakan alat pelindung jatuh saat bekerja di ketinggian
8. Pastikan diri dan anggota tubuh pada tempat yang aman
9. Cegah benda jatuh
10. Dapatkan otorisasi sebelum melakukan bypass

EVERYBODY IS A LEADER IN HSE

3T GOLDEN RULES

- 1. TAHU PEKERJAANNYA**
Mengetahui langkah kerja sebelum memulai pekerjaan
- 2. TAHU BAHAYANYA**
Mengetahui potensi bahaya sebelum memulai pekerjaan
- 3. TAHU RISIKONYA**
Mengetahui cara pengendalian risiko pada pekerjaan

DALAM KEADAAN DARURAT SILAHKAN HUBUNGI
IN CASE OF EMERGENCY PLEASE CONTACT
MPI: 081-225-201-008
THE ENERGY: 021 - 52963737

The Medco Power safety badge above is similar to the Medco E&P safety badge aiming to enforce the 3T rules.

In our mining business, AMNT is committed to being at the forefront in the field of work safety and has implemented effective safety and loss prevention programs. Employee and visitor safety is a top priority at the Batu Hijau Mine, and all are required to follow the company's safety rules, attend safety orientations, and wear personal protective equipment in areas with warning signs. AMNT personnel are experienced and well-trained, with an emphasis on safety rules and regulations. Employees have the authority to stop unsafe operations, in the event of a breach of safety or hazardous conditions. Safety training for all employees is mandatory, delivered by a certified instructor, and updated every year.

Contractor Safety Management System

Contractors make up the majority of MedcoEnergi's total workforce, so managing contractor safety is critical to our overall HSE performance. We have a Contractor HSE Management framework and process and we monitor contractor performance to ensure that work is conducted safely. Medco Power strengthened its Contractor Safety Management System (CSMS) in 2018 to align with the E&P system, and implementation will commence in 2019. In 2018, Medco E&P improved its database, modified audit and inspection implementation, and conducted regular KPI monitoring for HSE contractors. A fatality incident that occurred in Block A Aceh underlines the importance of a reliable contractor safety management system and we will pursue to continuously improve our CSMS. Refer to case study on page 66.

Process Safety

MedcoEnergi takes a comprehensive approach to managing process safety for the prevention of any uncontrolled release of hydrocarbons and hazardous substances from primary containment. We identify and eliminate or mitigate process safety risks with procedures that serve as preventive safeguards. We have a variety of safeguards in place, such as alarms and pressure relief systems, and we monitor these safeguards through testing, inspections, and internal and external audits. We improve awareness through an information system for process safety and Process Safety Management (PSM) training, which is conducted for all critical positions.

We also established a task force for collaboration between HSE and engineering functions, to align PSM practice in our E&P assets.

Health and Safety at Work

MedcoEnergi calculates and monitors the quality of the working environment, which includes the measurement of noise level, light intensity, vibration, air flows in the workplace, and prevalence of bacteria and dust, as well as the presence of gas pollutants such as CO, CO₂, SO₂, and NO₂. This monitoring is designed to ensure that working conditions meet the highest safety standards within the oil and gas industry, and protect employee health while at work and into retirement. Training were also held on topics such as respiratory and hearing protection, and first aid for Occupational Health & Industrial Hygiene (OHIH), HSE practitioners and paramedics in the organization. During 2018, the environmental quality was within the allowable thresholds.

Where health hazards are detected that may pose a personal risk to workers, MedcoEnergi undertakes an intensified individual monitoring program, which includes personal noise monitoring and bio-monitoring and periodic health check-ups. This intensified monitoring will determine whether or not a person has been exposed to health hazards that exceed the allowable limit as per regulation or industry standards.

To ensure that our employees are in good health and sound physical condition, MedcoEnergi implements a Fit to Work program. This involves regular medical checks to monitor employee health and a general medical test for field workers about to be deployed on site. Through this initiative we managed to reduce cases of uncontrolled hypertension from 20.4% to 13% in 2018. We also organize regular Health Talks by medical professionals.

MedcoEnergi cooperates with the National Anti-Narcotics Agency to conduct drug testing and anti-drug socialization for all employees and contractors working in operation areas, and socialization and random checks at the head office.

Health and Safety Emergency Response

Medco Power and Block B Natuna emergency response teams supported the disaster management program of the Ministry of Energy and Mineral Resources (ESDM). Medco Power emergency and medical relief teams were sent to assist following the Palu Donggala earthquake and Banten and Lampung tsunami under the coordination of ESDM.

Both Medco Power and Block B Natuna received awards from the Minister of ESDM for the participation of their emergency response team in the management response to natural disasters.

Gap Assessment

In 2018, we conducted a Safety Culture Assessment by DuPont Sustainable Solutions at Block B Natuna to assess current safety performance against industry best practices and standards. The assessment results showed that the overall safety performance of Block B Natuna is generally good. Safety is fully internalized and rules are followed, and compliance to procedures such as the 10 Life Saving Rules is high. There is some room for improvement in managing both behavior and process safety. Block B Natuna has also been successfully recertified for ISO 14001:2015 (Environmental Management System) in December 2018.

Health & Safety Performance

Occupational Health & Safety

Oil & Gas

We continuously monitor performance in the areas of Occupational Health & Safety and track key indicators. In 2018, improvements were made in Lost Time Incident Rate (LTIR) and Total Recordable Incident Rate (TRIR). Regretfully, a fatality occurred in our Block A Aceh asset as provided in the case study on page 66.

Incident Rate – Oil and Gas Operations (Domestic and International) per 1,000,000 work hours

	2016	2017	2018
Fatality	0	0	1
Lost Time Incident Rate ^{1,2}	0.16	0.18	0.13
Total Recordable Incident Rate ²	1.26	0.70	0.59
Occupational Disease Rate ²	0	0	0
Percentage of incidents that happened to contractors	100%	100%	100%

1) Lost Time Incident including Fatality, Permanent Disabilities and LTI

2) Workforce includes employees and contractors. Incidents include both injuries and illnesses.



Our workforce in the field often chooses to walk or ride bicycles in performing their day to day duties in the vast area of our operation facilities. This is one way for them to stay fit.

Case Study

Block A Aceh Incident

The development of Block A Aceh was a large-scale project, and we utilized a sizable workforce of MedcoEnergi personnel, contractors and sub-contractors, with more than 4,000 personnel working onsite during periods of peak activity. To ensure the health and safety of contractors and subcontractors, MedcoEnergi has applied a Contractor HSE Management System (CHSEMS) which establishes clear accountabilities and facilitates active and structured engagement with contractors to keep them, and our entire workforce, safe.

Tragically, we suffered a fatality on 6 June 2018 at the Alur Siwah remote working area, when a subcontractor was struck by a Truck Mounted Crane (TMC).

An internal independent investigation team was immediately formed consisting of four members from other MedcoEnergi Assets and led by a Senior HSE Manager. The work of the investigation team included conducting interviews with the surviving crew and witnesses, reconstruction of events, reviewing the circumstances of the incident, and identifying the immediate and basic causes in order to make recommendations to avoid similar incidents in the future. The results of the investigation were reported to the BOD and to the relevant government authorities. MedcoEnergi also provided direct support to the family of the victim to assist them in this difficult time.

Learning from this incident, we have strengthened the implementation of our CHSEMS, enhanced the level of commitment required by our contractors and subcontractors and reconfirmed our expectation for safe working standards and continuous improvement in HSE performance.

The action plans to further enforce the CHSEMS process and safety culture include:

- Strengthening heavy equipment inspection program by implementing more rigorous on-hire verification and routine inspection;
- Improving safe control of work for vehicle and heavy equipment through traffic management around congested working areas, flagmen, and safety signage;
- Improving the quality of contractor engagement through focus group discussions to communicate clear HSE performance expectations to contractors;
- Empowering 'stop work' authority to ensure all workers are alert to their own safety, care about the safety of their colleagues, and look out for any at-risk behaviours and potential safety risks in our operations.

MedcoEnergi continues to work relentlessly to strengthen our safety culture and leadership.

Power

MPI places a strong emphasis on HSE in all project activities and operations. “Everybody is a leader in HSE” represents our commitment to safety at work, and embodies our belief that safety is every employee’s responsibility. MPI and each subsidiary have a health and safety working group made up of both management and workers, which conducts monthly meetings and inspections of HSE performance. In 2018, ELB, a Medco Power subsidiary, has successfully been OHSMS (SMK3) certified by the Ministry of Manpower.

We see a link between health and safety in the workplace and social performance, and we are committed to meeting international requirements, such as those set out in the IFC Performance Standards, World Bank Group – Environment, Health, and Safety (EHS) General Guidelines, Thermal Power Plants Guidelines, EHS Guidelines for Geothermal Power Generation, and other relevant international good practices. MPI has succeeded in obtaining Integrated Management System certification for ISO 9001: 2015, ISO 14001: 2015, and OHSAS 18001:2007, strengthening our commitment to continual improvement.

Incident Rate – Power - per 1,000,000 work hours

	2016	2017	2018
Fatality	0	1	0
Lost Time Incident Rate ^{1,2}	0	0.35	0
Total Recordable Incident Rate ²	0	0.35	0.31
Occupational Disease Rate ²	0	0	0
Percentage of incidents that happened to contractors	0%	0%	0%

1) Lost Time Incident including Fatality, Permanent Disabilities and LTI

2) Workforce includes employees and contractors. Incidents include both injuries and illnesses.

Mining

In the mining sector, we closely monitor our HSE performance through monthly safety meetings and we conduct awareness campaigns that include all AMNT and business partner employees using email and safety flyers.

Incident Rate – Mining - per 1,000,000 work hours

	2016	2017	2018
Fatality		0	0
Lost Time Incident Rate ¹		0.06	0.01
Total Recordable Incident Rate	Not applicable (not under MedcoEnergi management)	0.58	0.27
Occupational Disease Rate ²		not measured	not measured
Percentage of incidents that happened to contractors		100%	100%

1) Workforce includes employees and contractors. Incidents include both injuries and illnesses.

Process Safety Event

	2016	2017	2018
Tier 1 PSE	7	0	2
Tier 1 PSE Rate per 1,000,000 work hours	0.62	0	0.08
Tier 2	15	17	9
Tier 2 PSE Rate per 1,000,000 work hours	1.33	0.71	0.32



The incidence of Process Safety Events was reduced from 2016 to 2018 even as man-hours increased, due to establishment and implementation of Process Safety Management in our Indonesian E&P assets.

Action Plan

The following action plan was designed to enable us to meet our Objectives for improving the health and safety of our workplaces and protecting our workers by reducing injuries and lost time, strengthening our Health and Safety performance across all of our operations.

We are measuring, monitoring, and reporting our progress and performance against these plans.

	Short Term Actions	Medium-Long Term Actions	Status
Occupational Health and Safety	Complete occupational health hazard assessments for all assets.	Evaluate and monitor the Occupational Health Hazard Assessment documents, mapping, and programs for security control in every oil and gas asset on a regular basis.	Completed Occupational Health Hazard Assessment documents, mapping, and programs for security control in oil & gas asset. Evaluation and monitoring are ongoing. MEB and TJB have completed the assessment and conducted socialization for other assets. Developed and implemented OHS management plans.
	Achieve and maintain Zero Fatalities across all assets.		One fatality incident in Block A Aceh. Investigation and improvements to avoid such incidents from reoccurring have been carried out.
	Achieve and maintain average Lost Time lower than the average performance benchmark for the equivalent industry in Indonesia.		Calculated LTIR or TRIR and initiated a study to establish baselines.
	Achieve and maintain average TRIR lower than the average performance benchmark for the equivalent industry in Indonesia.		

2018 Awards

No	Name of Award	Awarded By	Description
1	Patra Nirbhaya Karya Madya for South Sumatra Block and Lematang Block	Ministry of Energy and Mineral Resources	Achieved 2,500,000 working hours without an accident
2	Patra Nirbhaya Karya Pratama for Tarakan Block	Ministry of Energy and Mineral Resources	Achieved 5,000,000 working hours without an accident.
3	PROPER (Company Performance Rating Program) Gold for Rimau Block	Ministry for the Environment and Forestry	Received the eighth consecutive annual Gold PROPER award. Gold is the highest rating in the PROPER assessment
4	PROPER (Company Performance Rating Program) Green for South Sumatra Block, Lematang Block, TJB, and AMNT	Ministry for the Environment and Forestry	This award is tangible evidence of the Company's commitment to conduct business activities with the highest ethical and environmental standards also strong social programs at all times
5	PROPER (Company Performance Rating Program) Blue for Tarakan Block and Block B Natuna	Ministry for the Environment and Forestry	This award is tangible evidence of the Company's commitment to conduct business activities with the highest ethical and environmental standards at all times
6	Best Clean and Renewable Energy Company for MPI	Indonesia Best Electricity Award (IBEA)	An achievement for company that develops their business focusing on the clean and renewable energy in gas, geothermal, mini hydro and solar panel.
7	Best Clean and Renewable Energy Company and Best IPP <200MW for MEB	Indonesia Best Electricity Award (IBEA)	An achievement for best IPP company under 200 MW
8	Best New Comer Power Plant for The Sarulla 330MW Geothermal Power Plant	The Indonesia National Energy Council	New technology in geothermal operation
9	Aditama Awards for AMNT	Ministry of Energy & Mineral Resources	An achievement for environmental performance in the mining sector
10	Duty of Care Award 2018 for AMNT	SOS Foundation for Remote Health Care	A recognition for AMNT's Malaria Control Program that is implemented for employees, business partners, and in villages in the mining operation area.
11	Zero Accident Award for MPE and TJB	Ministry of Labor	Achievement of working hours without accident.
12	HIV/AIDS Prevention Gold Award for TJB	Ministry of Labor	Achieved Gold Award for 5 consecutive years for Prevention and Mitigation (<i>Pencegahan dan Pengendalian</i> / P2) HIV & AIDS Program in the work place.
13	Awards for MEB	Badan Narkotika Nasional (BNN)	Achievement in anti-narcotics and drug abuse campaigns.

