

BUILDING OUR FUTURE **SUSTAINABLE ENERGY** AND NATURAL RESOURCES



2021
MedcoEnergi
Sustainability
Report



BUILDING OUR FUTURE SUSTAINABLE ENERGY AND NATURAL RESOURCES



A large, semi-transparent graphic of a green plant or leaf structure is positioned in the center-right of the page, radiating outwards towards the top right corner. It overlaps several smaller, semi-transparent images: one showing hands holding a donation envelope labeled 'MedcoEnergi Donation Palu Earthquake Relief', another showing two workers in a forest, and a third showing workers installing solar panels on a roof.

2021
MedcoEnergi
Sustainability
Report

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Sustainability Report

MedcoEnergi Sustainability Report

BUILDING OUR FUTURE
SUSTAINABLE ENERGY
AND NATURAL RESOURCES

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2021 Sustainability Report is available at:



For further information, please visit
www.medcoenergi.com

BUILDING OUR FUTURE SUSTAINABLE ENERGY AND NATURAL RESOURCES



MEDCOENERGI 

SUSTAINABLE
DEVELOPMENT
 GOALS

We support the Sustainable Development Goals

 TCFD | TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES

 CDP
DISCLOSURE INSIGHT ACTION

 ibcsd

MedcoEnergi is a co-founder of the Indonesia Business Council for Sustainable Development, the Indonesian chapter of the World Business Council for Sustainability Development (WBCSD)

 SUSTAINALYTICS
a Morningstar company
RATED

PT Medco Energi Internasional Tbk ESG Risk Rating places it 44th in the Oil & Gas Producer industry and 38th in the Oil & Gas Exploration and Production sub industry assessed by Sustainalytics.


MSCI
ESG RATINGS BBB
CCC B BB BBB A AA AAA

As of 2021, PT Medco Energi Internasional, Tbk received an MSCI ESG Rating of BBB.

MSCI ESG Research provides MSCI ESG Ratings on global public and a few private companies on a scale of AAA (leader) to CCC (laggard), according to exposure to industry-specific ESG risks and the ability to manage those risks relative to peers. Learn more about MSCI ESG ratings here.



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ABOUT THIS REPORT

MedcoEnergi publishes an annual Sustainability Report to communicate the Company's policies and approach to sustainable development and to disclose its economic, social, environmental and governance performance.

This report covers MedcoEnergi's activities and performance per material topic between the period of 1st January and 31st December 2021 and provides progress updates on the action plans established to achieve our short, medium and long term sustainability objectives. A summary of the achievements and challenges for 2021 can be found on page 18. There are no significant changes in our materiality assessment since the previous report issued in 2021.

This report was prepared in accordance with the 2016 Global Reporting Initiative (GRI) Standards and its subsequent updates (Core option) and demonstrates the linkage between MedcoEnergi's sustainability performance and the United Nations' Sustainable Development Goals. Unless otherwise stated we use definitions as set out in the GRI Standards. The GRI Performance Data and GRI Content Index are accessible through this link: www.medcoenergi.com or through MedcoEnergi's website: www.medcoenergi.com.

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

Reporting Assurance

The number of data indicators disclosed and assured by KAP Purwantono, Sungkoro & Surja (A member firm of Ernst & Young Global Limited, or "EY") has increased from 75 in 2020 to 86 in this 2021 report. The Company will continue to enhance disclosure and increase the number of assured indicators once reliable and consistent data collection can be maintained across reporting units.

EY Limited Assurance Statement Scope and Limited Assurance of Sustainability Report

MedcoEnergi engaged EY to undertake limited assurance over selected disclosures in the sustainability report. The Subject Matter for EY's limited assurance engagement for the year 2019, 2020 and 2021 was limited to:

- A selection of 86 non-financial performance indicators ('Selected Performance Information') contained in the sustainability report (www.medcoenergi.com).
- The consolidated performance metrics relating to the Selected Performance Information, presented in the sustainability report.

EY's Conclusion Statement

MedcoEnergi engaged EY to undertake a limited assurance as defined by 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) over selected sustainability disclosures in the sustainability report as disclosed in the Appendix 1 of EY's independent limited assurance statement. Based on the limited assurance procedures performed and evidence obtained, nothing has come to EY's attention that causes EY to believe that the Subject Matter set out in MedcoEnergi's Sustainability Report for the year 2021, has not been reported and presented fairly, in all material respects, in accordance with the Criteria.

EY's independent limited assurance statement to the Management of MedcoEnergi is available in the company's website (www.medcoenergi.com).

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Chapter

#01

Messages from Management



Educational Support Program in Bonot Elementary School
Rimau, South Sumatra, Indonesia



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MESSAGE FROM THE CHAIRWOMAN

Energy is one of the indispensable factors for economic and social progress; in fact, access to energy resources affects the quality of life. In other words, energy is a basic human need, and especially so for populations with limited access to energy and consuming far less energy than the wealthier nations. Based on the World Bank's open data of electric power consumption (kWh per capita) 2014, the average electric power consumption in Indonesia is 812 kWh per capita, which is approximately just 22% of the average electric power consumption per capita¹ in Southeast Asia. The value is nearly 7.8 times higher in Europe and 16 times higher in the U.S.

The energy industry's main challenge is how to meet the world's energy needs, while addressing the imperative to combat the environmental problems related to energy production and consumption. During the past year, as the world started to recover from the impacts of COVID-19, discussions around pathways to advance sustainable energy amidst future uncertainties took centre stage. With the Sixth Assessment Report (AR6) published by the Intergovernmental Panel on Climate Change (IPCC) in August, and the 2021 United Nations Climate Change Conference (COP26) held in November, the energy sector placed renewed attention on the growing threats posed by environmental damage and climate change. The year of 2021 was a pivotal year towards a global energy transition in the midst of the pandemic.

Securing the provision of affordable and sustainable energy and natural resources is our mission. Despite pressures from the external landscape, MedcoEnergi has continued to invest in assets and people to further our commitment towards building a stronger company and a just transition. This report aims to reflect the progress we have made along our sustainability and climate journey in the past year, with the end goal of ensuring that our activities create value and have a positive impact for all stakeholders.

Climate change is driving the need for a global energy transition. In response, MedcoEnergi has set net zero climate ambitions for our Scope 1, 2, and 3 emissions and developed a Climate Change Strategy that aims to solidify our business resilience in the face of climate adversity. We have continued to work towards reducing our emissions and expanded our investments in renewable energy, natural gas production, and nature-based solutions to introduce real change in the short-term.

In dealing with the challenges brought by the pandemic, the health and safety of our employees and local communities where we operate have become more important than ever. Through our Environmental, Social and Governance (ESG) initiatives, we will meet our commitment to contribute to the achievement of the United Nations Sustainable Development Goals (UN SDGs). Our initiatives range from introducing the New Ways of Working (NWOW), deploying community development programs, and upholding our Safety and Operational Excellence standards across our business operations. Over the past three years, our ESG ratings have consistently strengthened and we will maintain our ambition for continual improvement.

Adapting to the ever-changing operational landscape is a key part of maintaining an effective risk-management framework. In managing our ESG risks, we set up 5-year sustainability programs and to date have achieved 90% of the goals and key performance indicators (KPIs) from our 2018 materiality assessment. We are currently updating our materiality assessment and conducting a human rights assessment that we anticipate will be completed in 2022. This will ensure that we are focusing on key material issues for our business, even as those issues evolve and new challenges emerge.

MedcoEnergi recognises the critical role of our industry in leading the way towards a low-carbon future, and in transforming uncertainties into opportunities. Our net zero climate ambitions and Climate Change Strategy form the foundations of our long-term sustainability and climate change commitments. We seek your trust and support in our journey ahead.



Yani Y. Panigoro
President Commissioner

¹ Energy consumption data is based on the World Bank's open data (<https://data.worldbank.org>) electric power consumption (kWh per capita) 2014. It is worthy to note that, with regard to the overall energy consumption across other sectors, Indonesia's transport sector is still highly dependent on fossil fuels. However, the country acknowledges this and is pushing towards the utilisation of renewable energy across all sectors, as per the National Mid-Term Development Plan 2020-2024.

Messages from Management



01

Ronald Gunawan
Director & Chief Operating Officer

02

Anthony R. Mathias
Director & Chief Financial Officer

03

Hilmi Panigoro
President Director

04

Amri Siahaan
Director & Chief Administrative Officer

05

Roberto Lorato
Director & Chief Executive Officer

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LETTER FROM THE BOARD

With the growing emphasis on the threats posed by climate change, this reporting year saw greater expectations placed upon the energy sector to take action and invest towards a low-carbon economy. At MedcoEnergi, we understand that securing sustainable energy and resources is vital for maintaining business continuity, which, in turn, allows us to deliver the benefits we promised our stakeholders and the communities where we operate. We are committed to conducting our business with integrity and transparency through our corporate values of being professional, ethical, open, and innovative. This year, one of our priorities was to establish our own pathway to provide sustainable energy by tackling the climate challenge.

Securing Sustainable Energy and Resources

Assessing our environmental footprint is a key step in MedcoEnergi's journey of securing sustainable energy and natural resources. Compared to 2020, we saw a 5% increase in our Scope 1 GHG emission intensity from our oil & gas operations and a 10% increase in Scope 1 GHG emissions from our power operations in 2021. In our oil & gas operations, the increase of our Scope 1 GHG emission intensity was due to operational variability and other temporary activities, such as well intervention. In the power business, due to the increase of electricity demand following the gradual relaxation of COVID-19 restrictions by the government, the total emissions in 2021 increased while the emissions intensity remains stable.

On the other hand, our wholly owned subsidiary, Medco Power, operates two mini hydro power plants with a total installed capacity of 18 MW. In a low-carbon future, renewable energy will be essential to the energy supply, and our expanding portfolio highlights our determination to seize this opportunity. We have started the development of a 30 megawatt (MW) geothermal plant in Ijen, East Java and our 26 megawatt peak (MWP) solar photovoltaic project in Sumbawa is on track for commercial operation. As part of our expansion of the Medco Power business, we have also joined a consortium to develop a 100 MW solar power project on Bulan Island, Riau, for potential export to Singapore.

In 2021, we set ambitious targets for emissions reduction, with a goal of achieving net zero for our Scope 1 and 2 greenhouse gas (GHG) emissions by 2050 and for Scope 3 by 2060. The pillars of our Climate Change Strategy will guide us toward these targets, with each one representing a focus area aimed at tackling climate change holistically and effectively through our business operations. These three pillars are Emissions Reduction, Transition to Low Carbon Energy, and Emerging Physical Climate Risk Management. Our Strategy is rooted in action, and we have already established a governance and risk management system aligned with the recommendations from the Task Force on Climate-Related Financial Disclosures¹ (TCFD). To improve our governance capacity, we are supporting the climate competency of our Board members by participating in the Climate Competent Boards Certificates program.

Empowering Our Workforce

The social challenges caused by the COVID-19 pandemic have only strengthened MedcoEnergi's commitment to safeguarding the health and safety of our workforce. The dedicated task force established in 2020 has launched multiple New Ways of Working (NWOW) initiatives to ensure that our employees remain healthy and supported. These include implementing strict health protocols, introducing new COVID-19-related safety guidelines, providing vaccination programs for all our staff, and establishing a phasing plan for resuming office work.

We continue to see the fruits of our efforts to maintain a Culture of Excellence. Our overall Total Recordable Incident Rate (TRIR) shows a decreasing trend since 2017. We are also proud to have met our targets in achieving zero Lost Time Injuries (LTI) and zero Process Safety Events (Tier-1) for all operating assets of oil & gas and power. Moreover, last year, we introduced the Operational Excellence Framework to our international assets, starting with Thailand.

¹ A set of recommendations, established by the Financial Stability Board, which aims to incorporate climate risks and opportunities and enable companies and organisations to make transparent climate-related disclosures around four thematic areas: governance, strategy, risk management, and targets (www.fsb-tcfd.org).

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Supporting Our Local Communities

Looking after our people does not stop with our employees and we are committed to creating long-lasting positive impacts for the communities surrounding our operations. During this reporting year, we have helped local communities to build their resilience against the impacts of the COVID-19 pandemic. We enhanced the capacity of school teachers through a series of virtual training sessions. We delivered an online tutoring program to prepare students for university admission through remote learning, 95 out of 249 students successfully passed admission tests in various state universities. Other initiatives include a vaccination program for senior citizens and the visually impaired, as well as donations of oxygen tubes to several hospitals in Central Kalimantan. We also launched local programs to mitigate climate change impacts, such as the Climate Village Program in Tarakan, North Kalimantan and provision of financial support for a mangrove restoration program in Chumphon Province, Thailand that covers 32 hectares. We extended our support to several communities in Indonesia impacted by natural disasters.

At MedcoEnergi, we aim to conduct our business with the utmost integrity and strive for diligence and transparency in our reporting. In the area of business ethics and corruption, we included our partner (JOB Tomori) and power subsidiaries in the scope of ABMS ISO 37001 certification in addition to the oil & gas assets in previous years. We have disclosed our climate change data through the Carbon Disclosure Project¹ (CDP)'s reporting platform and have aligned our climate reporting to TCFD recommendations, starting with this sustainability report.

Our tenth sustainability report encapsulates our journey of creating opportunities from complex global challenges. MedcoEnergi will continue to supply safe, reliable, and sustainable energy, while working towards a more equitable society and a cleaner environment.



Hilmi Panigoro
President Director



Roberto Lorato
Director & Chief Executive Officer

¹ An international non-profit organisation that helps companies and cities disclose their environmental impact (www.cdp.net).

Chapter

#02

Our Year in Summary



Replantation Activities for Watershed Rehabilitation
South Sumatra, Indonesia

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Improving our Economic Performance

At MedcoEnergi, we aim to build long term value for our stakeholders with our sustainable energy and natural resources businesses. We track our economic, social and environmental performance to ensure that we conduct our business with the utmost integrity and transparency.

	2019	2020	2021
Production	103 MBOEPD Oil & Gas 2,600 GWh Total IPP Sold	100 MBOEPD Oil & Gas 2,639 GWh Total IPP Sold	94 MBOEPD Oil & Gas 2,718 GWh Total IPP Sold
Revenue (USD) ¹	1,338,286,779	1,111,772,590	1,332,359,131
Net Profit/(Loss) (USD) ²	(38,765,488)	(192,825,309)	47,019,404
Third Party Supplier Breakdown (USD) ³	72,906,345 (57%) Indonesia 54,662,012 (43%) International	96,870,938 (66%) Indonesia 50,420,159 (34%) International	109,361,475 (66%) Indonesia 55,308,644 (34%) International
New and Renewable Energy Products	Cibalapulang and Pusaka Mini Hydro Two 9 MW mini-hydropower plants in West Java		
	Sumbawa and Bali Solar PV Project One 26 MWp and two 25 MWp solar PV facilities		
	Ijen Geothermal Project One 30 MW geothermal power plant located in Ijen, East Java		

		2019	2020	2021
Oil and Gas Production (mboepd)	Target	100 ⁴ / 110 ⁵	100 - 105	94 - 95
	Realisation	103 ⁴ / 115 ⁵	100	94
Oil and Gas Capital Expenditure (in million US\$)	Target	240 ⁴ / 290 ⁵	180	150
	Realisation	194 ⁴ / 237 ⁵	144	83
Power Sales (in GWh)	Target	2,850	2,600	2,700
	Realisation	2,600	2,639	2,718
Power Capital Expenditure (in million US\$)	Target	110	60	65
	Realisation	119	63	31

¹ Revenue data is taken from 2021 Economic Performance, Direct economic value generated, page 24, which refers to GRI 201-1 Guidance for Disclosure

² Net Profit/Loss is taken from Full Year 2020 Financial Statement for 2019 data and Full Year 2021 Financial Statement for 2020 & 2021 data

³ Based on third-parties Trade Payable data

⁴ Financial Ophir

⁵ Proforma Ophir

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Safeguarding our Environment

We manage our energy consumption and resource use to minimise environmental impact, protect ecosystems and biodiversity. Further details regarding our efforts can be read in Chapter 6 and 7.

	2019	2020	2021
Energy Consumption (million GJ)	20.1 Oil & Gas 10.5 Power	18.2 Oil & Gas 8.6 Power	18.5 Oil & Gas 9.5 Power
Water Consumption (mega Litre)	1,097.11 Oil & Gas 210.52 Power	758.13 Oil & Gas 221.38 Power	556.35 Oil & Gas 16.28 Power
Waste Reduction from Oil & Gas (tonnes)	1,302 Non-hazardous Waste 4,062 Hazardous waste	931 ($\downarrow 35\%$) Non-hazardous Waste 2,261 ($\downarrow 44\%$) Hazardous waste	607 ($\downarrow 35\%$) Non-hazardous Waste 1,467 ($\downarrow 35\%$) Hazardous waste
Emissions (Scope 1 and Scope 2) (million tCO ₂ e)	1.7 Oil & Gas 0.9 Power	1.4 ($\downarrow 18\%$) Oil & Gas 0.8 ($\downarrow 11\%$) Power	1.4 (0%) Oil & Gas 0.9 ($\uparrow 13\%$) Power
Biodiversity and Conservation Initiatives	28 hectares Total Planted Area Leasehold of Forest Area (IPPKH) 43 hectares Total Planted Area Beyond regulatory requirements	90 hectares Total Planted Area Leasehold of Forest Area (IPPKH) 11 hectares Total Planted Area Beyond regulatory requirements	68 hectares Total Planted Area Leasehold of Forest Area (IPPKH) 12 hectares Total Planted Area Beyond regulatory requirements

CORRIDOR ACQUISITION EMISSIONS DATA

As part of our strategy to grow gas as a transition energy source, we recently closed the Corridor PSC acquisition from ConocoPhillips Indonesia Holding Ltd (CIHL) in Q1 2022. The table below shows the total oil and gas Scope 1 and Scope 2 emissions from 2019-2021 if Corridor past emissions data are included. Moving forward, we will include these figures in our emissions inventory for determination of 2019 as the base year. The base year for our emissions strategy has been chosen as 2019 in reference to the Greenhouse Gas Protocol¹. The total oil & gas emissions Scope 1 and Scope 2 data for 2019 - 2021 below includes Corridor, Ophir Energy plc and heritage MedcoEnergi emissions. This total emission data will be assured by a third party in the next reporting cycle. Futher elaboration is provided in Chapter 7, page 77.

	2019	2020	2021
Corridor Emissions Scope 1 & Scope 2 (million tCO ₂ e)	3.6 Oil & Gas	3.2 ($\downarrow 11\%$) Oil & Gas	3.0 ($\downarrow 6\%$) Oil & Gas
Total Oil & Gas Emissions Scope 1 & Scope 2 including Corridor (million tCO ₂ e)	5.3 Oil & Gas	4.6 ($\downarrow 13\%$) Oil & Gas	4.4 ($\downarrow 4\%$) Oil & Gas

¹ The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard Revised Edition by World Business Council for Sustainable Development and World Resource Institute, March 2004 (<https://ghgprotocol.org/corporate-standard>)

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Supporting our Communities

Together with communities and other stakeholders, we continued to develop and implement our community development programs to empower and create resilient and self-reliant communities. Further details regarding our programs can be read in Chapter 8.

The following table summarises MedcoEnergi's support for community empowerment initiatives over the last three years:

	2019	2020	2021
Total Funding For Community Development Program (USD)	1,887,611	1,757,433 (+6.9%)	1,981,992 (+12.8%)

MedcoEnergi has introduced initiatives responding to the needs such as :

	Mangrove Plantation in Chumphon Province, Thailand
	<ul style="list-style-type: none"> • Provided financial assistance to the Mangrove Forest Development Station. • Expanded forested acreage to 32 hectares by 2021.
	Vaccination Access to Vulnerable Groups in South Jakarta, Indonesia
	<ul style="list-style-type: none"> • Collaborated with the South Jakarta Health Agency Office to improve vaccination access to vulnerable groups and improve community resilience. • Established vaccination centres and provided mobility support for the elderly and the visually impaired.
	Climate Village Program in Tarakan, Indonesia
	<ul style="list-style-type: none"> • Involved the local government and communities in developing adaptation and mitigation initiatives against climate change impacts. • Installed water supply reservoirs to households for clean water access by 2021.

Chapter

#03

About MedcoEnergi



Central Processing Plant
Block A, East Aceh, Indonesia

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MedcoEnergi is a leading Southeast Asian based energy and natural resources company. With strong ESG records and a climate aspiration to net zero, the Company is well placed to benefit from the rapid economic growth in the region, and the growing demand for clean sustainable energy.

MedcoEnergi in Brief

MedcoEnergi is a leading Southeast Asian energy and natural resources company listed on the Indonesia Stock Exchange (MEDC-IDX), focused on three key business segments, Oil & Gas, Clean Power and Copper Mining. The shared ownership of MedcoEnergi consists of PT Medco Daya Abadi Lestari 51.50%, Diamond Bridge Pte Ltd. 21.46% and Public 27.04%. MedcoEnergi produces oil and gas primarily in Indonesia with an increasing presence in Southeast Asia. The Group operates gas, solar PV, geothermal and hydro power plants in Indonesia through Medco Power and owns a non-consolidated interest in a large Indonesian copper and gold mine, Amman Mineral Nusa Tenggara (AMNT). The Company is well placed to benefit from the region's rapid economic growth and expanding demand for clean energy. Considering the non-controlling nature of our interest, we do not include AMNT ESG activities in this Sustainability Report.