Appendix

Aligning Our Sustainability Initiatives with the UN Sustainable Development Goals

Medco Energy Sustainability Initiatives as reported in this SR 2018 mapped against the supported UN Sustainable Development Goals (SDGs) Targets



Chapter 3 Thriving Communities with Better Livelihoods							
Community Development:	1.4	2.3, 2.4 2.a	3.9	4.1, 4.2 4.3, 4.4, 4.c	5.5, 5.a	6.1, 6.b	7.1, 7.2 7.b
Empowering Women Villagers in Rimau Block	1.4	2.3, 2.4, 2.a			5.5, 5.a		
Supporting Eco-friendly Agriculture Education in Block A Aceh				4.3, 4.4			
Bringing Electricity to Remote Villages in South Sumatra Block							7.1, 7.b
Empowering Sustainable Honey Bee Businesses in Lematang Block		2.3, 2.4, 2.a		4.3			
Managing Waste in Tarakan Block			3.9				
Harnessing the Sun and Improving Drainage for Villages in Block B Natuna							7.1, 7.2, 7.b
Mangrove and Environmental Quality in Riau							
Cultivating Trigona Bees in Batu Hijau Reclamation Area		2.3, 2.4, 2.a		4.3			
Understanding Our Impact:							
Social Return on Investment in Block B Natuna							
Sustainable Livelihood Impact Assessment in Block B Natuna							
Security							
Chapter 4 Our Employees Reflect Our Values							
Strategic Activities: Organization Integration of Block B Natuna; Block A Aceh Organizational Capacity Development; Strengthening Functional Excellence; retaining and motivating key talents; strengthening of talent pipeline; organizational values reinforcement							
Human Resources Management: Recruitment - female employees in managerial positions, hiring of local employees					5.1, 5.5		
Development: Accelerated Development, Leadership Competence, Technical Competence,				4.3, 4.5			
Industrial Relations: Collective Labor Agreements							
Contributions to Industry							
Chapter 5 Corporate Governance							
GCG; Risk Management; Ethics and Compliance; Ethics Liaison Officer (ELO); ISO37001:2016 ABMS; FRA including Bribery Risk; Annual Declaration and Assurance; Communication and Education - Internal and External Initiatives and Audits; Human Rights; Stakeholder Engagements				4.7			
Chapter 6 Enhancing Environmental Management							
Management Systems: HSEMS; Environmental Compliance; Emissions Reduction and Energy Efficiency; Water and Effluent; Waste Management; Biodiversity and Conservation			3.9			6.3, 6.4 6.6, 6.b	7.2, 7.3, 7.a 7.b
Chapter 7 Safe and Healthy at Work, Every Day							
Health Safety and Environment Management System (HSEMS) based on International Standards ISO14001:2015, OHSAS 18001:2007, IFC PS and EP:			3.4, 3.6 3.8, 3.9				
Safety Leadership and Workforce Engagement, Contractor Safety Management System, Process Safety, Health and Safety at Work, Health and Safety Emergency Response, Gap Assessment							

This MedcoEnergi's Sustainability initiatives mapping against the UN Sustainable Development Goals (SDG) Targets is part of our effort to assist the Government of Indonesia in identifying private sector contributions to the achievement of the UN SDG Targets. This mapping does not constitute a claim that MedcoEnergi has measured or committed towards certain target achievements of the Government of Indonesia. The mapping was prepared in consultation with BSR using the United Nations Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development version E/CN.3/2018/2.

         									
8.3	9.1		11.2 11.5 11.7	12.5		14.7 14.b	15.2 15.5		17.17
	9.1								
	9.1								17.17
							15.5		17.17
				12.5					17.17
	9.1		11.2						17.17
							15.2 15.5		
							15.5		
			11.5						
8.3						14.7, 14.b,			17.17
								16.1	
8.2, 8.5 8.6, 8.8		10.1, 10.2 10.3						16.b	
8.2, 8.5 8.6, 8.8		10.2, 10.3						16.b	
		10.2							
8.8									17.17
				12.6				16.3 16.5 16.6 16.7	17.17
				12.2, 12.4 12.5	13.2	14.1, 14.2 14.5	15.1, 15.2 15.4, 15.5		
8.8									

Acronyms and Abbreviations

2P	Proved and Probable
3R	Reduce, Reuse, Recycle
ABC	Anti-Bribery and Corruption
ABMS	Anti-Bribery Management System
ADB	Asian Development Bank
API	American Petroleum Institute
AMNT	PT Amman Mineral Nusa Tenggara
AMG	PT Api Metra Graha
Block B Natuna	Medco E&P Natuna Ltd
BOC	Board of Commissioners
BOD	Board of Directors
BOE	Barrel of Oil Equivalent
CLA	Collective Labour Agreement
CO ₂ e	Carbon dioxide equivalent
CoC	Code of Conduct
CoI	Conflict of Interest
CSR	Corporate Social Responsibility
E&P	Exploration and Production
ELB	PT Energi Listrik Batam
EP	Equator Principles
EPE	PT Energi Prima ElektriKA
ESDM	Ministry of Energy and Mineral Resources
ESG	Environmental, Social, and Governance
ESIA	Environmental and Social Impact Assessment
EU	European Union
FRA	Fraud Risk Assessment
GCG	Good Corporate Governance
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
HSE	Health, Safety, and Environment
IDR	Indonesian Rupiah
IPA	Indonesia Petroleum Association
IPIECA	International Petroleum Industry Environmental Conservation Association
IPP	Independent Power Producer
ISO	International Organization for Standardization
IWA	Indonesia West Area
JOB	Joint Operating Body
KLHK	Ministry of Environment and Forestry (insert Indonesian)
Koz	Thousand ounces
KPI	Key Performance Indicator

KPK	Corruption Eradication Commission (Komisi Pemberantasan Korupsi)
MEB	PT Mitra Energi Batam
MEPI	PT Medco E&P Indonesia
Mlbs	Million pounds
MPE	PT Multidaya Prima Elektrindo
MPI	PT Medco Power Indonesia
MW	Megawatt
MRPR	PT Medco Ratch Power Riau
NGO	Non-government organization
NOx	Nitrogen oxides
O&M	Operation and Maintenance
OHS	Occupational Health and Safety
OHSAS	Occupational Health and Safety Assessment Series
OJK	Financial Services Authority (Otoritas Jasa Keuangan)
PERKAP	Indonesian National Police Chief Regulation (Peraturan Kepala Kepolisian Negara Republik Indonesia)
PLN	National Power Company (Perusahaan Listrik Negara)
PM	Particulate matter
PROPER	Program for Pollution Control, Evaluation, and Rating (Program Penilaian Peringkat Kinerja Perusahaan)
PSC	Production Sharing Contract
PT	Limited Liability Company (Perseroan Terbatas)
Q	Quarter
SDG	Sustainable Development Goals
SKK Migas	Special Task Force for Upstream Oil and Gas Business Activities (Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi)
SME	Small and Medium Enterprises
SMS	Social Management System
SoA	Statement of Adherence
SOx	Sulfur oxides
SRA	Security Risk Assessment
SROI	Social Return on Investment
SSB	South Sumatra Block
TJPBS	PT Tanjung Jati B Power Services
TRIR	Total Recordable Incident Rate
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
US	United States of America
US\$	US Dollar
VOC	Volatile Organic Compound
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

Performance Data

The list of MedcoEnergi assets in the calculations for all data and information disclosed and assured, unless otherwise stated in each disclosure item, is as follows:

	2016	2017	2018
Oil & Gas	1. United States 2. Tunisia 3. Oman 4. Block A Aceh 5. South Sumatra Block 6. Rimau Block 7. Lematang Block 8. Tarakan Block 9. Jakarta Head Office	1. United States 2. Tunisia 3. Oman 4. Block A Aceh 5. South Sumatra Block 6. Rimau Block 7. Block B Natuna 8. Lematang Block 9. Tarakan Block 10. Jakarta Head Office	1. Tunisia 2. Oman 3. Block A Aceh 4. South Sumatra Block 5. Rimau Block 6. Block B Natuna 7. Lematang Block 8. Tarakan Block 9. Jakarta Head Office
Power	1. Mitra Energi Batam 2. Dalle Energi Batam 3. Energi Listrik Batam 4. Medco Geothermal Sarulla 5. Tanjung Jati B 6. Pembangkitan Pusaka Parahiangan 7. Medco Power Indonesia 8. Multidaya Prima Elektrindo 9. Energi Prima Elektrindo 10. Singa 11. Bio Jathropa Indonesia 12. Medco Hidro Indonesia 13. Sangsaka Hidro Barat 14. Medco Cahaya Geothermal	1. Mitra Energi Batam 2. Dalle Energi Batam 3. Energi Listrik Batam 4. Medco Geothermal Sarulla 5. Tanjung Jati B 6. Pembangkitan Pusaka Parahiangan 7. Medco Power Indonesia 8. Multidaya Prima Elektrindo 9. Energi Prima Elektrindo 10. Singa 11. Bio Jathropa Indonesia 12. Medco Hidro Indonesia 13. Sangsaka Hidro Barat 14. Medco Cahaya Geothermal 15. Medco Ratch Power Riau	1. Mitra Energi Batam 2. Dalle Energi Batam 3. Energi Listrik Batam 4. Medco Geothermal Sarulla 5. Tanjung Jati B 6. Pembangkitan Pusaka Parahiangan 7. Medco Power Indonesia 8. Multidaya Prima Elektrindo 9. Energi Prima Elektrindo 10. Singa 11. Bio Jathropa Indonesia 12. Medco Hidro Indonesia 13. Sangsaka Hidro Barat 14. Medco Cahaya Geothermal 15. Medco Ratch Power Riau

Chapter 3 - Thriving Communities with Better Livelihoods

Indirect Economic Impacts

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	2016	2017	2018
GRI 203-1	Indirect Economic Impacts	Infrastructure investments and services provided	Extent of development of significant infrastructure investments and services supported	Information provided on the Investments in infrastructure table on page 74		
			Current or expected impacts on communities and local economies, including positive and negative impacts when relevant	Investments in infrastructure in MedcoEnergi covers among others: - Road and bridge rehabilitation or development which brings better and extended access for local communities. - Public facilities construction or renovation for mosques, schools, wells for clean water, drainage systems, housing for vulnerable groups, evacuation routes, solar street lamps, village libraries and public areas, sports facilities, and organic plant farming infrastructure. These investments bring lasting impact to the receiving communities in the form of decent and helpful public facilities for their everyday use.		
			Whether these investments and services are commercial, in-kind, or pro bono engagements	All investments in infrastructure are in-kind.		
GRI 203-2	Indirect Economic Impacts	Significant Indirect Economic Impacts	Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts	Information on the Social Return on Investment (SROI) results of Medco E&P Natuna's program in Kampung Bilis is provided on page 30.		
			Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols and policy agendas	Information on the associated UN Sustainable Development Goals is provided along with the SROI results on page 30.		

Local Communities

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	2016	2017	2018
GRI 413-1	Indirect Economic Impacts	Operations with local community engagement, impact assessments, and development programs	Percentage of operations with implemented local community engagement, impact assessments and/or development programs, including the use of: Social impact assessments, including gender impact assessments, based on participatory processes; Environmental impact assessments and ongoing monitoring; Public disclosure of results of environmental and social impact assessments; Local community development programs based on local community' needs; Stakeholder engagement plans based on stakeholder mapping Board based local community consultation committees and processes that include vulnerable groups; Works councils, occupational health and safety committees and other worker representation bodies to deal with impacts; Formal local community grievance processes	Oil & Gas: 100.00% Power: 81.82%	Oil & Gas: 100.00% Power: 81.82%	Oil & Gas: 100.00% Power: 90.91%

e. The operations included in the calculations are all of Medco Energi operations as disclosed on page 73 excluding Jakarta Head Office, Medco Cahaya Geothermal, Medco Hidro Indonesia, and Medco Ratch Power Riau. Mitra Energi Batam and Dalle Energi Batam are operated under the same management which has joint local communities programs, and are regarded as one entity in the calculations.