MedcoEnergi has interests in 16 oil and gas properties in Indonesia, 12 of which are producing. The Company also has interests in 12 oil and gas properties in eight further countries, with key producing assets in Oman, Thailand, Vietnam and Yemen and additional assets in Malaysia, Libya and Tanzania. In 2021, oil and gas production was 94 MBOEPD (in line with the Company's guidance). Oil & Gas costs were US\$9.8 per BOE, within the Company's

long term sub US\$10 per BOE commitment. In December 2021 MedcoEnergi announced it had entered into an agreement to acquire ConocoPhillips Indonesian Assets, which include a 54% working interest in Corridor PSC and a 35% interest in Transasia Pipeline Company Pvt. Ltd. The acquisition completed in March 2022 and builds upon a track record of accretive acquisitions. It also strengthens MedcoEnergi's footprint in Southeast Asia and fits well with Company's Climate Change Strategy.

MedcoEnergi, through its wholly-owned subsidiary Medco Power Indonesia, promotes clean energy solutions through its operated gas, solar PV, geothermal and hydro power plants in Indonesia. Medco Power Indonesia owns and operates nine small to medium-sized IPPs and provides operational and maintenance services to its own and to third-party power plants.

Medco Power Indonesia commissioned the 275 MW Riau gas-fired IPP in December 2021, and reached commercial operation in February 2022. In 2021 Medco Power formed a strategic alliance with Kansai Electric Power Company to further strengthen our capabilities and allow us to continue developing our Gas IPP and O&M businesses through the application of advanced technology and best international practices.

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Central Processing Plant Block A, East Aceh, Indonesia

In 2021 Medco Power also progressed the construction of a 26MWp Solar PV facility in Sumbawa and in Q1-2022 signed a power purchase agreement with PLN to develop two 25MWp Solar PV facilities in Bali. In fourth-quarter 2021, a consortium of Medco Power, PacificLight Power Pte Ltd. and Gallant Venture Ltd. received an in-principle import license from Singapore's Energy Market Authority to develop a pilot Solar Power Import facilities from Indonesia to Singapore on Pulau Bulan Island, Kepulauan Riau Province. The project will have an installed capacity of 670 MWp in the initial phase, which will provide 100 MW equivalent of non-intermittent electricity.

As part of its Climate Change Strategy, MedcoEnergi has committed to reach net zero greenhouse gas (GHG) emissions for Scope 1 and 2 by 2050 and Scope 3 by 2060.

During the past three years, MedcoEnergi has worked hard to strengthen its ESG ratings. The MSCI rating improved from B to BB in 2020, and to BBB in 2021. Sustainalytics risk score moved from 49.9 to 46.9 in 2020 and to 42.2 in 2021. In line with these improvements, MedcoEnergi achieved 90% of the sustainability goals set in the 2018 Materiality Assessment.

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2021 Sustainability Performance at a Glance

Highlights

Governance

Obtained **ISO 37001:2016 Anti-Bribery Management System certification** for Medco Power's subsidiaries (PT Mitra Energi Batam/Dalle Energi Batam, PT Energia Listrik Batam and PT Tanjung Jati B Power Services) and a Joint Venture (JOB Tomori).



Launched the **Corporate Sanctions Compliance Policy** and the **Sanctions Compliance Program**.

Recognized as **The Most Improved Public Listed Company in Big Cap Category** by Indonesia Institute for Corporate Directorship at the 13th IICD Corporate Governance Award 2022.

Environmental Management

Became a member of CDP in May 2021 to improve the accountability and transparency of MedcoEnergi's climate actions.



Established **Climate Change Strategy** with an aspiration to achieve **net zero** for Scope 1 and Scope 2 emissions by 2050 and net zero for Scope 3 emissions by 2060.

Maintained **Gold PROPER rating** for JOB Tomori, and received **Green PROPER rating** for South Natuna Sea Block B from the Indonesian Ministry of Environment and Forestry.

Social Management and Community Empowerment

Conducted capacity building across the organization in the implementation of our **Social Management System** to strengthen social risk management.



Continued to **empower local communities** through education and capacity-building programs, in addition to collaborate with the government and other stakeholders in managing the impact of the pandemic through vaccination program and donation of medical supplies.

Health and Safety

Improved **Corporate Total Recordable Injury Rate (TRIR)** from 0.33 in 2020 to 0.29 in 2021, lower than the average TRIR of the International Association of Oil & Gas Producers (IOGP) Asia/Australasia.



Achieved **zero fatalities** and **zero Tier-1 process safety events** in 2021.

Lowlights

Community Health and Safety

In April 2021, during routine well maintenance work in Block A, Aceh, residents of Panteun Rayeuk T Village in East Aceh, located near the operation area, were affected by a strong odor. The Company quickly began evacuating the residents and together with the local government and independent parties, investigated the source of the odor and took care of the evacuees. The investigation soon determined that SO₂, H₂S, and CH₄ levels were normal, and the evacuees were returned to their villages quickly and safely¹.



¹ for further information please refer to chapter 8 page 88.

- Strengthening Our Environmental and Social Safeguards
- Paving the Ground for Net Zero
- Creating Opportunities for Communities
- Empowering our People, Securing Sustainable Growth
- Strengthening Our Health & Safety Culture

Vision, Mission, & Corporate Values

VISION

To be the Energy Company of Choice for our investors, shareholders, partners, employees and the communities where we operate.

MISSION

To build long-term value with a portfolio of sustainable energy and natural resource businesses.

CORPORATE VALUES



Professional

All employees must conduct themselves in a professional manner by:

- Being competent in their area of expertise.
- Having a "champion spirit".
- Always seeking self-improvement.
- Having professional capabilities and knowing their own limits.



Ethical

All employees must conduct themselves in an ethical manner by:

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



Open

All employees must make efforts to promote transparency by:

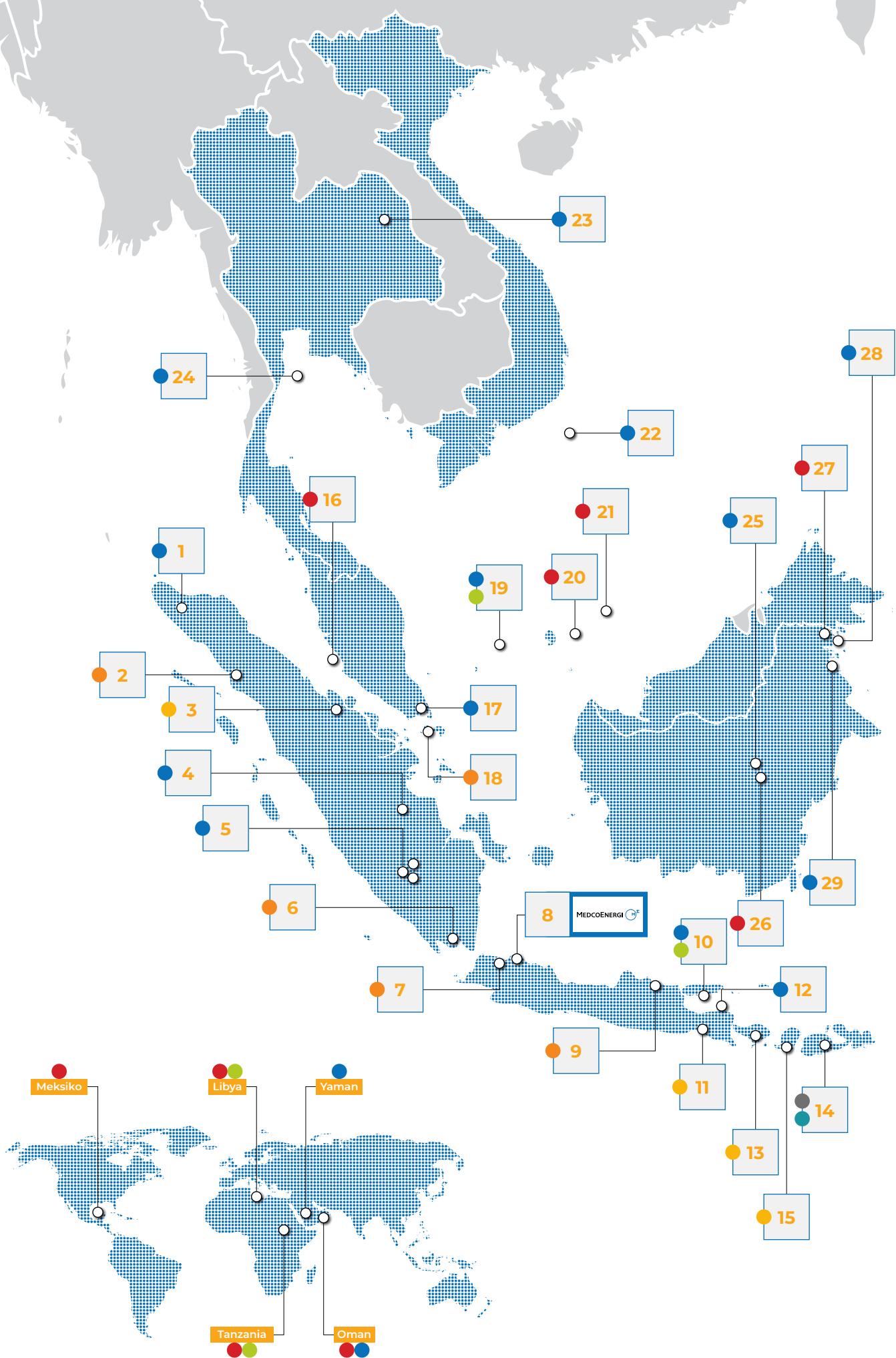
- Encouraging informality and openness in communication at all levels.
- Building an environment of trust among employees and management.
- Being open-minded in thought, behavior and work.



Innovative

All employees must cultivate a spirit of innovation by:

- Building a culture of trailblazers.
- Continuously searching for innovative solutions to achieve better, safer and cost-effective outcomes.
- Having intellectual and emotional maturity.