Investments in Infrastructure* (GRI 203)

No.	Operations	2016	US\$	2017	US\$	2018	US\$
1	Oman					Road repair and construction	
						total	50,290
2	Block A Aceh	- Cleaned water well drilling for Islamic Boarding School - Mosque ablution facility construction - Access road rehabilitation and maintenance at Kecamatan Indra Makmu (Desa Blang Nisam) dan Julok (Desa Bukit Dindeng, Blang Keumahang dan Seuneubok Rambong)		- Mosque Rehabilitation at Mane Rampak Village - Cleaned Water Well Drilling at Teupin Raya Village and orphanage at Idi Rayeuk - School construction in Lhokseumawe		- Cleaned water well drilling and organic farming nursery construction at SMK Pertanian & Peternakan Indra Makmur - House construction for vulnerable group - Mosque renovation - Islamic boarding school renovation	
		Total	3,235	Total	6,075	Total	41,726
3	South Sumatra Block	- Simpang Babat - Pengabuan street rehabilitation - Local market in Pengabuan - Mosque renovation participation - Karang Taruna building rehabilitation - Drilling water wells participation - Local community road access rehabilitation - Sport facilities rehabilitation - School, village and police office facilities rehabilitation		- Simpang Babat - Pengabuan street rehabilitation - Mosque renovation participation in villages of Musi Rawas District (Lubuk Pauh, SDN Giriyo, Kertosono, Bangun Jaya), Musi Banyuasin District (Bailangu, Danau Cala, Jirak), Lahat District (Purwaraja), PALI District (Pengabuan Timur, Tanjung Harapan), Palembang city (Bukit Lama) - School Renovation Participation : - School Fence (SMA PGRI - Gelumbang Village, Muara Enim & SDN Penukal, PALI, SDN Setia Jaya, Musi Banyuasin) - School Building (TPA Rejosari - PALI) - Ambulance Unit for Musi Rawas District - Street rehabilitation		- Village road and bridge rehabilitation - Public and social facilities rehabilitation - School renovation - Mosque renovation - Farming Infrastructure - Village library	
		Total	207,362	Total	351,772	Total	104,171

*) These investment are for 100% participating interest.

No.	Operations	2016	US\$	2017	US\$	2018	US\$
4	Rimau Block	- Cleaned water provision for community - Public and social facilities participation - Road and access rehabilitation - Playground and sport center facilities		- Villages road and access renovation Musi Banyuasin District (Tanjung Kerang, Rimbabat, Tanjung Agung Utara, Gajah Mati, Petaling, Lais Utara) - Pesantren, Puskesmas and village office land flattening - Sport field restoration - Teacher room renovation - Community economic facilities improvement - SPORA Lais facilities support - Community sanitation facilities support - Mosque construction and renovation - Culverts renovation - Sport facilities renovation support		- School renovation - Mosque renovation - Village road rehabilitation - Village library - Public facility renovation	
	Total		14,704	Total	39,333	Total	60,872
5	Block B Natuna			- Jetty construction of laut Natuna - Water drainage from village to river bank; - Batu Lepe Public Park; - Construction of patient corridor for village clinic; - Canopy for Ridha Busana		- PJUTS in Palmatak; Evacuation route and Rida Busana Canopy; - Traffic signs in Matak island; - Drainage in Payakmaram (Block B Natuna has installed 180 metres drainage system with the local community to help with waste water management in order to prevent diseases and flooding); - Public area (PPO); - Open space development in Batu Lepe, Tarempa	
	Total			Total	192,659	Total	130,224
6	Lematang Block	- Village Road rehabilitation - Bridge rehabilitation - Mosque renovation - Clean water wells drilling		- Village road rehabilitation Social & Public facilities rehabilitation - Mosque renovation participation - Sport facilities rehabilitation participation		- Village road rehabilitation Social & Public facilities rehabilitation - Mosque renovation participation - Sport facilities rehabilitation participation - Cleaned Water Wells Drilling	
	Total		18,647	Total	13,851	Total	40,203
7	Tarakan Block	- Bridge rehabilitation - Mosque renovation - Electricity poles supply		- Oil & Gas Museum Facility Support - Pesantren Facilities Support		Social and public facilities support	
	Total		5,370	Total	18,902	Total	11,694
	Subtotal Oil & Gas		249,318	Total	622,592	Total	439,180
8	Medco Power Indonesia		N/A			Road improvement project phase 1 in Cibalapulung Mini-Hydro Power Plant	
	Subtotal Power					Total	66,710
9	Amman Mineral Nusa Tenggara	N/A		Misc. Programmes		Misc. Programmes	
	Total			Total	579,642	Total	463,754

Sustainable Livelihoods & Community Development** (GRI 413)

No.	Operations	2016	US\$	2017	US\$	2018	US\$
1	Tunisia	Agriculture & Breeding Administration (CRDA)	13,310				
2	Block A Aceh	- Organic Farming training and mentoring (Organic SRI, vegetable, herb medicine and rubber cultivation) - Entrepreneurship training program	3,895	Organic Farming training and mentoring program	14,542	- Organic Farming training and mentoring (Organic SRI, vegetable, herb medicine and rubber cultivation) - Goat fattening program - Entrepreneurship training program	48,175
3	South Sumatra Block	- Organic farming and organic rubber cultivation - Health Program : Health check & healthy living counselling - Entrepreneurship program - Support for vulnerable groups	98,862	- Organization strength of sustainable & environmentally friendly agricultural cultivation unite 12 villages with more than thousand member in one vision bond in IPPAL (Ikatan Petani Pecinta Alam Lestari). This organization successful received Lembaga Sertifikasi Organik (LSO) Certification for the organic rice; local, province and national inspiring speakers, sustainable innovation in agricultural technology. In 2018, this organization ready to open formal cooperation to both government and private sharing their knowledge and experience in organic. - Strengthening the capacity of TPA teachers and increasing Mosque activities - Health Program : health check & healthy living counselling - Entrepreneurship training and business development program - Support for vulnerable groups	62,466	- Teacher Training - Strengthening the capacity of TPA teachers and increasing Mosque activities - Dairy goat program - Bee honey cultivation program - Organic farming program (SRI, Rubber, Herb Medicine, Vegetable) - Entrepreneurship training and business development program - Fishery Ecotourism Program Support - Electricity Program (BRIGHT) - Mushroom cultivation program	212,520
4	Rimau Block	- Herb medicinal program - Organic SRI program - Organic catfish cultivation program - Organic rubber cultivation program - Tofu product processing - Student transportation support	34,143	- Aquaculture entrepreneurship training - Food making business training - Mushroom cultivation program - Organic SRI & herbal medicinal program - Organic Farming program - Fisheries development program - Cattle breeding program - Scholarship program - Student transportation provision - Support for vulnerable groups	88,868	- Training for Mosque management - Teacher Training - Student transportation support - Organic rubber cultivation - Fishery Program - Herb Medicine Organic Farming - Sweet corn program - Mushroom cultivation - Dairy goat program - Home-based business enterprises training (jumpitan & flannel material, cooking) - Paper recycling business development - Broiler breeding warmers & houses program - Empowered Village Program	91,357
5	Block B Natuna			- Community based homestay in Belibak; - Grouper marine culture development; - SME development (UMKM)	196,895	- Support for environmental-based education/school (Adiwiyata) - Education fund for English training - Support small medium enterprise for grouper cultivation - Support for tourism village - Small-Medium Enterprise (SME) development (UMKM)	132,498

**) These numbers are for 100% participating interest.

No.	Operations	2016	US\$	2017	US\$	2018	US\$
6	Lematang Block	- Teacher training - Organic farming program - Organic rubber cultivation - Bee honey cultivation	20,057	- Organic farming program - Sewing training program - Community product promotion activities support - Teacher training program - School facilities support	26,653	- Organic farming program - Sewing training program - Honey bee cultivation program - Teacher training program - Dairy Goat program - Mushroom cultivation program - Fishery program - Cooking & Make-up training	39,898
7	Tarakan Block	- Strengthening of agribusiness based on organics through fostering/strengthening farmers network groups - Waste management program for economic development program	24,871	Strengthening of agribusiness based on organic through hydroponic vegetable training program	18,846	Strengthening of agribusiness based on organic farming program	20,228
	Subtotal Oil & Gas		195,138		408,270		544,676
8	Amman Mineral Nusa Tenggara	N/A		Misc. CSR programmes	780,320	Misc. CSR programmes	938,899

Other Programs Sustainable Livelihoods & Community Development*** (GRI 413)

No.	Operations	2016	US\$	2017	US\$	2018	US\$
1	Tunisia	- School Supplies - Support for people with disabilities - Schoolbus membership - Local festival - Football uniform - Women hand craft centre - Consortium project (Medco Share)	500,814	- School Supplies - Support for people with disabilities - Schoolbus membership - Local festival - Football uniform - Women hand craft centre - Consortium project (Medco Share)	485,787	- School Supplies - Support for people with disabilities - Schoolbus membership - Local festival - Football uniform - Women hand craft centre - Consortium project (Medco Share)	250,030
2	Oman	- Assistance for needy families - Camel race and festival - Al Amerat Challenge Race Sponsorship - Camel beauty competition - Participation in seminar Inovasi and Oil Week - Indonesian Embassy celebration of Independence day - Sponsorship of Oman Down Syndrome Association, Muscat Unique Diamond Entertainment, Indonesia fashion show - Support for culture activity days in Ashaleem and Al Halaniyat - Honoring Students in Al Jazer	19,693	- Support for schools - Camel beauty competition - Assistance for needy families - Contribution for ministry of interior - Providing iPads for school	26,759	- Supporting Oman 1th Commercial Week Event at Sultan Qaboos University - Support family in need as Wali Recommendation - Various Community Development	18,965
3	Block A Aceh	- Counseling Healthy Life and Utilization of Family Medicinal Plants (TOGA) - Health education for pregnant women / toddlers / seniors for the community around the location - Organic Based Agriculture / Plantation Facilities and Infrastructure - Implementation of the Earthquake Disaster Humanitarian Assistance Program in Pidie Jaya Regency (Cross-budget subsidy with no. WBS) - Natural Disaster Relief	18,992	Not measured		- Health counselling for pregnant women/toddler/ elderly - Mosque facility support - Natural disaster victims support - Environment improvement support	11,504

***) These numbers are for 100% participating interest.

No.	Operations	2016	US\$	2017	US\$	2018	US\$
4	South Sumatra Block	- Participation for local flood victims, religious activities, agricultural facilities, school facilities - Data collection of farmers for agricultural programs in the watershed - Participation for Mosque facilities and equipment	18,185	Donation & Participation: - Sports equipment - School equipment - Mosque facilities - Sports tournaments - Village competitions - Police office facilities - Agricultural equipment - Village office supplies - School activities - Equipment for PKK activities	10,957	Donation & Participation: - School equipment - Health program - National disaster victims support - Vulnerable group support	121,064
5	Rimau Block	- Participation in religious activities - Study of fisheries business program - Participation for natural disaster victims	11,005	Participation in religious activities	5,062	- Support school facilities and equipment - Health education program (sport, counselling) - Cleaned water support - Support public facilities - National disaster victims support - Support for vulnerable groups - Support Education Program (Medco Mengajar, etc.)	70,349
6	Lematang Block	Support school facilities and equipment	2,658	- Clean water supply for community - Fire victims support - Police office facilities support	6,324	- School facilities support - Health program (counselling, sport, examination) - Trash box support - National disaster victims support - Support for vulnerable groups - Medco teaching program	17,594
7	Tarakan Block	Community satisfaction study	89	- Renewable energy development support - Waste management program support - Stakeholder mapping - Local disaster contribution	18,750	- Health Program - Environment Program support	7,539
8	Block B Natuna			- Scholarships - Development of environmental management school - Literacy program - Revitalization of traditional dance - Staple food and fishermen study and assessment for Batu Lepe Public Park	165,264	- Social assistance programs for disaster management; - Block B Natuna CSR studies and regular monitoring and evaluation; - Social mapping study	73,863
	Subtotal Oil & Gas		571,436		718,903		570,908
9	Medco Power Indonesia	Charity to support infrastructure, religion, health and education	29,452	Charity to support infrastructure, religion, health and education	22,806	Charity to support infrastructure, religion, health and education	54,512
	Subtotal Power		29,452		22,806		54,512

Security Practices (GRI 410)

Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
Security Personnel Trained in Human Rights Policies or procedures	a. Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security	Oil & Gas	65.35%	63.88%	73.70%
		Power	100%	100%	97.13%
	b. Whether training requirements also apply to third party personnel	Oil & Gas	Human rights policies and procedures training are also applied to third party security personnel		
		Power			

Chapter 4 – Our Employees Reflect Our Values

GRI Standard Number	GRI Standard Title	Disclosure Title		Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018
102-8	General Disclosures	Information on employees and other workers	Gender	a. Total number of employees by employment contract (permanent and temporary), by gender.	Permanent	Male	4,704	3,528	2,156
						Male (%)	91%	87%	86%
						Female	466	531	408
						Female (%)	9%	13%	14%
					Temporary	Male	224	416	1,453
						Female	17	38	158
					Total		5,411	4,513	4,175
		Region	Oil & Gas	b. Total number of employees by employment contract (permanent and temporary), by region.	United States		5	5	5
					Tunisia		59	56	55
					Oman		192	190	186
					Block A Aceh		50	82	135
					South Sumatra Block		195	188	185
					Rimau Block		133	136	129
					Block B Natuna		0	775	760
					Lematang Block		38	33	30
					Tarakan Block		38	33	30
					Jakarta Head Office		563	588	578
Power		Medco Power Indonesia (Head Office Jakarta)	55	54	72				

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018
				Medco Power Indonesia (Singa)		11	12	11
				Medco Hidro Indonesia (Jakarta)		9	7	3
				Pembangkitan Pusaka Parahiangan (Cianjur)		12	14	22
				Bio Jathropa Indonesia (Cianjur)		17	21	22
				Sangsaka Hidro Barat (Cianjur)		6	0	0
				Medco Cahaya Geothermal (Jakarta)		7	7	9
				Mitra Energi Batam & Dalle Energi Batam (Batam)		96	223	225
				Energi Listrik Batam (Batam)		49	46	45
				Multidaya Prima Elektrindo (Palembang)		21	21	21
				Energi Prima Elektrindo (Palembang)		21	21	21
				Tanjung Jati B (Jepara)		259	272	263
				Medco Geothermal Sarulla (Tapanuli Selatan)		53	98	100
				Medco Ratch Power Riau (Head Office Jakarta)		0	7	10
		Mining		AMNT		3,522	1,624	1,258
			c. Total number of employees by employment type (full-time and part-time), by gender.	Full-time	Male	4,928	3,944	3,609
					Female	483	569	566
				Part-time	Male	-	-	-
					Female	-	-	-