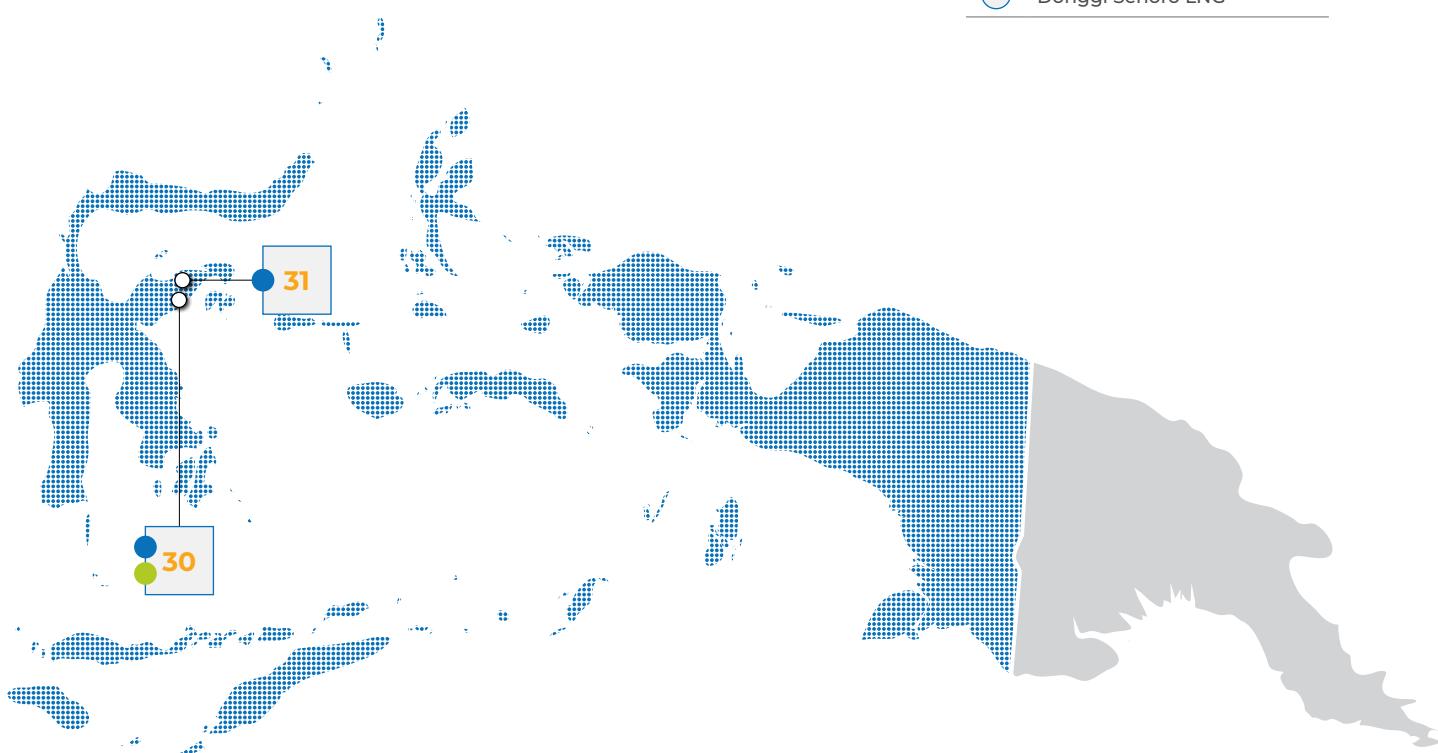


- Strengthening Our Environmental and Social Safeguards
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1	Block A Aceh
2	Sarulla Geothermal
3	Riau IPP
4	Corridor
5	South Sumatra Region
6	South Sumatra IPP
7	Cibalapulang Mini Hydro
8	The Energy Building (HQ)
9	Pusaka Mini Hydro
10	Sampang

11	Ijen Geothermal
12	Madura Offshore
13	Bali Solar PV
14	Batu Hijau & Elang Mines
15	Sumbawa Solar PV
16	PM322, Malaysia
17	ORF, Singapore
18	Batam IPP
19	South Natuna Sea Block B
20	South Sokang

21	North Sokang
22	Block 12W, Vietnam
23	Sinphuhorm, Thailand
24	Bualuang, Thailand
25	Bangkanai
26	West Bangkanai
27	Bengara
28	Tarakan
29	Simenggaris
30	Senoro-Toili
31	Donggi Senoro LNG



Oil & Gas

- Production
- Development
- Exploration



Power

- Installed
- Development



Mining

- Production
- Development
- Exploration

Business at a Glance



Oil & Gas

12

Onshore Production Assets

5

Offshore Production Assets

10

Exploration Assets

9

Presence in Countries



Power

638 MW

IPP Power Capacity

1,650 MW

O&M Power Capacity

6

Operated Gas-fired IPPs

1

Non-Operated Geothermal IPP

2

Operated Mini Hydro IPPs



ESG

Zero Fatality

Zero Tier-1
Process Safety Event

us\$ 1.98 million

CSR Spending
Oil & Gas and Power
an increase of 12.8%
compared to 2020

Climate Change Strategy

Net Zero for **Scope 1** and
Scope 2 Emissions by **2050**

Net Zero for **Scope 3**
Emissions by **2060**



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Supply Chain Management

Our suppliers play an important role in our business. When conducting our business, we continuously assess opportunities to improve the resilience of our supply chains to mitigate risk and secure better access to supplies and markets. We procure our goods and services in a transparent and accountable manner, maintaining active communication and ensuring access to our policies and systems. We do not employ child labour and forced labour in our operations. We require suppliers/contractors to comply with Medco's Code of Conduct and fulfill all prevailing laws and regulations.

We continued participating in the Key Performance Indicator (KPI) assessments for the Production Sharing Contract (PSC) operation, where our oil & gas operations were ranked in the Top Three for the third consecutive year. The assessments were conducted by SKK Migas¹ and cover the evaluation of our assets, customs, supply chain management, and provision of goods and services. Furthermore, our MedcoEnergi Supply Chain Management (SCM) received the "Most Committed and Cost Efficient Drilling Rig" award in 2020. The award highlighted our achievement of supporting the efficient and timely drilling programs to meet SKK Migas' production targets.

In 2021, we enhanced our e-procurement platform for our operations in Indonesia and Thailand, established a process for onshore and offshore material management, and initiated the development of corporate warnings and sanctions for Medco Energi Internasional (MEI), Medco Power Indonesia (MPI) and Medco Thailand. These initiatives were

introduced as part of our efforts to strengthen our SCM infrastructure.

Our SCM team has been involved in various internal and external engagements during this reporting year. For instance, we contributed as the lead Subject Matter Expert (SME) at SKK Migas and PSC's 2021 National Capacity Forum and conducted knowledge sharing sessions on the domestic component requirement (*Tingkat Kandungan Dalam Negeri*) with our active contractors. These involvements represent our proactive approach of engaging with our supply chain.

At MedcoEnergi, we host our annual Vendor Days to communicate the Company's policies, progress and plans to our vendors. We conducted virtual Vendor Day for our oil & gas operations, which was attended by 1,137 participants. During the event, we shared insights and key updates on vendor-related topics, such as the Company's Anti-Bribery Management System (ABMS), our Climate Change Strategy and the use of local products. Meanwhile, our power operations conducted Contractor Forum in Batam which was attended by 75 vendors to emphasize the commitment to safety and compliance with company rules and regulations.

Our initiatives extend beyond our operations. With the COVID-19 pandemic impacting accessibility to healthcare and equipment, MedcoEnergi SCM collaborated with SKK Migas, KADIN and the local police force to provide oxygen gas cylinders for COVID-infected patients.



Medco Power Contractor Forum 2021 in Batam, Riau Islands Province, Indonesia

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2021 Economic Performance

Direct Economic Value Generated and Distributed

	Value (US\$)	Value (US\$)	Value (US\$)
	2019 ¹	2020	2021
Direct economic value generated	1,388,286,779	1,111,772,590	1,332,359,131
Revenues	1,388,286,779	1,111,772,590	1,332,359,131
	2019 ¹	2020	2021
Economic value distributed	1,171,596,971	945,652,976	1,066,742,066
Operating costs	647,919,925	500,371,598	514,920,147
Employee wages and benefits	99,405,231	89,686,142	93,957,547
Payments to providers of capital	227,274,338	282,220,004	225,134,721
Payments to host countries governments	195,358,203	72,353,410	231,900,686
Community investments	1,639,274	1,021,821	828,965
Economic value retained	216,689,807	166,119,615	265,617,065

¹ In accordance with the provisions of Indonesia Statement of Financial Accounting Standards/PSAK No. 22, the management of the Group retrospectively adjusted the provisional amounts of net asset arising from the acquisition of Ophir Energy Ltd on May 22, 2019, as previously reported in the Group's consolidated financial statements as of December 31, 2019 and for the year then ended to reflect the final fair value of such identifiable net assets. Also, in accordance with PSAK No. 58, the Group also restated the profit and loss accounts pertaining to the operations of PT Medco Geopower Sarulla which have been previously presented under "Continuing Operations" for the year ended December 31, 2019. Accordingly, the Group restated its consolidated financial statements for the year ended December 31, 2019.

Chapter
#04

Our Sustainability Approach



Organic Rubber Cultivation Program
South Sumatra, Indonesia

MedcoEnergi's Three Pillars of Sustainability
Journey to Sustainability
Engaging Our Stakeholders

26 ESG Standards and Performance
28 MedcoEnergi's Membership and Initiatives
30

32

32

OUR SUSTAINABILITY APPROACH



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

MEDCOENERGI'S THREE PILLARS OF SUSTAINABILITY

At MedcoEnergi, we strive to cultivate strong relationships with our stakeholders to generate sustainable shared value. We conduct our business with integrity and transparency to secure our social license to operate. We are committed to protect our people's health and safety, safeguard the environment, and support local communities with empowerment programs, which are reflected in our three pillars of sustainability policy. This approach is driven by a strong foundation of governance directed towards achieving the targets outlined in our sustainability framework.

The COVID-19 pandemic continued to present significant challenges for our sustainability programs during 2021. Three task forces were established in

2020 and have since been closely managing day-to-day pandemic risk mitigation, reporting directly to a steering committee and the board. One task force is ensuring the health and safety of the workforce through strict operational protocols, the second is managing office working arrangements and conducting health campaigns for our workforce and their families, and the third is working with stakeholders to mobilise resources to support the communities around MedcoEnergi's operational areas.

We continue to assess and monitor the risks of the pandemic, address the social and economic impacts, and minimise any disruption to our operations. The mitigation measures we have in place are continuously improved and adjusted to prioritize the health and safety of our employees, their families, and communities surrounding our operational areas.

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We built the Zubir Mahmud Hospital in 2015 as part of our community development program for the Block A gas field in East Aceh, Indonesia and continue our collaboration with them until the present day.

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 recognising and rewarding individual performance and expecting personal accountability. All levels of our management are expected to set clear directions towards our expectations.

Environment and Social Development

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 practices 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 for Business and Human Rights, and the Voluntary Principles on Security and Human Rights, and to learning from and applying industry best practices and relevant international standards.

Local Community Empowerment

MedcoEnergi endeavours 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 SDGs.

These pillars are enshrined in our core Corporate Values and Good Corporate Governance Principles, which we uphold vigorously.