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018
			d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees.		yes, e.g., project based (drilling, EPC), security, OA, administration, mining operations, camp service			
			e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries).	Oil and Gas			Not Applicable	
				Power			Not measured	
				Mining			Not measured	
			f. An explanation of how the data have been compiled, including any assumptions made.		database and manual compilation			

New Employee Hires

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Entities	2016		2017		2018	
					value	%	value	%	value	%
401-1	Employment	New employee hires and employee turnover	a. Total number and rate of new employee hires during the reporting period by:		201	3.71%	394	8.73%	354	8.48%
		Age Group	Oil & Gas	Under 30 years old	46	3.63%	70	3.36%	76	3.64%
				30-50 years old	16	1.26%	71	3.41%	103	4.93%
				Over 50 years old	10	0.79%	14	0.67%	9	0.43%
			Power	Under 30 years old	59	9.58%	164	20.42%	45	5.46%
				30-50 years old	62	10.06%	57	7.10%	40	4.85%
				Over 50 years old	6	0.97%	5	0.62%	3	0.36%
			Mining	Under 30 years old	0	0.00%	3	0.18%	13	1.03%
				30-50 years old	1	0.03%	8	0.49%	51	4.05%
				Over 50 years old	1	0.03%	2	0.12%	14	1.11%
		Gender	Oil & Gas	Female	11	0.87%	33	1.59%	39	1.87%
				Male	61	4.81%	122	5.86%	149	7.14%
			Power	Female	9	1.46%	13	1.62%	12	1.46%
				Male	118	19.16%	213	26.53%	76	9.22%

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Entities	2016		2017		2018	
					value	%	value	%	value	%
		Mining	Female		0	0.00%	3	0.18%	11	0.87%
			Male		2	0.06%	10	0.62%	67	5.33%
	Region	Oil & Gas		Tunisia	0	0.00%	0	0.00%	3	0.14%
				Oman	12	0.95%	4	0.19%	8	0.38%
				Block A Aceh	41	3.23%	64	3.08%	112	5.36%
				South Sumatra Block	1	0.08%	0	0.00%	2	0.10%
				Rimau Block	0	0.00%	4	0.19%	0	0.00%
				Block B Natuna	0	0.00%	26	1.25%	9	0.43%
				Lematang Block	0	0.00%	0	0.00%	0	0.00%
				Tarakan Block	0	0.00%	0	0.00%	0	0.00%
				Jakarta Head Office	18	1.42%	57	2.74%	54	2.59%
		Power		Medco Power Indonesia (Head Office Jakarta)	7	1.14%	5	0.62%	24	2.91%
				Medco Power Indonesia (Singa)	0	0.00%	1	0.12%	0	0.00%
				Medco Hidro Indonesia (Jakarta)	2	0.32%	1	0.12%	1	0.12%
				Pembangkitan Pusaka Parahiangan (Cianjur)	1	0.16%	0	0.00%	15	1.82%
				Bio Jathropa Indonesia (Cianjur)	1	0.16%	4	0.50%	9	1.09%
				Sangsaka Hidro Barat (Cianjur)	1	0.16%	0	0.00%	0	0.00%
				Medco Cahaya Geothermal (Jakarta)	1	0.16%	0	0.00%	2	0.24%
				Mitra Energi Batam & Dalle Energi Batam (Batam)	15 ^a	2.44% ^a	129 ^a	16.06% ^a	5 ^a	0.61% ^a
				Energi Listrik Batam (Batam)	12	1.95%	3	0.37%	3	0.36%
				Multidaya Prima Elektrindo (Palembang)	2	0.32%	0	0.00%	0	0.00%
				Energi Prima Elektrindo (Palembang)	0	0.00%	0	0.00%	0	0.00%
				Tanjung Jati B (Jepara)	33	5.36%	34	4.23%	13	1.58%
				Medco Geothermal Sarulla (Tapanuli Selatan)	52	8.44%	48	5.98%	13	1.58%
				Medco Ratch Power Riau (Head Office Jakarta)	0	0.00%	1	0.12%	3	0.36%

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Entities	2016		2017		2018	
					value	%	value	%	value	%
		Mining		AMNT	2	0.06%	13	0.80%	78	6.20%

a. Mitra Energi Batam & Dalle Energi Batam (Batam) are reported under the same management and regarded as one entity in the calculation.

Employee Turnover

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Entities	2016		2017		2018	
					value	%	value	%	value	%
401-1	Employment	New employee hires and employee turnover	b. Total number and rate of employee turnover during the reporting period by:		115	2.13%	100	2.22%	184	4.41%
		Age Group	Oil & Gas	Under 30 years old	8	0.63%	4	0.19%	3	0.14%
				30-50 years old	31	2.44%	31	1.49%	63	3.02%
				Over 50 years old	30	2.37%	22	1.06%	45	2.16%
		Power		Under 30 years old	14	2.27%	5	0.62%	15	1.82%
				30-50 years old	25	4.06%	25	3.11%	45	5.46%
				Over 50 years old	4	0.65%	9	1.12%	6	0.73%
		Mining		Under 30 years old	0	0.00%	1	0.06%	1	0.08%
				30-50 years old	3	0.09%	3	0.18%	6	0.48%
				Over 50 years old	0	0.00%	0	0.00%	0	0.00%
		Gender	Oil & Gas	Female	12	0.95%	17	0.82%	22	1.05%
				Male	57	4.50%	40	1.92%	89	4.26%
		Power		Female	5	0.81%	5	0.62%	9	1.09%
				Male	38	6.17%	34	4.23%	57	6.92%
		Mining		Female	0	0.00%	0	0.00%	0	0.00%
				Male	3	0.09%	4	0.25%	7	0.56%
		Region	Oil & Gas	Tunisia	2	0.16%	0	0.00%	1	0.05%
				Oman	7	0.55%	8	0.38%	15	0.72%
				Block A Aceh	3	0.24%	1	0.05%	2	0.10%
				South Sumatra Block	15	1.18%	3	0.14%	6	0.29%
				Rimau Block	3	0.24%	2	0.10%	1	0.05%
				Block B Natuna	0	0.00%	21	1.01%	30	1.44%
				Lematang Block	2	0.16%	1	0.05%	1	0.05%
				Tarakan Block	0	0.00%	1	0.05%	0	0.00%
				Jakarta Head Office	37	2.92%	20	0.96%	55	2.63%

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Entities	2016		2017		2018	
					value	%	value	%	value	%
		Power		Medco Power Indonesia (Head Office Jakarta)	5	0.81%	4	0.50%	11	1.33%
				Medco Power Indonesia (Singa)	0	0.00%	0	0.00%	0	0.00%
				Medco Hidro Indonesia (Jakarta)	0	0.00%	2	0.25%	2	0.24%
				Pembangkitan Pusaka Parahiangan (Cianjur)	2	0.32%	2	0.25%	9	1.09%
				Bio Jathropa Indonesia (Cianjur)	1	0.16%	3	0.37%	6	0.73%
				Sangsaka Hidro Barat (Cianjur)	4	0.65%	1	0.12%	0	0.00%
				Medco Cahaya Geothermal (Jakarta)	0	0.00%	0	0.00%	0	0.00%
				Mitra Energi Batam & Dalle Energi Batam (Batam)	4 ^a	0.65% ^a	1 ^a	0.12% ^a	2 ^a	0.24% ^a
				Energi Listrik Batam (Batam)	2	0.32%	4	0.50%	4	0.49%
				Multidaya Prima Elektrindo (Palembang)	0	0.00%	0	0.00%	0	0.00%
				Energi Prima Elektrindo (Palembang)	0	0.00%	0	0.00%	0	0.00%
				Tanjung Jati B (Jepara)	25	4.06%	19	2.37%	20	2.43%
				Medco Geothermal Sarulla (Tapanuli Selatan)	0	0.00%	3	0.37%	11	1.33%
				Medco Ratch Power Riau (Head Office Jakarta)	0	0.00%	0	0.00%	1	0.12%
		Mining		AMNT	3	0.09%	4	0.25%	7	0.56%

a. Mitra Energi Batam & Dalle Energi Batam (Batam) are reported under the same management and regarded as one entity in the calculation

Benefits for Permanent Employees

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
401-2	Employment	Benefits provided to full-time employees that are not provided to temporary or part-time employees	a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; ii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. b. The definition used for 'significant locations of operation'.	Oil & Gas Power Mining	1. Education Refund Plan (MEI and MEPI), Employee Education Assistance (Block B Natuna) 2. Emergency Loan (MEI and MEPI), Loan Salary Advance (Block B Natuna) 3. Pension program - "Penghargaan atas Pengabdian" (MEI and MEPI, Block B Natuna) 4. Service award (MEI and MEPI, Block B Natuna) 5. Scholarship Assistance (Oman) 6. Housing Loan Assistance (Oman) 7. Group benefits plan, include medical, dental and life insurance (Tunisia) 1. Rest and Relax Allowance (Medco Power Indonesia, Medco Geothermal Sarulla) 2. Emergency Loan (Medco Power Indonesia, Tanjung Jati B, Medco Hidro Indonesia, Energi Listrik Batam) 3. Pension Program (Medco Power Indonesia, Tanjung Jati B, Mitra Energi Batam, Dalle Energi Batam) The company provides the following benefit (2018): i. mandatory BPJS Kesehatan for outpatient and inpatient ii. mandatory BPJSTK for JKK,JKM, JHT, JP. iii. Life insurance 24 x Basic Salary (Mandiri InHealth) iv. Medical Insurance for GHS (group hospitalization and surgery) v. Annual Ceiling for medical Outpatient (8.5 mio / years) vi. Saving Plan Program - managed by AXA Mandiri vii. Parental leave as per government regulation viii. Site Allowance ix. Monthly & Annual KPI Bonus x. No stock ownership xi. 1x Basic Salary for THR (religion bonus) As stated in the list benefits above		

Parental Leave

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018
401-3	Employment	Parental leave	a. Total number of employees that were entitled to parental leave, by gender.	Oil & Gas	Female	226	357	366
					Male	936	1,581	1,576
				Power	Female	59	71	73
					Male	467	498	486
				Mining	Female	151	106	97
					Male	3,260	1,430	1,082

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018
		b. Total number of employees that took parental leave, by gender.	Oil & Gas	Female		33	14	18
				Male		147	130	98
			Power	Female		5	3	5
				Male		26	51	33
			Mining	Female		20	14	4
				Male		127	91	21
		c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender	Oil & Gas	Female		33	14	18
				Male		147	130	98
			Power	Female		5	3	5
				Male		26	51	33
			Mining	Female		20	14	4
				Male		127	91	21
		d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender.	Oil & Gas	Female ^a		17	33	14
				Male ^a		114	147	130
			Power	Female ^a		4	5	3
				Male ^a		24	26	51
			Mining	Female ^a		20	14	4
				Male ^a		127	91	21
		e. Return to work rates of employees that took parental leave, by gender.	Oil & Gas	Female ^a		100%	100%	100%
				Male ^a		100%	100%	100%
			Power	Female ^a		100%	100%	100%
				Male ^a		100%	100%	100%
			Mining	Female ^a		100%	100%	100%
				Male ^a		100%	100%	100%
		f. Retention rates of employees that took parental leave, by gender.	Oil & Gas	Female		100%	100%	100%
				Male		99%	100%	100%
			Power	Female		100%	100%	100%
				Male		100%	100%	100%
			Mining	Female		100%	100%	100%
				Male		100%	100%	100%

a. Calculation per reporting year referred to records of return to work after parental leave from the prior year

Diversity and Equal Opportunity

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	Entities	2016	2017	2018	
405-1	Diversity and Equal Opportunity	Diversity of governance bodies and employees	a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories:						
			i. Gender		Female	25.00%	26.67%	26.67%	
					Male	75.00%	73.33%	73.33%	
			ii. Age group		Under 30 years old	0.0%	0.0%	0.0%	
					30-50 years old	31.25%	33.33%	26.67%	
					Over 50 years old	68.75%	66.67%	73.33%	
			iii.Other indicators of diversity where relevant (such as minority or vulnerable groups).					Not available	
			b. Percentage of employees per employee category in each of the following diversity categories:						
			i. Gender		Oil & Gas	Female	17.82%	17.16%	17.53%
						Male	82.18%	82.84%	82.47%
					Power	Female	9.58%	8.84%	8.86%
						Male	90.42%	91.16%	91.14%
					Mining	Female	6%	9%	10%
						Male	94%	91%	90%
			ii.Age group		Oil & Gas	Under 30 years old	12.54%	9.13%	7.85%
						30-50 years old	76.74%	76.45%	78.30%
						Over 50 years old	10.73%	14.42%	13.84%
					Power	Under 30 years old	21.10%	33.50%	33.50%
						30-50 years old	72.73%	61.64%	61.53%
						Over 50 years old	6.17%	4.86%	4.98%
					Mining	Under 30 years old	3.00%	3.00%	4.00%
						30-50 years old	87.00%	90.00%	86.00%
						Over 50 years old	9.00%	7.00%	10.00%
			iii.Other indicators of diversity where relevant (such as minority or vulnerable groups).					Not available	

Chapter 5 - Corporate Governance

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	Type of Entity	2016		2017		2018	
					value	%	value	%	value	%
GRI 205 – 1	Anti Corruption	Operations assessed for risk related to corruption	a. Total number and percentage of operations assessed for risks related to corruption (based on Fraud Risk Assessment workshops that have been conducted in Indonesia).	Oil & Gas	5	83%	6	86%	6	86%
				Power*	0	0%	0	0%	6	43%
			b. Significant risks related to corruption identified through the risk assessment.	Corporate	Corporate crime liability, procurement fraud, third party relationship, and Col				Corporate crime liability, procurement fraud, third party relationship, Col and licensing & permit	

*) Mitra Energi Batam and Dalle Energi Batam are operated under the same management, and are regarded as one entity in the calculations).