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MedcoEnergi Three Pillars of Sustainability

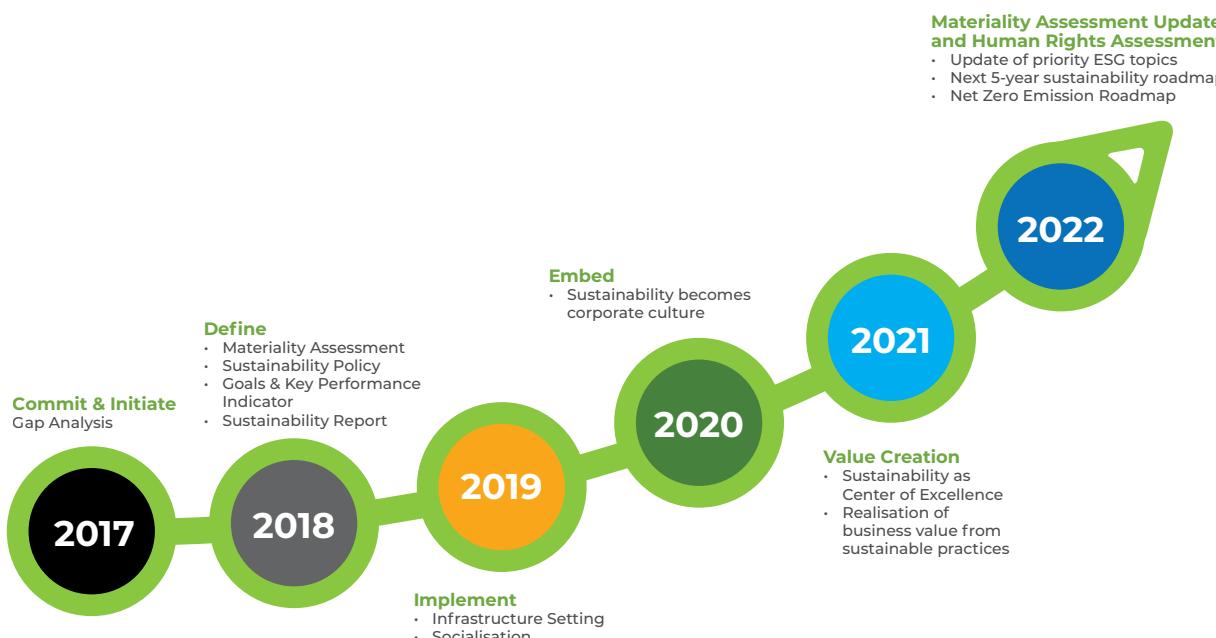


Governance

Anti-Bribery & Corruption (ABC); Human Rights; Public Policy; Socio-economic Compliance; Supply Chain Management; Enterprise Risk Management

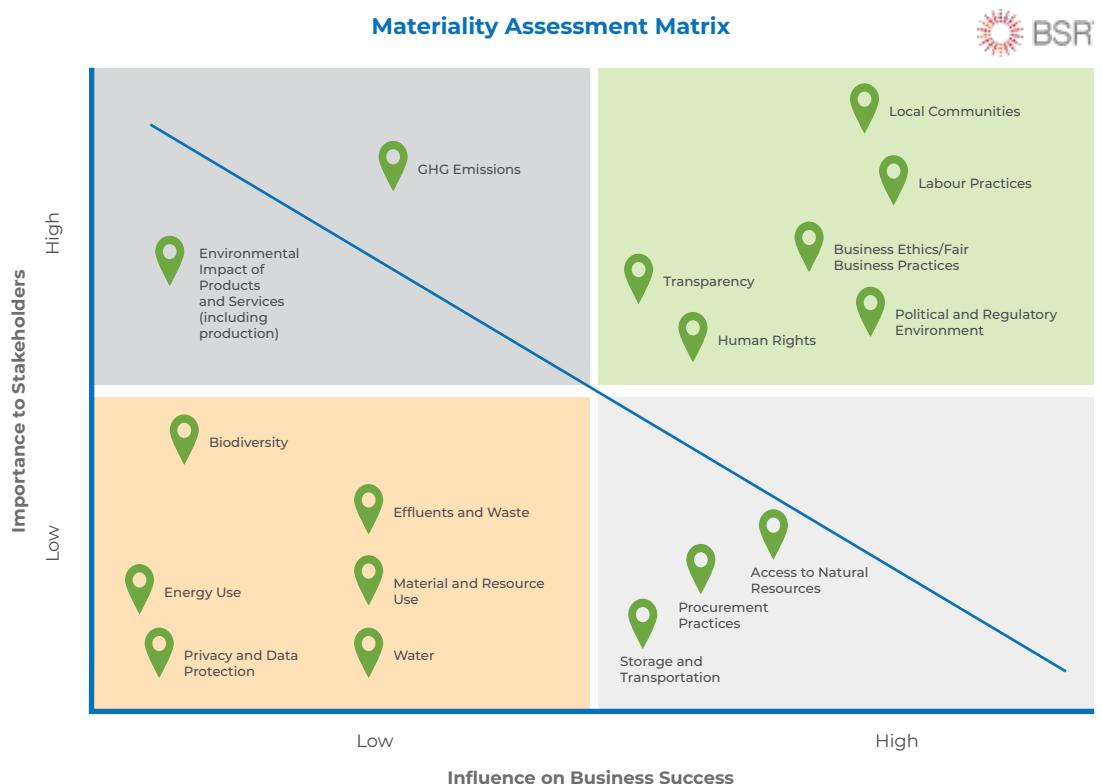
JOURNEY TO SUSTAINABILITY

At MedcoEnergi, we aim to embed and develop a sustainability culture across our operations and projects along with integrating environmental, social, and governance (ESG) aspects into our business.



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Our sustainability policy is designed to encompass short and medium to long term goals. In 2018, we conducted a risk-based materiality assessment with the help of Business for Social Responsibility (BSR). Through inclusive engagements with our internal and external key stakeholders, we identified material issues that are relevant to our business, as represented in our materiality matrix below.



Based on this materiality assessment, our priority issues include the following:

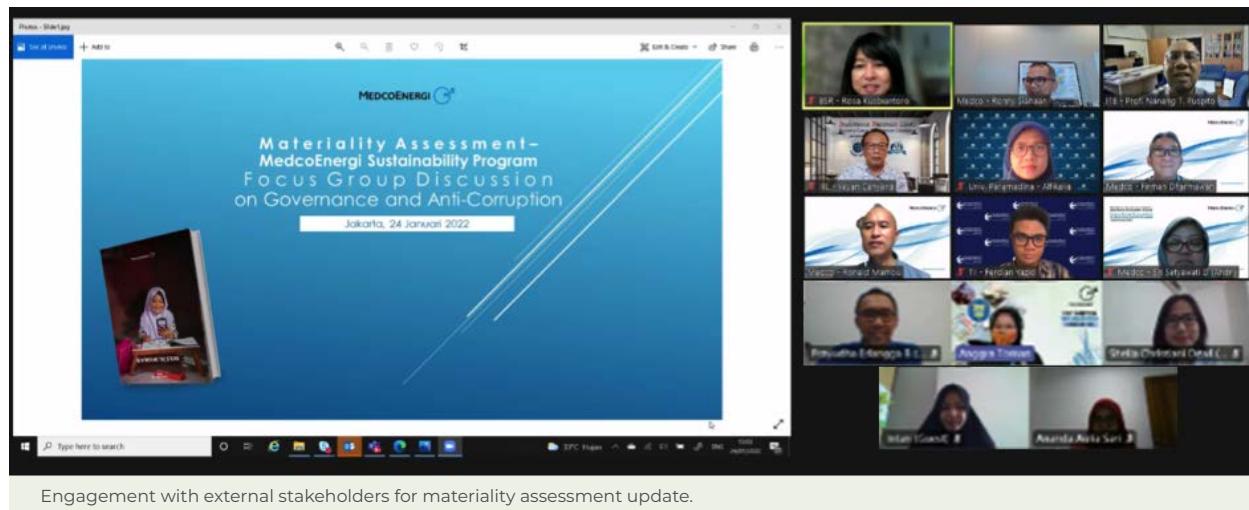


Updating the Materiality Matrix

In response to the accelerating sustainability demands from stakeholders, we are renewing our 2018 materiality assessment. This will help us to update our priority Environmental, Social and Governance (ESG) topics and set the 5-year roadmap for our goals and key performance indicators from 2022 to 2026.

Our update will be based on a double materiality assessment that will inclusively engage strategic internal and external stakeholders to understand their key perspectives on the most important sustainability risks, opportunities and impacts. After analysing the results, we will formulate a new materiality matrix and include it in our next sustainability report.

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Defining Our Climate Change Strategy

The implications of climate change have become increasingly more apparent, as highlighted by the Intergovernmental Panel on Climate Change (IPCC) this year, and many are looking towards the energy sector to address such challenges by driving the shift towards a low-carbon energy transition.

Positioned as a leading natural resources company in Southeast Asia, MedcoEnergi recognises the need to tackle the climate challenge, whilst simultaneously meeting the region's energy demands. Therefore, we established and publicly issued our Climate Change Strategy in 2021. The Strategy aims to provide guiding principles for our business and operations to achieve our net zero emissions goals.

Our strategy also emphasizes the need to transition towards greener energy sources. Our Climate Change Strategy enables us to continue to deliver value for our stakeholders in face of future uncertainties. We aim to utilise this Strategy to holistically tackle and manage climate-related transition and physical risks by reducing our emissions intensity and paving the way towards a low-carbon future. Further details regarding our Climate Change Strategy can be seen in Chapter 7.

ENGAGING OUR STAKEHOLDERS

Stakeholder engagement is critical to ensure our social license to operate. It allows us to remain informed and addresses our stakeholders' expectations, priorities, and needs.

Broadly, our stakeholders include local communities, local and central government authorities, non-government organizations (NGO's), the media,

our supply chain, and our shareholders. Through campaigns and regular meetings, we received feedbacks, which are then incorporated into our programs and targets for operational activities, community development, social welfare improvement, and environmental conservation.

In 2021, we continue our partnership with BSR and other international and national organisations, such as the Indonesia Business Council for Sustainable Development (IBCSD) and Global Reporting Initiatives (GRI).

MedcoEnergi participates in events aiming to inspire others and share our knowledge and experience on climate change and other relevant sustainability topics. We contributed virtually as a panellist at a webinar on *Aligning ESG and Sustainability Reporting* in collaboration with Environmental Resource Management (ERM) and GRI on 18 March 2021. We also took part in the Indonesian Climate Change Virtual Expo in June 2021. The Expo was hosted by the Indonesian Ministry of Environment and Forestry as part of the "Road to Glasgow" series of conventions leading up to the COP26 later that year. MedcoEnergi presented the Company's climate action, sustainability policies, and strategies, as well as our initiatives for supporting the journey towards a greener future. This builds on continuous engagement with the Indonesian Ministry of Environment and Forestry from the previous year. In 2020, our board member, Mr. Yaser Raimi Panigoro, contributed as one of the key speakers in the Indonesia Youth Climate Summit webinar.