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	Type of Entity	2016		2017		2018	
					value	%	value	%	value	%
GRI 205 – 2	Anti Corruption	Communication and training about anti-corruption policies and procedures	a. Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to in Indonesia (based on email communication to governance body members regarding anti-corruption policies and procedures).	Corporate	16	100%	15	100%	15	100%
			b. Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to in Indonesia (based on email communication to employees regarding anti-corruption policies and procedures).	Oil & Gas	1,017	100%	1,834	100%	1,847	100%
				Power	615	100%	803	100%	824	100%
				Mining	Not conducted yet				24	2%
			c. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to in Indonesia.	Oil & Gas	Communication to business partners were delivered through series of emails, Vendor Days, GCG and COC Socialization to vendor and Vendor Compliance Survey.				418	100%
				Power	Not conducted yet				Communication to business partners were delivered through series of emails.	

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	Type of Entity	2016		2017		2018	
					value	%	value	%	value	%
			d. Total number and percentage of governance body members that have received training on anti-corruption in Indonesia (provided through understanding test prior to Statement of Adherence declaration).	Corporate	4	25%	2	13%	15	100%
			e. Total number and percentage of employees that have received training on anti-corruption in Indonesia.	Light Education (Oil & Gas)	1,017	100%	1,834	100%	1,847	100%
			- Light education provided through emails to employees.	Light Education (Power)	Not conducted yet				824	100%
			- Participative training provided through understanding test prior to Statement of Adherence declaration for Oil and Gas, and through filling Col forms for Power.	Participative Training (Oil & Gas)	523	51%	909	50%	1,821	99%
			- Intensive training provided through class room training, such as: Fraud Risk Awareness Workshop, Compliance Week, ELO Workshop, and GCG COC Socialization	Participative Training (Power)	Not conducted yet				797	97%
				Intensive Training (Oil & Gas)	128	13%	354	19%	480	26%
				Intensive Training (Power)	0	0%	0	0%	327	40%
				(Mining)	Not conducted yet				68	5%

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	Type of Entity	2016		2017		2018	
					value	%	value	%	value	%
GRI 412-1	Human Rights assessment	Operations that have been subjected to human rights reviews or impact assessment	a. Total number and percentage of operations that have been subject to human rights review or human rights impact assessments, by country	Oil & Gas ^a	Not conducted yet				1	14.29%
				Power	Not conducted yet					
				Mining	Not available					

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	Type of Entity	2016		2017		2018	
					value	%	value	%	value	%
GRI 412-2	Employee training on human rights policies or procedures		a. Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	Oil & Gas ^a	Not conducted yet				96 hours	
				Power	Not conducted yet					
				Mining	Not available					
			b. Percentage of employees trained concerning aspects of human rights that are relevant to operations	Oil & Gas ^a	Not conducted yet				1.30%	
				Power	Not conducted yet					
				Mining	Not available					

a. Indonesia assets

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	2016	2017	2018
GRI 412-3	Human Rights Assessment	Significant assesment agreement and contracts that include human rights clauses or that underwent human rights screening	a. Total number and percentage of significant invesment agreement and contract that include human rights clauses or that underwent human rights screening.	No agreement or contract include human rights clauses to date		
			b. The definition used for 'significant invesment agreement'.	Not available		

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosures Item	2016	2017	2018
GRI 415-1	Public Policy	Political contributions	a. Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary	MedcoEnergi does not support any political party, and make no contributions or donations in any form to any political party or affiliated organization in any location where we operate		
			b. If applicable, how the monetary value of in-kind contributions was estimated	Not applicable		

Chapter 6-Enhancing Environmental Management

Direct (Scope 1) GHG Emissions

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018		
GRI 305-1	Emissions	Direct (Scope 1) GHG emissions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent	Oil & Gas	297,159.16 ^a	1,170,529.05 ^b	1,162,507.63 ^b		
				Power	740,350.66	855,549.90	905,626.77		
				Mining	Not applicable. (not under MedcoEnergi management)	1,255,167.15	1,320,451.56		
			b. Gases included in the calculation	Oil & Gas	CO ₂ , N ₂ O, CH ₄				
				Power					
				Mining	Not available				
			c. Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent	Oil & Gas	Report does not include biogenic CO2 emissions. MedcoEnergi calculates and reports GHG emissions from stationary sources and other human activities-associated emissions resulting from fossil fuels.				
				Power	Not applicable				
				Mining	Not available				
			d. Base year for the calculation, if applicable, including:						
			i. the rationale for choosing it;				Not applicable		
			ii. Emissions in the base year				Not applicable		
			iii. The context for any significant changes in emissions that triggered recalculations of base year emissions				Not applicable		
			e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source	Oil & Gas	Source of emissions factors: Internal calculation with reference to American Petroleum Institute (API) Compendium 2009 and United States Environmental Protection Agency Air Pollutant-42 (US EPA AP-42) Source of GWP rates: IPCC Fourth Assessment Report				
				Power	Source of emissions factors: Implementation Guidance of National Greenhouse Gas Emissions Inventory Book II - Volume 1 Year 2012 Source of GWP rates: IPCC Fourth Assessment Report				
				Mining					
			f. Consolidation approach for emissions	Oil & Gas	Operational control				
				Power					
				Mining	Not available				
			g. Standards, methodologies, assumptions, and/or calculation tools used	Oil & Gas	API Compendium 2009 and US EPA AP-42				
				Power	Implementation Guidance of National Greenhouse Gas Emissions Inventory Book II - Volume 1 Year 2012				
				Mining	2010 Guidelines to Departement for Environment, food and Rural Affairs (Defra) / Departement of Energy Climate Change (DECC's) GHG Conversion Factors for Company Reporting				

a. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan)

b. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan, Block B Natuna)

GHG Emissions Intensity

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018		
GRI 305-4	Emissions	GHG emssions intensity	a. GHG emissions intensity ratio for the organization	Oil & Gas	99.27 ^a	205.21 ^b	237.12 ^b		
				Power	0.53	0.54	0.55		
				Mining	Not applicable (not under MedcoEnergi management)	2.17	3.67		
			b. Organization-specific metric (the denominator) chosen to calculate the ratio	Oil & Gas	Ton CO ₂ e/1000TOE HC product				
				Power	Ton CO ₂ e/MWH				
				Mining	Metric ton per WMT CO ₂ emissions to copper concentrate production ratio.				
			c. Types of GHG emissions included in the intensity ratio; whether Direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3).	Direct (Scope 1) emission sources					
				d. Gases included in the calculation; whether CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ , or all.	CO ₂ , N ₂ O, CH ₄				
			a. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan)						
b. Consolidated data (International: Oman and Tunisia; Domestic: Rimau, SSB, Lematang, Tarakan, Block B Natuna)									

Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
GRI 305-7	Emissions	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Significant air emissions, in kilograms or multiples, for each of the following:				
			i. NOx (ton/ year)	Oil & Gas	3,150.67 ^c	13,770.76 ^d	14,149.41 ^d
				Power	560.79	704.25	948.25
				Mining	Not applicable (not under MedcoEnergi management)	1,022 (up to June 2017)	2,270.00
			ii. SOx (ton/ year)	Oil & Gas	6.73 ^c	16.89 ^d	14.88 ^d
				Power	289.62	337.24	411.82
				Mining	Not applicable (not under MedcoEnergi management)	656 (up to June 2017)	9.00
			iii. Persistent organic pollutants (POP)		Not applicable		
			iv. Volatile organic compounds (VOC)	Oil & Gas	1,323.11 ^c	2,054.91 ^d	1,508.95 ^d
				Power	Not applicable		
				Mining	Not applicable		
			v. Hazardous air pollutants (HAP)		Not applicable		
			vi. Particulate matter (PM, ton/ year)	Oil & Gas	247.05 ^c	340.31 ^d	341.20 ^d
				Power	143.46	156.31	192.17
				Mining	Not applicable (not under MedcoEnergi management)	126 (up to June 2017)	257.00
			vii. Other standard categories of air emissions identified in relevant regulations		Not available		

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
			b. Source of the emissions factors used	Oil & Gas	Internal calculation with reference to American Petroleum Institute (API) Compendium 2009 and United States Environmental Protection Agency Air Pollutant-42 (US EPA AP-42)		
				Power	Not applicable		
				Mining	Not available		
		c. Standards, methodologies, assumptions, and/or calculation tools used		Oil & Gas	API Compendium 2009 and US EPA AP-42		
				Power	Minister of Environment Decree No. 21 Year 2008 regarding Emission Quality Standards for Stationary Sources for Businesses and/or Activities of Thermal Power Plants		
				Mining	Minister of Environment Regulation No.4 year 2014 regarding Emission Standard for Stationary Sources for Mining Activities Minister of Environment Regulation No. 15 year 2019 regarding Emission Standards for Thermal Power Plant		

c. Domestic data: Rimau, SSB, Lematang, Tarakan

d. Domestic data: Rimau, SSB, Lematang, Tarakan, Block B Natuna

Chapter 7-Providing a Safe and Healthy Workplace

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
GRI 403-1	Occupational Health and Safety	Workers representation in formal joint management-worker health and safety committees	a. The level at which each formal joint management worker health and safety committee typically operates within the organization.	Oil & Gas	Medco E&P Indonesia HSECom (Health, Safety and Environment Committee) which consists of Board of Directors, Head of Assets, Head of Divisions and Workers Union representative.		
					Medco E&P Natuna HSE Action Committee and labour union, whose existence and function are integrated in the organization and the authority structure up to top management.		
				Power	Medco Power Indonesia Medco Power Indonesia and each of its subsidiaries have a health and safety working group which comprises of both management and workers. At MPI level, the working group is a P2K3 (Panitia Pelaksana Keselamatan Kesehatan Kerja) and at each subsidiaries, the working group is an HSE Working Group. Each month the group conducts routine meetings and inspections to ensure that the Company's HSE procedures are implemented in accordance with HSE rules and regulations.		
			b. Percentage of workers whose work, or workplace, is controlled by the organization, that are represented by formal joint managementworker health and safety committees.	Mining	Mining Area Safety Committee is led by Area/ Dept Sr. Manager; Site-wide Safety Committee and Business Partner Safety Committee are led by General Manager Operations/Chief Mine Technical. All committees have workers representation.		
						100%	

Types and Rates of Injury

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
GRI 403-2	Occupational Health and Safety	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	(a) and (b). Types of injury for all workers and employees	Definitions	Fatality: This classification includes cases of death caused by accident or occupational illness, regardless of the time between the occurrence of an accident/illness and the time of death. LostTime Injury (LTI): This classification includes cases of injury or illness that cause the injured person to be at least 24 hours absent from work after the day of the incident. The classification applies regardless whether the next day is a workday or a holiday. Fatalities, total permanent disability and partial permanent disability cases are included in LTI. Restricted Work Injury (RWI): This classification covers cases of work accident/occupational illness that result in injured person not being able to perform full routine tasks, or not being able to work fully within one business day where the injured person has been scheduled to work the next day. Medical Treatment Injury (MTI): This classification covers cases of work injury/illnesses that require medical treatment.		
				Oil & Gas	LTI RWI MTI	LTI RWI MTI	Fatality LTI RWI MTI
				Power	-	Fatality	MTI
		Total Recordable Incident Rate (TRIR) per 1,000,000 work hours for all workers and employees In reference to OSHA criteria:		Oil & Gas	1.26	0.70	0.59
				Power	0	0.35	0.31
		i. Minor injuries are excluded					
		ii. Fatalities are included		Mining	Not available		0.43
		Occupational Disease Rate (ODR) per 1,000,000 work hours for all workers and employees		Oil & Gas	0.00	0.00	0.00
				Power	0.00	0.00	0.00
				Mining	Not available		0.00
		Lost Time Incident Rate (LTIR) per 1,000,000 work hours for all workers and employees In reference to OSHA criteria:		Oil & Gas	0.16	0.18	0.13
				Power	0.00	0.35	0.00
		i. Calendar days are used to calculate 'lost days'					
		ii. The 'lost days' count begins the day after the incident					
		In reference to DEMR criteria:		Mining	Not available		9.27
		Absentee rate (AR) for all workers and employees			Not available		
		Work-related fatalities, for all workers and employees		Oil & Gas	0	0	1
				Power	0	1	0
				Mining	Not available		0
		c. The system of rules applied in recording and reporting accident statistics.			The injury rates are calculated as follow: Total Recordable Incident Rate (TRIR) per 1,000,000 work hou $= \frac{(\text{number of recordable injuries})}{\text{manhour}} \times 1,000,000$ $= \frac{(\text{number of recordable injuries})}{\text{manhour}} \times 1,000,000$		

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	Type of Entity	2016	2017	2018
					Occupational Disease Rate (ODR) per 1,000,000 work hou = $\frac{\text{(number of occupational disease cases)}}{\text{manhour}} \times 1,000,000$ = $\frac{\text{(number of occupational disease cases)}}{\text{manhour}} \times 1,000,000$		
					Lost Time Incident Rate (LTIR) per 1,000,000 work hou = $\frac{\text{(number of lost time cases including fatality)}}{\text{manhour}} \times 1,000,000$ = $\frac{\text{(number of lost time cases including fatality)}}{\text{manhour}} \times 1,000,000$		
					Oil and Gas Safety statistics and incident are collected from each asset according to the Incident Management Document guideline PRIME-13-OS-01, this system adopts widely used industrial incident rate calculation and classification, adheres to the Indonesian Government Regulation as in <i>Keputusan Direktur Teknik Pertambangan Migas tentang Pendataan dan Pelaporan Kecelakaan Tambang</i> dated 25 October 1996, and refers to Occupational Safety and Health Administration (OSHA) 29 CFR Part 1904 - Standard for Reporting and Recording Occupational Injuries and Illness.		
					Power Medco Power Indonesia's safety statistics are calculated from subsidiaries according to incident/ accident investigation and reporting procedure (A800/C01/SOPR010014), which complies with the Indonesian Government Regulation (<i>Peraturan Menteri Tenaga Kerja No. 3 tahun 1998 tentang Tata Cara Pelaporan dan Pemeriksaan Kecelakaan Kerja</i> and <i>Peraturan Menteri Tenaga Kerja dan Transmigrasi PER-01/MEN/1981 tahun 1981 tentang Kewajiban Melapor Penyakit Akibat Kerja</i>) and Occupational Safety and Health Administration (OSHA) 29 CFR Part 1904 - Standard for Reporting and Recording Occupational Injuries and Illness.		

Formal Agreements

GRI Standard Number	GRI Standard Title	Disclosure Title	Individual Disclosure Items	2016	2017	2018
GRI 403-4	Occupational Health and Safety	Health and safety topics covered in formal agreements with trade unions	a. and b. Whether formal agreements (either local or global) with trade unions cover health and safety. If so, the extent, to which various health and safety topics are covered by these agreements.	Medco E&P Indonesia Agreement at the local level (Collective Labour Agreement) for 2016-2018 covers: • Health, safety and environment • Personal Protective Equipment (PPE) • Work related accidents/incidents Medco E&P Natuna Clauses which formally address health and safety, in line with the HSE Policy, have been included in Collective Labour Agreement and Team Performance Contract (TPC) including: • Health, safety and environment • HSE Committee • Personal Protective Equipment (PPE) • Safety insurance coverage • Healthy working environment Medco Power Indonesia Medco Power Indonesia and all its subsidiaries do not have trade unions. Various health and safety topics are regulated in Medco Power Indonesia's 2016-2018 Company Regulations.		
				Amman Mineral Nusa Tenggara Yes, 2017-2018 Collective Labour Agreement (PKB)		

GRI Content Index

This report has been prepared in accordance with the GRI Standards: Core option.

The report references the GRI Standards listed in the left hand column of this GRI Content Index. Where the GRI Standard has not been used in full we have marked the disclosure “partial” and explained the reasons for omission.

GRI Standard	GRI Disclosure	Location (page #)	Level of Disclosure (Full, Partial, Not Disclosed)	Reason for Omission and Other Notes
GRI 102: General Disclosures	102-1 Name of the organization	6-9	Full	
	102-2 Activities, brands, products, and services	6-9	Full	
	102-3 Location of headquarters	i	Full	
	102-4 Location of operations	i	Full	
	102-5 Ownership and legal form	Not measured	Full	Refer to Annual Report p.54-57
	102-6 Markets served	Not measured	Not Disclosed	Not applicable – MedcoEnergi does not produce retail products that are directly consumed by the general public. The products of MedcoEnergi, such as crude oil, natural gas, and electricity, are industrial products that are used by various industries.
	102-7 Scale of the organization	Not measured	Full	Refer to Annual Report p.54-57
	102-8 Information on employees and other workers	34-39	Full	
	102-9 Supply chain	Not measured	Not Disclosed	Not applicable – Supply chain was not identified as a material issue for MedcoEnergi
	102-10 Significant changes to the organization and its supply chain	Not measured	Partial	Not applicable – Supply chain was not identified as a material issue for MedcoEnergi
	102-11 Precautionary Principle or approach	Not measured	Not Disclosed	Not applicable – Medco has an comprehensive enterprise risk management system in place.
	102-12 External initiatives	47	Full	
	102-13 Membership of associations	15	Full	
	102-14 Statement from senior decision-maker	2-5	Full	
	102-16 Values, principles, standards, and norms of behavior	40-49	Full	
	102-17 Mechanisms for advice and concerns about ethics	42-47	Full	
	102-18 Governance structure	41	Full	
	102-40 List of stakeholder groups	16-17	Full	High-level list of stakeholder groups is included
	102-41 Collective bargaining agreements	38	Full	
	102-42 Identifying and selecting stakeholders	16-19	Full	
	102-43 Approach to stakeholder engagement	19	Full	
	102-44 Key topics and concerns raised	12-14	Full	
	102-45 Entities included in the consolidated financial statements	Not measured	Full	Please refer to Financial Report (in the Annual Report) p.18
	102-46 Defining report content and topic Boundaries	2-5	Full	See Board Letter
	102-47 List of material topics	12-14	Full	
	102-48 Restatements of information	Not measured	Not disclosed	Not applicable
	102-49 Changes in reporting	6	Full	
	102-50 Reporting period	6	Full	
	102-51 Date of most recent report	6	Full	
	102-52 Reporting cycle	6	Full	
	102-53 Contact point for questions regarding the report	6	Full	
	102-54 Claims of reporting in accordance with the GRI Standards	6	Full	

GRI Standard	GRI Disclosure	Location (page #)	Level of Disclosure (Full, Partial, Not Disclosed)	Reason for Omission and Other Notes
	102-55 GRI content index	96-97	Full	
	102-56 External assurance	Attached to the Appendix	Full	Please refer to the section "Independent Limited Assurance Statement."
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	12-14	Full	
	103-2 The management approach and its components	18, 34, 40, 50, 61	Full	
	103-3 Evaluation of the management approach	33, 39, 48, 60, 68	Full	
GRI 203: Indirect Economic Impacts	203-1 Infrastructure investments and services supported	18-33	Partial	Information partly available for Amman Minerals Nusa Tenggara
	203-2 Significant indirect economic impacts	30-33	Partial	Information on impact assessment methods is provided in Chapter 5. Information on indirect impacts is unavailable.
GRI 205: Anti-Corruption	205-1 Operations assessed for risks related to corruption	42-47	Full	
	205-2 Communication and training about anti-corruption policies and procedures	42-47	Partial	Information is reported on a consolidated basis and not broken down by employee category or region
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	52-53	Partial	Information partly available for MPI and AMNT
	305-4 GHG emissions intensity	52-53	Partial	Information partly available for MPI and AMNT
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	52-53	Partial	Information unavailable for NOx, SOx, and PM for AMNT (July – December 2017) Information unavailable for Persistent organic pollutants (POP), Hazardous air pollutants (HAP) for all business units, Volatile Organic Compounds (VOC) for Power and Mining for all years (2016-2018)
GRI 307: Environmental Compliance	307-1 Non-compliance with environmental laws and regulations	50-51	Full	
GRI 401: Employment	401-1 New employee hires and employee turnover	81-84	Full	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	85	Full	
	401-3 Parental leave	85-86	Full	
GRI 403: Occupational Health and Safety	403-1 Workers representation in formal joint management-worker health and safety committees	61-68	Full	
	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	65-67	Partial	Information unavailable for Types of Injury, Occupational Disease Rate, Absentee Rate Information for Rates of Injury provided on a consolidated basis, not broken down by gender
	403-4 Health and safety topics covered in formal agreements with trade unions	61-68	Full	
GRI 405: Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees	34 and 87	Partial	Information unavailable for minority or other vulnerable groups
GRI 410: Security Practices	410-1 Security personnel trained in human rights policies or procedures	31-32 and 79	Full	
GRI 412: Human Rights Assessment	412-1 Operations that have been subjected to human rights reviews or impact assessment	47 and 89	Partial	Information unavailable for Amman Mineral Nusa Tenggara
	412-2 Employee training on human rights policies or procedures	90	Partial	Information unavailable for Amman Mineral Nusa Tenggara
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	90	Full	
GRI 413: Local Communities	413-1 Operations with local community engagement, impact assessments, and development programs	18-33	Partial	Information unavailable for Amman Mineral Nusa Tenggara Information unavailable for indirect impacts of investments
GRI 415: Political Contributions	415-1 Political contributions	90	Full	
GRI 419: Socioeconomic Compliance	419-1 Non-compliance with laws and regulations in the social and economic area	44-45	Full	

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Independent Limited Assurance Statement in relation to the subject matters included in the Sustainability Report of PT Medco Energi Internasional Tbk for the year 2018

Report No. 00449/2.1032/JL.0/02/0692-2/1/X/2019

To the Management of PT Medco Energi Internasional Tbk (the "Company")

We have carried out a limited assurance engagement in order to state whether anything has come to our attention that causes us to believe that the subject matter detailed below ("Subject Matter"), and as presented in the Sustainability Report of the Company for the year 2018 (the "Report"), has not been reported and presented fairly, in all material respects, in accordance with the criteria ("Criteria") below.

Subject Matter

The Subject Matter for our limited assurance engagement was limited to the indicators/disclosures for the year 2016, 2017 and 2018 as detailed in the Appendix 1.

The Subject Matter did not include:

- Data sets, statements, information, systems or approaches other than the selected indicators/disclosures
- Management's forward looking statements such as targets, plans and intentions
- Any comparisons made against historical data
- Any work in respect of sustainability information published elsewhere in the Company's annual report, website and other publications
- Sustainability information prior to 1 January 2016 and subsequent to 31 December 2018

Criteria

As the basis for the assurance engagement, the Company has used definitions as set out in the Global Reporting Initiative Standards for the selected Subject Matter in the Report, unless otherwise stated in each disclosure items throughout the report.

Management's responsibility

The Management of the Company is responsible for the preparation and fair presentation of the Subject Matter in accordance with the Criteria. The Company's management is responsible for establishing and maintaining internal controls relevant to the preparation and presentation of the Subject Matter that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate criteria; maintaining adequate records and making estimates that are reasonable in the circumstances.



Independent Limited Assurance Statement in relation to the subject matters included in the Sustainability Report of PT Medco Energi Internasional Tbk for the year 2018 (continued)

Report No. 00449/2.1032/JL.0/02/0692-2/1/X/2019 (continued)

Assurance Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Subject Matter in accordance with the Standards on Assurance Engagement (SAE) 3000 (Assurance Engagements Other than Audits or Reviews of Historical Financial Information) established by the Indonesian Institute of Certified Public Accountants (IICPA) and the terms of reference for this engagement as agreed with the Company.

Our procedures were designed to obtain a limited level of assurance on which to base our conclusion, and, as such, do not provide all of the evidence that would be required to provide a reasonable level of assurance. The procedures performed depend on the assurance practitioner's judgement including the risk of material misstatement of the Subject Matter, whether due to fraud or error. While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls.

Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems. We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Summary of Procedures Undertaken

Our limited assurance procedures included:

- Conducting interviews with key personnel to understand the process for collecting, collating and reporting the Subject Matter during the reporting period
- Comparing that the calculation criteria had been correctly applied in accordance with the methodologies outlined in the Criteria
- Performing recalculations of performance metrics to confirm quantities stated were replicable
- Undertaking analytical review procedures to support the reasonableness of the data
- Undertaking site visits to Rimau Block (Kaji Station, Semoga Station and Kaji Satellite Station)
- Vouching, on a sample basis, to underlying source information to check the validity of the data

Use of our Limited Assurance Statement

We disclaim any assumption of responsibility for any reliance on this limited assurance statement, or on the Subject Matter to which it relates, to any persons other than the Management of the Company or for any purpose other than that for which it was prepared.



Independent Limited Assurance Statement in relation to the subject matters included in the Sustainability Report of PT Medco Energi Internasional Tbk for the year 2018 (continued)

Report No. 00449/2.1032/JL.0/02/0692-2/1/X/2019 (continued)

Our Independence

In conducting our assurance engagement we have met the independence requirements within the meaning of the Code of Ethics for Public Accountants established by the Indonesian Institute of Certified Public Accountants.

Conclusion

Based on the limited assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Subject Matter set out in the Company's Sustainability Report for the year 2018, has not been reported and presented fairly, in all material respects, in accordance with the Criteria.