The following table lists the sustainability and climate change-related events where members of our Board of Directors (BoD) have participated in this year:

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- Paving the Ground for Net Zero
- Creating Opportunities for Communities
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Member of the BoD	Event	Date
Hilmi Panigoro President Director	Conference Rumah Mentor Indonesia (RUMI)	As part of RUMI's steering committee, Mr. Panigoro participated in the conference as a representative of one of the country's leading energy companies.
	CNBC Indonesia	Mr. Panigoro discussed about Carbon Tax and its implications towards the energy sector.
	Investor Daily Summit 2021	Mr. Panigoro contributed as a panelist and shared about increasing investments in renewable energy.
	The 10 th Indonesia Directorate General of New Renewable Energy and Energy Conservation Convention & Exhibition (EBTKE ConEX)	Mr. Panigoro shared MedcoEnergi's energy transition agenda.
Ronald Gunawan Chief Operating Officer	The 2 nd International Oil & Gas Convention	Mr. Gunawan shared about MedcoEnergi Transformation and Beyond
Roberto Lorato Chief Executive Director	"Indonesia's Oil & Gas Industry: Towards the Green Transition" hosted by the Italian and British Embassies	Mr. Lorato presented MedcoEnergi's Climate Change Strategy and our approach to climate action.

MedcoEnergi's Stakeholders

Shareholders	Our Corporate Governance principles require that we protect the interests of our shareholders. We conduct General Meetings with shareholders to present the Company's annual results and adopt resolutions, including the appointment and termination of Commissioners and Directors, material decisions regarding investments and divestments, and other significant corporate actions. Our management team also has regular engagement with our investor base.
Employees	We hold regular meetings with Worker Union representatives to ensure an open line of communication concerning employee aspirations and the Company's ability to meet those aspirations. We also have communication forums as an effective way to resolve matters of employee relations and employment benefits, terms and conditions.
Contractors, Suppliers and Business Partners	The Corporate Governance principles and Corporate Values guide all of our engagements with contractors, suppliers and business partners. The newly revised Code of Conduct has been communicated to 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 mutually beneficial relationships.
Communities	Our local community empowerment entails strengthening engagement, enhancing livelihoods and creating self-reliant and resilient communities wherever we operate. Our community development teams facilitate the establishment and implementation of stakeholder engagement and community development plans. We established a corporate-level Social Management System (SMS) which includes a grievance mechanism as an avenue for local community members to communicate their aspirations or concerns directly to MedcoEnergi and ensure that the grievances are addressed in a timely manner. We have also standardised our online recording system of grievances for better closure monitoring.
Government and Regulators	MedcoEnergi engages governments and regulators in various ways, including consultation and cooperation with government agencies to strengthen policies and activities to mitigate adverse impacts on our operations' environmental, social and health issues. We regularly conduct consultations with government authorities on employment and workforce recruitment issues and cooperate to bolster local communities' capacity and develop and empower local economies.
Banks and Investors	We issue periodic monitoring reports to our lenders and provide data on ESG indicators in our Sustainability Report and quarterly investor update materials. We also work with banks that adhere to the Equator Principles ("EP Lenders") to finance our projects, such as in Senoro Toili JOB, Block A, Sarulla Geothermal and Riau.
Non-Government Organisations (NGOs)/Civil Society	NGOs and civil society organisations are important stakeholders that we engage on a proactive basis. We maintain communication with stakeholders from the NGO community to listen to and gather feedback.
Consumers	We support consumers with our production both directly and indirectly. We contribute to the government objectives of increasing natural gas use as a viable source of energy for Indonesia, Singapore and Vietnam. We also supply gas to the Indonesian state-owned enterprise PT Pupuk Sriwidjaja Palembang that produces urea fertilizers for farmers throughout South Sumatra. As an independent power producer, our Medco Power provides electricity in Java and Sumatra to the Indonesian state-owned electricity company PT Perusahaan Listrik Negara Persero.
Media	We conduct media engagement at local and national level to keep journalists updated on our current activities, with media gatherings, knowledge sharing and press conferences. We have also held competency training for journalists in the oil & gas industry to develop their capacities and knowledges of the sector. In 2021, this certification program was carried out for South Sumatra in collaboration with the Special Task Force for Upstream Oil & Gas/SKK Migas, the Indonesian Journalist Association/PWI of South Sumatra and other Production Sharing Contractors.

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MedcoEnergi's Stakeholders

Academia	We work with academics from various universities, such as Gadjah Mada University (Yogyakarta), Syiah Kuala University (Banda Aceh), Tadulako University (Palu), Bogor Agriculture Institute, Bandung Institute of Technology and Universitas Samudra Langsa Aceh in conducting environmental and social assessments as well as other relevant studies. We worked together with the Indonesian Petroleum Association (IPA) for the IPA Ethics & Compliance Committee (ECC) Goes to Campus event in the Bandung Institute of Technology (ITB) on delivering "Integrity and Anti-Corruption Programs in the Oil & Gas Sector". In Thailand, we delivered an "Introduction to Petroleum Industry" class to the Energy Engineering students in King Mongkut's Institute of Technology Ladkrabang - Prince Chumphon Campus (KMITL-PCC). We also participated in their senior projects proposal defendant session to build energy efficiency machinery.
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ESG STANDARDS AND PERFORMANCE

We strive to implement global best practices and standards, including the use of GRI standards in our sustainability reporting and aligning our sustainability programs with the UN SDG's.

Our ESG performance has been assessed by Sustainalytics and MSCI ESG Research. We improved our Sustainalytics risk rating score from 2019 to 2021, ranking 55th out of 146 oil & gas exploration and production sub-industry. MedcoEnergi was upgraded by MSCI from "B" to "BB" in 2019 then again to "BBB" in 2021 (on a scale of AAA-CCC) in the MSCI ESG rating assessment. We started our engagement with Carbon Disclosure Project (CDP)¹ in 2021 and disclosed our climate-related data for the first time.

We continue our involvement in various associations and initiatives to ensure that we are at the forefront of key global topics relevant to our business and operations.

MEDCOENERGI'S MEMBERSHIP AND INITIATIVES

Name of Association	Position
Indonesia	
Association of Indonesian Oil & Gas Industry Remuneration Practitioners (APRIMI)	Member
Auditors Forum of SKK Migas - KKKS (FAMI)	Steering Committee
Hydropower Plant Developers Association (APPLTA)	Member
Indonesian Business Council for Sustainable Development (IBCSID)	Member
Indonesian Employers Association (APINDO)	Member
Indonesian Chamber of Commerce and Industry (KADIN)	Member
Indonesian Electrical Power Society (MKI)	Member
Indonesian Environmental Impact Assessment Forum (FAI)	Chairman
Indonesian Geothermal Association (INAGA)	Member
Indonesian Petroleum Association (IPA)	Board of Directors
Indonesian Independent Power Producers Association (APLSI)	Member
Indonesian Renewable Energy Society (METI)	Board of Supervisors
International Society of Sustainability Professionals (ISSP)	Member
IPA Ethics & Compliance Committee	Chairman
IPA- Environmental and Safety Committee	Secretary
National Center for Sustainability Reporting - Energy Sector (NCSRE)	Chairman
Public Relations Forum of SKK Migas - KKKS	Steering Committee
The Climate Reality Project Indonesia	Leader
Thailand	
Oil Industry Environmental Safety Group Association (IESG)	Member
Petroleum Institute of Thailand (PTIT)	Member
Society of Petroleum Engineers (SPE)	Member
Oman	
Oman Chamber of Commerce and Industry (OCCI)	Member
Oman Society for Petroleum Services (OPAL)	Member

¹ An international non-profit organisation that helps companies and cities disclose their environmental impact (www.cdp.net).

Chapter
#05

Strengthening Our Governance



Approach, Commitment and Goals	34	Whistleblowing Channels	46
Good Corporate Governance Principles and Structure	34	Anti-Corruption Initiatives at Our Joint Ventures	47
Risk Management	38	Alignment of Sustainability Initiatives with the UN SDGs	48
Corporate Governance Assurance Framework, Programs, and Policies	38	Action Plan	48
Anti-Corruption Collective Actions	45		

STRENGTHENING OUR GOVERNANCE

MedcoEnergi aims to uphold sustainable business practices and maintain a culture of compliance and transparency. We believe that ethical and responsible governance sets the foundation to provide stakeholder value and foster long-term relationships with our stakeholders that drive business resilience. Having an effective leadership structure in place is critical to realise MedcoEnergi's vision, mission, and values.

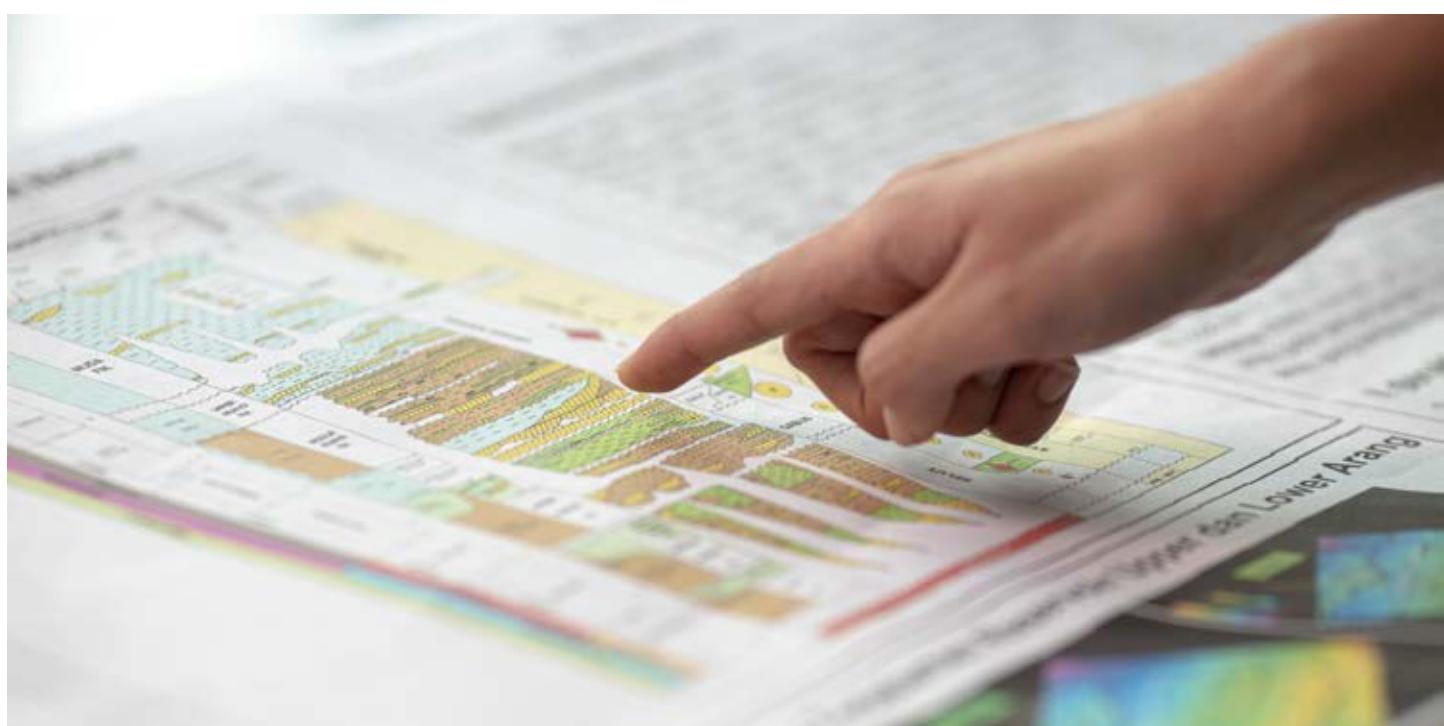
APPROACH, COMMITMENT AND GOALS

Implementing Good Corporate Governance (GCG) forms the foundation of an ethical and transparent business. MedcoEnergi takes an ethics-based approach that is underpinned by a culture that recognises and rewards sustainable and profitable long-term relationships with stakeholders. We see it as our duty to uphold our GCG principles, along with our regulatory approach based on compliance with prevailing laws, regulations, and international and industry best practices and standards.

GOOD CORPORATE GOVERNANCE POLICIES AND STRUCTURE

Our governance is built upon the principles of Transparency, Accountability, Responsibility, Independence, and Fairness. These principles form the foundation of our values and underpin the way we conduct our business.

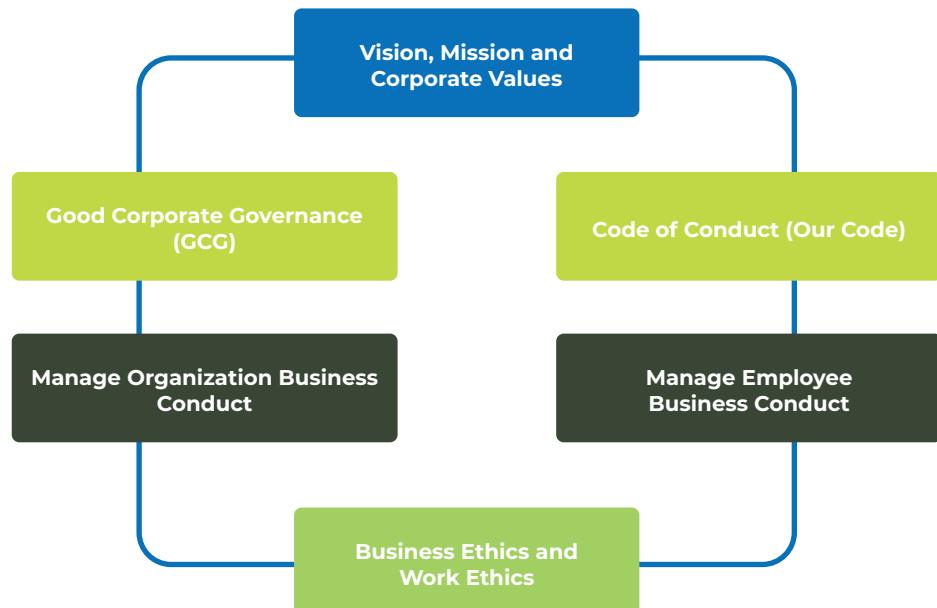
We implement MedcoEnergi's Good Corporate Governance (GCG) Policies and Code of Conduct (Our Code) across all our subsidiaries and business units. MedcoEnergi's GCG provides guidance on how the organisation should be governed and must be followed by the MedcoEnergi Board of Commissioners and Board of Directors. Our Code provides guidance on how our employees should conduct themselves and how we aim to do business. We expect all our stakeholders to follow this Code.



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Relationship Between GCG and Our Code



To ensure its effective implementation, our GCG structure delegates the roles and responsibilities of the Board of Commissioners (BOC) and Board of Directors (BOD). Our Boards play a pivotal role in providing guidance and oversight to ensure that we utilize responsible business practices.

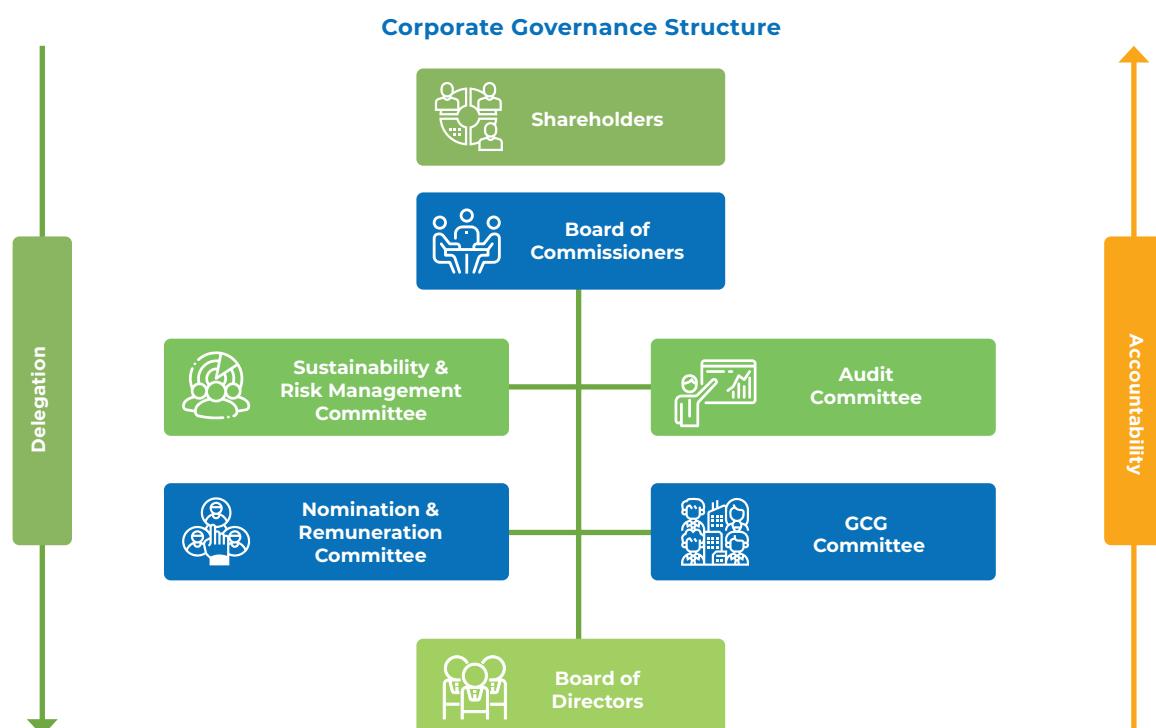
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Board of Commissioners

The BOC supervises the BOD and ensures that GCG is implemented across MedcoEnergi's organisations. The BOC provides advice pursuant to the Articles of Association and is tasked with chairing the Annual General Meeting of Shareholders (AGM), monitoring internal and external audits, supervising risk management processes, and making remuneration recommendations based on performance evaluation. The BOC is supported in carrying out its duties by the Audit Committee, Nomination and Remuneration Committee, Sustainability and Risk Management Committee, and GCG Committee.

Board of Directors

The BOD is responsible for managing and aligning MedcoEnergi's business and operations with the interests and objectives of our shareholders. Our BOD is tasked with implementing the Company's strategies and business objectives in line with our values, and is responsible for implementing a risk management process and the annual Work Program and Budget.



Sustainability and Risk Management Governance

MedcoEnergi's Corporate Sustainability and Risk Management (CSR) division assists the BOD with implementation of the Board's agenda for sustainability and risk management. The CSR division coordinates with other divisions and entities within the Company such as Health, Safety, and Environment (HSE), Human Resources (HR), Relations and Security, and Audit and Integrity Compliance to monitor progress towards meeting MedcoEnergi's sustainability and risk management targets. These functional teams support the integration and implementation of our sustainability and risk management agenda, programs, and initiatives at the asset level and across our business sectors.

This year, with the Company's growing sustainability initiatives, we renamed our Risk Management Committee to the Sustainability and Risk Management Committee (SRMC) to better reflect its expanded responsibility. The SRMC provides advice and support to the BOC related to the oversight of sustainability strategy and programs, and group-level risk management strategy and practices in the Company and its subsidiaries.

During our Quarterly Performance Reviews, the functional teams are responsible for reporting to the BOD on their risk registers and sustainability performance. The BOD then provides updates to the BOC on sustainability and risk management matters in SRMC meetings. The progress of our sustainability efforts in 2021 are disclosed in this report.

Our Code

Last year, we revised Our Code to address the increased complexity of our expanding portfolio and stakeholder expectations. Our Code forms the principal guidance for the MedcoEnergi BOC, BOD, and employees on how our business should be conducted.

Our Code is based on the Corporate Values of MedcoEnergi – professional, ethical, open, and innovative. With the tagline “Know the Code, Know the Commitment”, the Code defines the expectations, roles, and responsibilities that our people are expected to uphold when conducting MedcoEnergi’s business and operations. The Code is aligned with international best practices

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in Human Rights, Personal Data Privacy, Anti-Corruption, and Anti-Money Laundering. It is imperative that all our stakeholders follow the Code without any exceptions and regardless of their geographical location. Our Code is accessible at this link: www.medcoenergi.com.

MedcoEnergi recognises that our growing business and asset expansion increase our exposure to various global risks, and some of the key risks that we have identified are related to human rights. We are currently carrying out a human rights assessment to further understand these risks and develop appropriate mitigations, which will be included in the next sustainability report.