Purwantono, Sungkoro & Surja

Deden Riyadi
Public Accountant Registration No. AP0692

29 October 2019

Appendix 1. Subject Matter for Independent Limited Assurance of PT Medco Energi Internasional Tbk Sustainability Report for the year 2018

GRI 203 – Indirect Economic Impact

Indicators/disclosures	Type of entity and location	2016	2017	2018
1. Extent of development of significant infrastructure investments and services supported (GRI 203-1)	Oil and gas (Indonesia and Oman)	US\$249,318	US\$622,592	US\$439,180
	Power (Indonesia)	0	0	US\$66,710
2. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant (GRI 203-1)	Oil and gas (Indonesia and Oman), Power (Indonesia)	Investments in infrastructure in MedcoEnergi covers among others: - Road and bridge rehabilitation or development which brings better and extended access for local communities. - Public facilities construction or renovation for mosques, schools, wells for clean water, drainage systems, housing for vulnerable groups, evacuation routes, solar street lamps, village libraries and public areas, sports facilities, and organic plant farming infrastructure. These investments bring lasting impact to the receiving communities in the form of decent and helpful public facilities for their everyday use.		
3. Whether these investments and services are commercial, in-kind, or pro bono engagements (GRI 203-1)	Oil and gas (Indonesia and Oman), Power (Indonesia)	All investments in infrastructure are in-kind.		
4. Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts (GRI 203-2)	Oil and gas (Indonesia)	Social Return on Investment (SROI) is a method to calculate the financial value of a program's impact. This informs decisions on the choice of programs, strategies, budgeting, and scale of each program. Measuring this value is another way to communicate program benefits in a clear and consistent way. This tool also supports risk management, opportunity identification, and improves the value of the programs. In Kampung Bilis, SROI is used by the Social Investment Indonesia Foundation (Yayasan Sahabat Investasi Indotama/YSII) to evaluate the impact of activities between 2016 and 2018 based on guidelines from the organization Social Value International. Based on SROI calculation, the present value of total outcome is IDR 2,378,341,661, total investment is IDR 858,041,148, and SROI value from 2016 to 2018 is 2.77. This means that for every investment of IDR one, the benefit over three years of the program is IDR 2.77.		
5. Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas (GRI 203-2)	Oil and gas (Indonesia), Power (Indonesia)	These efforts in Kampung Bilis support the realization of SDG 8 (Target 8.3), SDG 14 (Target 14.7 and 14.b) and SDG 17 (Target 17.17)		

GRI 205 – Anti-corruption

Indicators/disclosures	Type of entity and location	2016		2017		2018	
6. Total number and percentage of operations assessed for risks related to corruption (GRI 205-1)		Number	Percentage	Number	Percentage	Number	Percentage
	Oil and gas (Indonesia)	5	83%	6	86%	6	86%
	Power (Indonesia)	0	0%	0	0%	6	43%
7. Significant risks related to corruption identified through the risk assessment (GRI 205-1)	Corporate	Corporate crime liability, procurement fraud, third party relationship and conflict of interest				Corporate crime liability, procurement fraud, third party relationship, conflict of interest and licensing and permit	
8. Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to (GRI 205-2)		Number	Percentage	Number	Percentage	Number	Percentage
	Corporate	16	100%	15	100%	15	100%
9. Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to (GRI 205-2)		Number	Percentage	Number	Percentage	Number	Percentage
	Oil and gas (Indonesia)	1,017	100%	1,834	100%	1,847	100%
	Power (Indonesia)	615	100%	803	100%	824	100%

Indicators/disclosures		Type of entity and location	2016		2017		2018	
10. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to (GRI 205-2)		Oil and gas (Indonesia)	Communication to business partners were delivered through series of emails, Vendor Days, GCG and COC Socialization to vendor and Vendor Compliance Survey.				418	100%
		Power (Indonesia)	Not conducted yet				Communication to business partners were delivered through series of emails.	
11. Total number and percentage of governance body members that have received training on anti-corruption (GRI 205-2)			Number	Percentage	Number	Percentage	Number	Percentage
		Corporate	4	25%	2	13%	15	100%
12. Total number and percentage of employees that have received training on anti-corruption (GRI 205-2)			Number	Percentage	Number	Percentage	Number	Percentage
	Light education provided through emails to employees	Oil and gas (Indonesia)	1,017	100%	1,834	100%	1,847	100%
		Power (Indonesia)	Not conducted yet				824	100%
	Participative training provided through understanding test prior Statement of Adherence declaration for Oil and gas, and through filling Conflict of Interest forms for Power	Oil and gas (Indonesia)	523	51%	909	50%	1,821	99%
		Power (Indonesia)	Not conducted yet				797	97%
	Intensive training provided through class room training	Oil and gas (Indonesia)	128	13%	354	19%	480	26%
	Power (Indonesia)	0	0%	0	0%	327	40%	

GRI 305 – Emissions

Indicators/disclosures	Type of entity and location	2016	2017	2018
13. Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent (GRI 305-1)	Oil and gas (Indonesia, Oman, Tunisia)	297,159.16	1,170,529.05	1,162,507.63
	Power (Indonesia)	740,350.66	855,549.90	905,626.77
14. Gases included in the calculation (GRI 305-1)	Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	CO ₂ , N ₂ O, CH ₄		
15. Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent (GRI 305-1)	Oil and gas (Indonesia, Oman and Tunisia)	Report does not include biogenic CO ₂ emissions.		
	Power (Indonesia)	Not applicable		
16. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source (GRI 305-1)	Oil and gas (Indonesia, Oman and Tunisia)	Source of emissions factors: Internal calculation with reference to American Petroleum Institute (API) Compendium 2009 and United States Environmental Protection Agency Air Pollutant-42 (US EPA AP-42)		
	Power (Indonesia)	Source of emissions factors: Implementation Guidance of National Greenhouse Gas Emissions Inventory Book II - Volume 1 Year 2012 Source of GWP rates: IPCC Fourth Assessment Report		
17. Consolidation approach for emissions (GRI 305-1)	Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	Operational control		
18. Standards, methodologies, assumptions, and/or calculation tools used (GRI 305-1)	Oil and gas (Indonesia, Oman and Tunisia)	API Compendium 2009 and US EPA AP-42		
	Power (Indonesia)	Implementation Guidance of National Greenhouse Gas Emissions Inventory Book II - Volume 1 Year 2012		

Indicators/disclosures		Type of entity and location	2016	2017	2018
19. GHG emissions intensity ratio for the organization (GRI 305-4)		Oil and gas (Indonesia, Oman and Tunisia)	99.27	205.21	237.12
		Power (Indonesia)	0.53	0.54	0.55
20. Organization-specific metric (the denominator) chosen to calculate the ratio (GRI 305-4)		Oil and gas (Indonesia, Oman and Tunisia)	Ton CO ₂ e/1000 TOE HC product (TOE HC = Ton of Oil Equivalent of Hydrocarbon product, consist of oil and gas products)		
		Power (Indonesia)	Ton CO ₂ e/MWH		
21. Types of GHG emissions included in the intensity ratio (GRI 305-4)		Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	Direct (Scope 1) emission sources		
22. Gases included in the calculation (GRI 305-4)		Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	CO ₂ , N ₂ O, CH ₄		
23. Significant air emissions (GRI 305-7)	NOx (ton/year)	Oil and gas (Indonesia, Oman and Tunisia)	3,150.67	13,770.76	14,149.41
		Power (Indonesia)	560.79	704.25	948.25
	SOx (ton/year)	Oil and gas (Indonesia, Oman and Tunisia)	6.73	16.89	14.88
		Power (Indonesia)	289.62	337.24	411.82
	VOC (ton/year)	Oil and gas (Indonesia, Oman and Tunisia)	1,323.11	2,054.91	1,508.95
		Power (Indonesia)	Not applicable	Not applicable	Not applicable
	PM (ton/year)	Oil and gas (Indonesia, Oman and Tunisia)	247.05	340.31	341.20
		Power (Indonesia)	143.46	156.31	192.17
24. Source of the emissions factors used (GRI 305-7)		Oil and gas (Indonesia, Oman and Tunisia)	Internal calculation with reference to American Petroleum Institute (API) Compendium 2009 and United States Environmental Protection Agency Air Pollutant-42 (US EPA AP-42)		
		Power (Indonesia)	Not applicable		
25. Standards, methodologies, assumptions, and/or calculation tools used (GRI 305-7)		Oil and gas (Indonesia, Oman and Tunisia)	API Compendium 2009 and US EPA AP-42		
		Power (Indonesia)	Minister of Environment Decree No. 21 Year 2008 regarding Emission Quality Standards for Stationary Sources for Businesses and/or Activities of Thermal Power Plants		

GRI 307 – Environmental Compliance

Indicators/disclosures		Type of entity and location	2016	2017	2018
26. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations (GRI 307-1)		Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	During 2016-2018, there were zero incidents of non-compliance with environmental laws or regulations that resulted in material monetary fines, non-monetary sanctions, or cases brought through dispute resolution mechanisms across all business units.		

GRI 401 – Employment

Indicators/disclosures			Type of entity and location	2016		2017		2018	
				Number	Percentage	Number	Percentage	Number	Percentage
27. Total number and rate of new employee hires during the reporting period, by age group, gender and region (GRI 401-1)	Age group	Under 30 years old	Oil and gas (Indonesia, Oman and Tunisia)	46	3.63%	70	3.36%	76	3.64%
		30-50 years old		16	1.26%	71	3.41%	103	4.93%
		Over 50 years old		10	0.79%	14	0.67%	9	0.43%
	Age group	Under 30 years old	Power (Indonesia)	59	9.58%	164	20.42%	45	5.46%
		30-50 years old		62	10.06%	57	7.10%	40	4.85%
		Over 50 years old		6	0.97%	5	0.62%	3	0.36%
	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	11	0.87%	33	1.59%	39	1.87%
		Male		61	4.81%	122	5.86%	149	7.14%
	Gender	Female	Power (Indonesia)	9	1.46%	13	1.62%	12	1.46%
		Male		118	19.16%	213	26.53%	76	9.22%
	Region	Tunisia	Oil and gas (Indonesia, Oman and Tunisia)	0	0.00%	0	0.00%	3	0.14%
		Oman		12	0.95%	4	0.19%	8	0.38%
		Block A Aceh		41	3.23%	64	3.08%	112	5.36%
		South Sumatra Block		1	0.08%	0	0.00%	2	0.10%
		Rimau		0	0.00%	4	0.19%	0	0.00%
		Block B Natuna		0	0.00%	26	1.25%	9	0.43%
		Lematang		0	0.00%	0	0.00%	0	0.00%
		Tarakan		0	0.00%	0	0.00%	0	0.00%
		Jakarta Head Office		18	1.42%	57	2.74%	54	2.59%
	Region	Medco Power Indonesia (Jakarta Head Office)	Power (Indonesia)	7	1.14%	5	0.62%	24	2.91%
		Medco Power Indonesia (Singa)		0	0.00%	1	0.12%	0	0.00%
		Medco Hidro Indonesia (Jakarta)		2	0.32%	1	0.12%	1	0.12%
		Pembangkitan Pusaka Parahiangan (Cianjur)		1	0.16%	0	0.00%	15	1.82%
		Bio Jathropa Indonesia (Cianjur)		1	0.16%	4	0.50%	9	1.09%
		Sangsaka Hidro Barat (Cianjur)		1	0.16%	0	0.00%	0	0.00%
		Medco Cahaya Geothermal (Jakarta)		1	0.16%	0	0.00%	2	0.24%
		Mitra Energi Batam and Dalle Energi Batam (Batam)		15	2.44%	129	16.06%	5	0.61%
		Energi Listrik Batam (Batam)		12	1.95%	3	0.37%	3	0.36%
		Multidaya Prima Elektrindo (Palembang)		2	0.32%	0	0.00%	0	0.00%
		Energi Prima Elektrindo (Palembang)		0	0.00%	0	0.00%	0	0.00%
		Tanjung Jati B (Jepara)		33	5.36%	34	4.23%	13	1.58%
		Medco Geothermal Sarulla (Tapanuli Selatan)		52	8.44%	48	5.98%	13	1.58%
		Medco Ratch Power Riau (Jakarta Head Office)		0	0.00%	1	0.12%	3	0.36%

Indicators/disclosures			Type of entity and location	2016		2017		2018	
				Number	Percentage	Number	Percentage	Number	Percentage
28. Total number and rate of employee turnover during the reporting period, by age group, gender and region (GRI 401-1)	Age group	Under 30 years old	Oil and gas (Indonesia, Oman and Tunisia)	8	0.63%	4	0.19%	3	0.14%
		30-50 years old		31	2.44%	31	1.49%	63	3.02%
		Over 50 years old		30	2.37%	22	1.06%	45	2.16%
	Age group	Under 30 years old	Power (Indonesia)	14	2.27%	5	0.62%	15	1.82%
		30-50 years old		25	4.06%	25	3.11%	45	5.46%
		Over 50 years old		4	0.65%	9	1.12%	6	0.73%
	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	12	0.95%	17	0.82%	22	1.05%
		Male		57	4.50%	40	1.92%	89	4.26%
	Gender	Female	Power (Indonesia)	5	0.81%	5	0.62%	9	1.09%
		Male		38	6.17%	34	4.23%	57	6.92%
	Region	Tunisia	Oil and gas (Indonesia, Oman and Tunisia)	2	0.16%	0	0.00%	1	0.05%
		Oman		7	0.55%	8	0.38%	15	0.72%
		Block A Aceh		3	0.24%	1	0.05%	2	0.10%
		South Sumatra Block		15	1.18%	3	0.14%	6	0.29%
		Rimau		3	0.24%	2	0.10%	1	0.05%
		Block B Natuna		0	0.00%	21	1.01%	30	1.44%
		Lematang		2	0.16%	1	0.05%	1	0.05%
		Tarakan		0	0.00%	1	0.05%	0	0.00%
		Jakarta Head Office		37	2.92%	20	0.96%	55	2.63%
	Region	Medco Power Indonesia (Jakarta Head Office)	Power (Indonesia)	5	0.81%	4	0.50%	11	1.33%
		Medco Power Indonesia (Singa)		0	0.00%	0	0.00%	0	0.00%
		Medco Hidro Indonesia (Jakarta)		0	0.00%	2	0.25%	2	0.24%
		Pembangkitan Pusaka Parahiangan (Cianjur)		2	0.32%	2	0.25%	9	1.09%
		Bio Jathropa Indonesia (Cianjur)		1	0.16%	3	0.37%	6	0.73%
		Sangsaka Hidro Barat (Cianjur)		4	0.65%	1	0.12%	0	0.00%
		Medco Cahaya Geothermal (Jakarta)		0	0.00%	0	0.00%	0	0.00%
		Mitra Energi Batam and Dalle Energi Batam (Batam)		4	0.65%	1	0.12%	2	0.24%
		Energi Listrik Batam (Batam)		2	0.32%	4	0.50%	4	0.49%
		Multidaya Prima Elektrindo (Palembang)		0	0.00%	0	0.00%	0	0.00%
		Energi Prima Elektrindo (Palembang)		0	0.00%	0	0.00%	0	0.00%
		Tanjung Jati B (Jepara)		25	4.06%	19	2.37%	20	2.43%
		Medco Geothermal Sarulla (Tapanuli Selatan)		0	0.00%	3	0.37%	11	1.33%
		Medco Ratch Power Riau (Jakarta Head Office)		0	0.00%	0	0.00%	1	0.12%

Indicators/disclosures			Type of entity and location	2016	2017	2018
29. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation (GRI 401-2)			Oil and gas (Indonesia, Oman and Tunisia)	1. Education Refund Plan (MEI and MEPI), Employee Education Assistance (Block B Natuna) 2. Emergency Loan (MEI and MEPI), Loan Salary Advance (Block B Natuna) 3. Pension program - "Penghargaan atas Pengabdian" (MEI and MEPI, Block B Natuna) 4. Service award (MEI and MEPI, Block B Natuna) 5. Scholarship Assistance (Oman) 6. Housing Loan Assistance (Oman) 7. Group benefits plan, include medical, dental and life insurance (Tunisia)		
			Power (Indonesia)	1. Rest and Relax Allowance (Medco Power Indonesia, Medco Geothermal Sarulla) 2. Emergency Loan (Medco Power Indonesia, Tanjung Jati B, Medco Hidro Indonesia, Energi Listrik Batam) 3. Pension Program (Medco Power Indonesia, Tanjung Jati B, Mitra Energi Batam, Dalle Energi Batam)		
30. The definition used for 'significant locations of operation' (GRI 401-2)			Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	As stated in the list benefits above		
31. Total number of employees that were entitled to parental leave, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	226	357	366
		Male		936	1581	1576
	Gender	Female	Power (Indonesia)	59	71	73
		Male		467	498	486
32. Total number of employees that took parental leave, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	33	14	18
		Male		147	130	98
	Gender	Female	Power (Indonesia)	5	3	5
		Male		26	51	33
33. Total number of employees that returned to work in the reporting period after parental leave ended, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	33	14	18
		Male		147	130	98
	Gender	Female	Power (Indonesia)	5	3	5
		Male		26	51	33
34. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	17	33	14
		Male		114	147	130
	Gender	Female	Power (Indonesia)	4	5	3
		Male		24	26	51
35. Return to work rates of employees that took parental leave, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	100%	100%	100%
		Male		100%	100%	100%
	Gender	Female	Power (Indonesia)	100%	100%	100%
		Male		100%	100%	100%
Retention rates of employees that took parental leave, by gender (GRI 401-3)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	100%	100%	100%
		Male		99%	100%	100%
	Gender	Female	Power (Indonesia)	100%	100%	100%
		Male		100%	100%	100%

GRI 403 – Occupational Health and Safety

Indicators/ disclosures	Type of entity and location	2016	2017	2018
36. The level at which each formal joint management-worker health and safety committee typically operates within the organization (GRI 403-1)	Oil and gas (Indonesia), Power (Indonesia)	MedcoEnergi E&P Indonesia HSECom (Health, Safety and Environment Committee) which consists of Board of Directors, Head of Assets, Head of Divisions and Workers Union representative. MedcoEnergi E&P Natuna HSE Action Committee and labor union, whose existence and function are integrated in the organization and the authority structure up to top management. Medco Power Indonesia Medco Power Indonesia and each of its subsidiaries have a health and safety working group which comprises of both management and workers. At MPI level, the working group is a P2K3 (Panitia Pelaksana Keselamatan Kesehatan Kerja) and at each subsidiary, the working group is an HSE Working Group. Each month the group conducts routine meetings and inspections to ensure that the Company's HSE procedures are implemented in accordance with HSE rules and regulations.		
37. Percentage of workers whose work, or workplace, is controlled by the organization, that are represented by formal joint management-worker health and safety committees (GRI 403-1)	Oil and gas (Indonesia), Power (Indonesia)	100%		
38. Types of injury for all workers and employees (GRI 403-2)	Oil and gas (Indonesia), Power (Indonesia)	• Lost Time Injury • Restricted Work Injury • Medical Treatment Injury	• Lost Time Injury • Restricted Work Injury • Medical Treatment Injury	• Fatality • Lost Time Injury • Restricted Work Injury • Medical Treatment Injury
	Power (Indonesia)	-	Fatality	Medical Treatment Injury
39. Total Recordable Incident Rate (TRIR) per 1,000,000 work hours for all workers and employees (GRI 403-2)	Oil and gas (Indonesia, United States, Oman and Tunisia)	1.26	0.70	0.59
	Power (Indonesia)	0	0.35	0.31
40. Occupational Disease Rate (ODR) for all workers and employees (GRI 403-2)	Oil and gas (Indonesia, United States, Oman and Tunisia)	0.00	0.00	0.00
	Power (Indonesia)	0.00	0.00	0.00
41. Lost Time Injury Rate (LTIR) for all workers and employees (GRI 403-2)	Oil and gas (Indonesia, United States, Oman and Tunisia)	0.16	0.18	0.13
	Power (Indonesia)	0	0.35	0.00
42. Work-related fatalities for all workers and employees (GRI 403-2)	Oil and gas (Indonesia, United States, Oman and Tunisia)	0	0	1
	Power (Indonesia)	0	1	0
43. The system of rules applied in recording and reporting accident statistics (GRI 403-2)	Oil and gas (Indonesia, United States, Oman and Tunisia), Power (Indonesia)	The injury rates are calculated as follow: Total Recordable Incident Rate (TRIR) per 1,000,000 work hours = $\frac{\text{number of recordable injuries}}{\text{manhour}} \times 1,000,000$ Occupational Disease Rate (ODR) per 1,000,000 work hours = $\frac{\text{occupational disease case/ manhour}}{\text{manhour}} \times 1,000,000$ Lost Time Incident Rate (LTIR) per 1,000,000 work hours = $\frac{\text{number of lost day cases including fatality}}{\text{manhour}} \times 1,000,000$ Oil and Gas Safety statistics and incident are collected from each asset according to the Incident Management Document guideline PRIME-13-OS-01, this system adopts widely used industrial incident rate calculation and classification, adheres to the Indonesian Government Regulation as in Keputusan Direktur Teknik Pertambangan Migas tentang Pendataan dan Pelaporan Kecelakaan Tambang dated 25 October 1996, and refers to Occupational Safety and Health Administration (OSHA) 29 CFR Part 1904 - Standard for Reporting and Recording Occupational Injuries and Illness.		

Indicators/disclosures	Type of entity and location	2016	2017	2018
		Power Medco Power Indonesia's safety statistics are calculated from subsidiaries according to incident/accident investigation and reporting procedure (A800/C01/SOPR010014), which complies with the Indonesian Government Regulation (Peraturan Menteri Tenaga Kerja No. 3 tahun 1998 tentang Tata Cara Pelaporan dan Pemeriksaan Kecelakaan Kerja and Peraturan Menteri Tenaga Kerja dan Transmigrasi PER-01/MEN/1981 tahun 1981 tentang Kewajiban Melapor Penyakit Akibat Kerja) and Occupational Safety and Health Administration (OSHA) 29 CFR Part 1904 - Standard for Reporting and Recording Occupational Injuries and Illness.		
44. Formal agreements (either local or global) with trade unions that cover health and safety (GRI 403-4)	Oil and gas (Indonesia, United States, Oman and Tunisia), Power (Indonesia)	MedcoEnergi E&P Indonesia Agreement at the local level (Collective Labor Agreement) for 2016-2018 covers: • Health, safety and environment • Personal Protective Equipment (PPE) • Work related accidents/incidents MedcoEnergi E&P Natuna Clauses which formally address health and safety, in line with the HSE Policy, have been included in Collective Labor Agreement and Team Performance Contract (TPC) including: • Health, safety and environment • HSE Committee • Personal Protective Equipment (PPE) • Safety insurance coverage • Healthy working environment Medco Power Indonesia Medco Power Indonesia and all its subsidiaries do not have trade unions. Various health and safety topics are regulated in Medco Power Indonesia's 2016-2018 Company Regulations.		

GRI 405 – Diversity and Equal Opportunity

Indicators/disclosures			Type of entity and location	2016	2017	2018
45. Percentage of individuals within the organization's governance bodies, by gender and age group (GRI 405-1)	Gender	Female	Corporate	25.00%	26.67%	26.67%
		Male		75.00%	73.33%	73.33%
	Age group	Under 30 years old	Corporate	0.00%	0.00%	0.00%
		30-50 years old		31.25%	33.33%	26.67%
		Over 50 years old		68.75%	66.67%	73.33%
46. Percentage of employees per employee category , by gender and age group (GRI 405-1)	Gender	Female	Oil and gas (Indonesia, Oman and Tunisia)	17.82%	17.16%	17.53%
		Male		82.18%	82.84%	82.47%
	Gender	Female	Power (Indonesia)	9.58%	8.84%	8.86%
		Male		90.42%	91.16%	91.14%
	Age group	Under 30 years old	Oil and gas (Indonesia, Oman and Tunisia)	12.54%	9.13%	7.85%
		30-50 years old		76.74%	76.45%	78.30%
		Over 50 years old		10.73%	14.42%	13.84%
	Age group	Under 30 years old	Power (Indonesia)	21.10%	33.50%	33.50%
		30-50 years old		72.73%	61.64%	61.53%
		Over 50 years old		6.17%	4.86%	4.98%

GRI 410 – Security Practices

Indicators/disclosures	Type of entity and location	2016	2017	2018
47. Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security (GRI 410-1)	Oil and gas (Indonesia)	65.35%	63.88%	73.70%
	Power (Indonesia)	100%	100%	97.13%
48. Whether training requirements also apply to third-party organizations providing security personnel (GRI 410-1)	Oil and gas (Indonesia), Power (Indonesia)	Human rights policies and procedures training are also applied to third party security personnel		

GRI 412 – Human Rights Assessment

Indicators/disclosures	Type of entity and location	2016		2017		2018	
		Number	Percentage	Number	Percentage	Number	Percentage
49. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country (GRI 412-1)	Oil and gas (Indonesia)	Not conducted yet				1	14.29%
	Power (Indonesia)	Not conducted yet					
50. Total number of hours in the reporting period devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations (GRI 412-2)	Oil and gas (Indonesia)	Not conducted yet				96 hours	
	Power (Indonesia)	Not conducted yet					
51. Percentage of employees trained during the reporting period in human rights policies or procedures concerning aspects of human rights that are relevant to operations (GRI 412-2)	Oil and gas (Indonesia)	Not conducted yet				1.30%	
	Power (Indonesia)	Not conducted yet					

GRI 413 – Local Communities

Indicators/disclosures	Type of entity and location	2016	2017	2018
52. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs (GRI 413-1)	Oil and gas (Indonesia, Oman and Tunisia)	100%	100%	100%
	Power (Indonesia)	81.82%	81.82%	90.91%

GRI 415 – Public Policy

Indicators/disclosures	Type of entity and location	2016	2017	2018
53. Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary (GRI 415-1)	Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	MedcoEnergi does not support any political party, and make no contributions or donations in any form to any political party or affiliated organization in any location where we operate.		
54. If applicable, how the monetary value of in-kind contributions was estimated (GRI 415-1)	Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	Not applicable		

GRI 419 – Socioeconomic Compliance

Indicators/disclosures	Type of entity and location	2016	2017	2018
55. Significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area (GRI 419-1)	Oil and gas (Indonesia, Oman and Tunisia), Power (Indonesia)	There were no material penalties or sanctions imposed on any of the Company's business units for regulatory violations or compliance issues.		

Feedback Form

The Sustainability Report of MedcoEnergi provides an overview of the Company's sustainability performance. We are looking forward to receive any suggestions for improvement from stakeholders about this Sustainability Report by sending feedback form by email, fax, or mail.

Stakeholders Group

- ☐ Shareholders ☐ Employee ☐ Partners ☐ Government & Regulator
- ☐ Bank & Investor ☐ Community ☐ Customer ☐ Media
- ☐ Others, please specify.....

Please choose the most appropriate answer that suit with the questions below

- | | Yes | No |
|---|--------------------------|--------------------------|
| 1. This report is useful to you. | ☐ | ☐ |
| 2. This report describes Company's performance in sustainability development. | ☐ | ☐ |

Please sort the following material aspects based on the level of importance according to your view for the sustainability of MedcoEnergi (score 1 = most important to 17 = least important).

Local Communities	()
Labour Practices	()
Business Ethics/Fair Business Practices	()
Political and Regulatory Environment	()
Transparency	()
Human Rights	()
GHG Emissions	()
Environmental Impact of Products and Services	()
Access to Natural Resources	()
Procurement Practices	()
Storage and Transportation	()
Biodiversity	()
Effluents and Waste	()
Material and Resource Use	()
Water	()
Privacy and Data Protection	()
Energy Use	()

Please provide suggestion/comments on this report:

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Thank you for your participation. Kindly send this feedback form to the following address:

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