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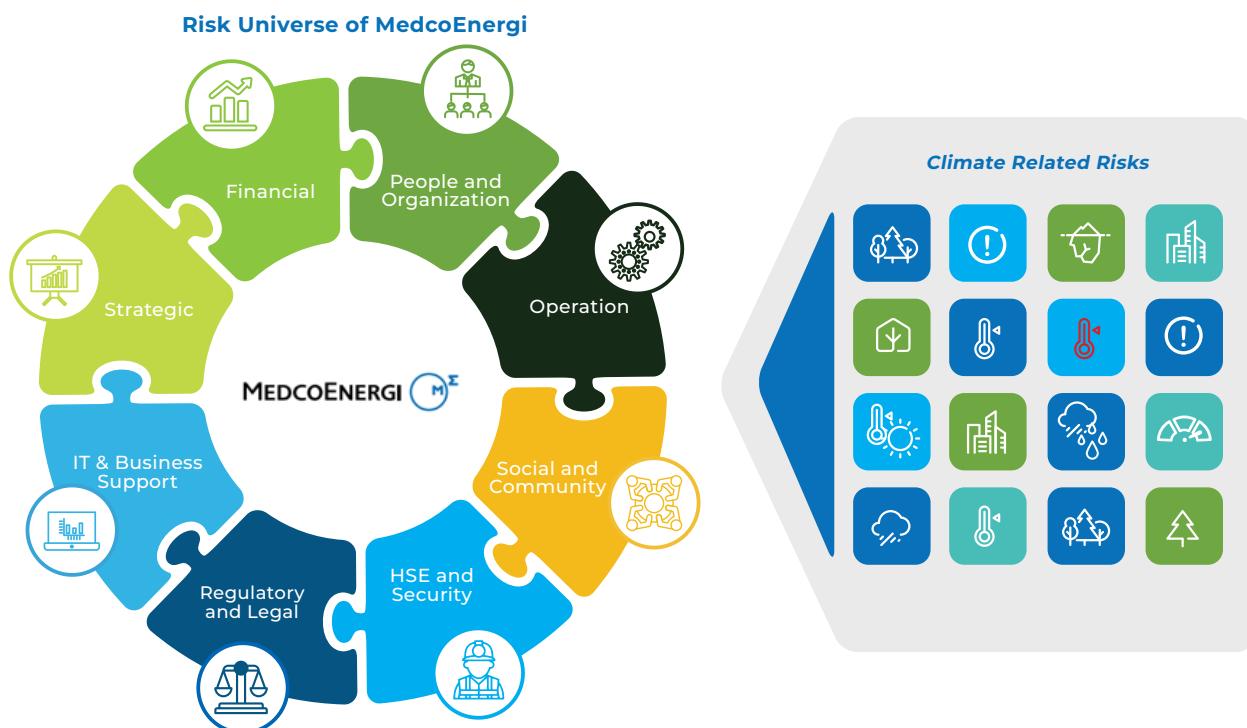
RISK MANAGEMENT

We work to mitigate adverse impacts on the business through an effective risk management system. At MedcoEnergi, we implement an Enterprise Risk Management (ERM) framework that follows ISO 31000:2018 standards to identify, address, and manage risks that may impact the Company. This forms the governance part of our Sustainability Framework.

Through implementation of the ERM framework, we conduct rigorous risk identification and assessments, monitoring, and reporting. It covers all facets of risks related to strategy, finance, operations, people and organisation, information technology

(IT) and business support, regulatory and legal, HSE and security, as well as social and community. The framework also covers risks that may arise from third-party stakeholders, including suppliers and contractors.

One of the key risks that we identified through our ERM framework is climate change. We acknowledge that climate change is an overarching topic that profoundly interacts with every category of this risk universe, illustrated in the figure below. In 2021, we established a Climate Change Strategy to achieve MedcoEnergi's climate aspirations towards net zero. More detail on our Climate Change Strategy is available in Chapter 7.

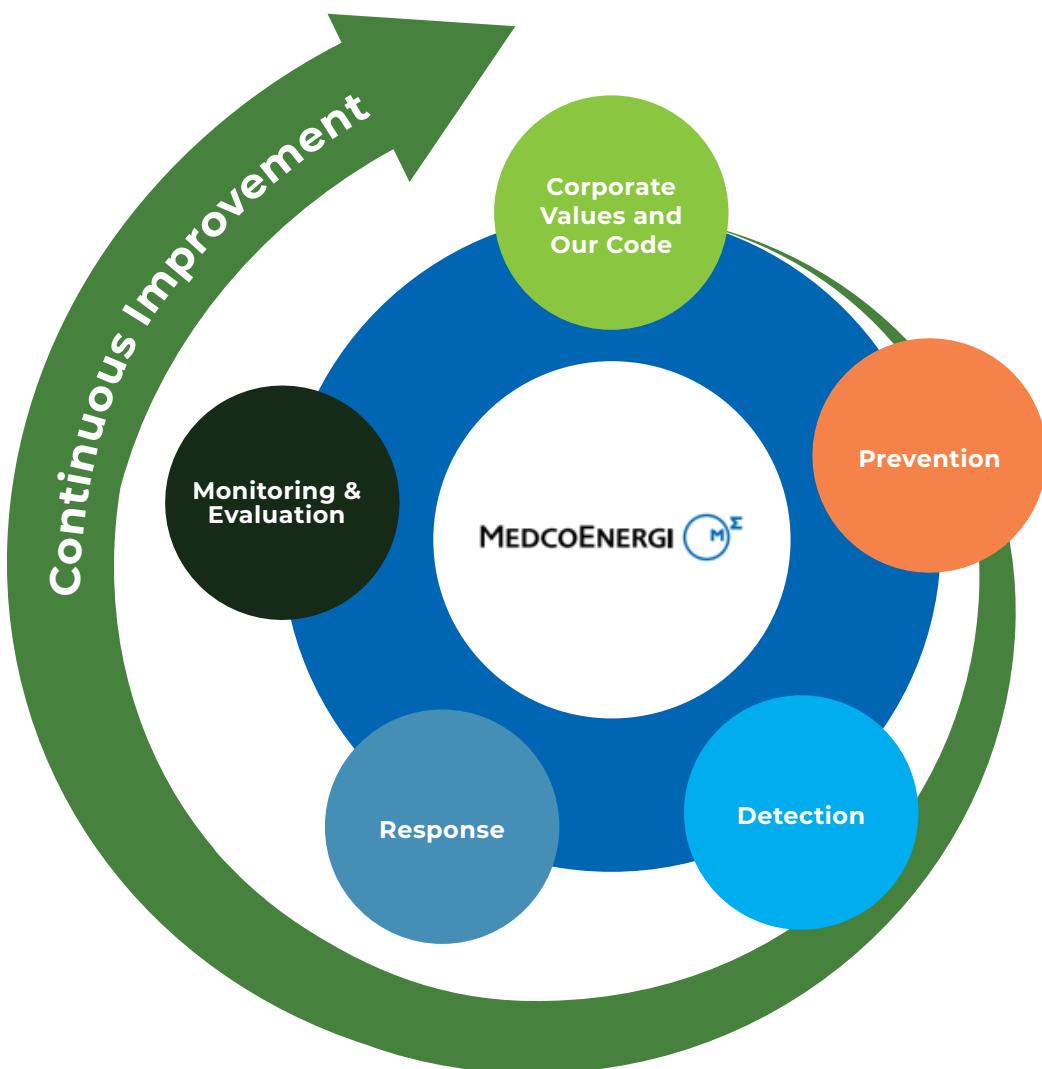


CORPORATE GOVERNANCE ASSURANCE FRAMEWORK, PROGRAMS, AND POLICIES

Good corporate governance is fundamental for any organisation to achieve their vision and mission. Our Corporate Governance Assurance Framework provides a framework to support our Board in upholding and implementing MedcoEnergi's GCG and Our Code in our business operations. The Framework creates a supporting structure that enables the Board's oversight on compliance, accountability, and transparency within the Company.

MedcoEnergi's Corporate Governance Assurance Framework is comprised of six components: Corporate Values and Our Code, Prevention, Detection, Response, Monitoring & Evaluation, and Continuous Improvement.

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Corporate Values and Our Code

Our Corporate Values and Our Code define the standards that govern how our people conduct their work, carry out responsibilities, and behave according to ethical values.

Updated Anti-Corruption Policies and Processes

In 2021, we continued to strengthen our anti-corruption policies through the development of the Corporate Anti-Bribery and Corruption (ABC) Policy. The Policy solidifies MedcoEnergi's commitment to conduct business with a high ethical standard and in compliance with all applicable laws and regulations. Currently, we are in the process of reviewing our Gift & Entertainment (GE) and Government Hosting (GH) Policies to further improve these policies and expand them to our newly acquired assets.

Corporate Sanctions Compliance Program and Policy

We held Sanctions Awareness and Risk Assessment sessions as part of our capacity-building initiatives under the Sanction Compliance Program. The sessions were attended by our domestic and international functions, such as Human Resources (HR), Legal, and Corporate Sustainability and Risk Management, and covered ways to detect violations and mitigate monetary penalties. We also launched our Corporate Sanctions Compliance Policy aimed at adopting the US Treasury Department's Office of Foreign Assets Control's (OFAC) guidance framework for effective sanctions compliance programs, with components such as management commitment, risk assessment, training, internal control, and audit & testing. The policy includes other applicable measures on international sanctions such as from the United Nations, Europe, United Kingdom, and Singapore.

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We conducted Sanctions Awareness and Risk Assessment awareness sessions aimed at strengthening our risk awareness and understanding of international sanctions.

Prevention

Initiatives aimed at preventing violations of our ethical standards and policies are key in establishing good governance within our organisation.

Ethics Ambassador Program

MedcoEnergi's Ethics Ambassador Program helps build a culture of ethical compliance. We select employees to participate in a capacity-building program covering ethics and compliance, risk identification, and remediation, before assigning them to become Ethics Liaisons Officers (ELOs) in Medco Oil & Gas and Compliance Champions in Medco Power. Ethics Ambassadors promote compliance with MedcoEnergi's business ethics rules and policies, and laws and regulations.

	Oil & Gas	Power
Program Title	Ethics Liaisons Officer (ELO) Program	Compliance Champion Program
No. of Personnel in 2021	56	13
Role and Responsibilities of personnel	<ul style="list-style-type: none"> Lead discussions and deliver presentations on ethics to their group Provide awareness and support to their group using the ELO materials (presentation, case studies, posters, and infographics) Participate in corporate campaigns (such as Ethics & Compliance Week and Anti-Corruption Day) and distribute the campaign tools coordinated by the Audit & Integrity Compliance division 	<ul style="list-style-type: none"> Communicate and discuss issues related to ethics and compliance from subsidiaries to MPI head office Monitor the design and implementation of the Anti-Bribery Management Systems (ABMS) and other bribery-related matters Monitor compliance of ABMS with ISO 37001 requirements Report on ABMS performance to top management and other compliance-related functions as required

The reach of the ELO Program is shown in the table below¹:

Description	2018	2019	2020	2021
Oil and Gas Domestic	1,009*	1,364	1,050	1,360
Oil and Gas International	0	84	80	83
Total	1,009	1,448	1,130	1,443

*South Natuna Sea Block B

Although COVID-19 restrictions limited outreach options at the asset level, MedcoEnergi's ELO Program was able to reach at least 1,457 employees and contractors' employees during 2021.

¹ The number of participants for ELO Program includes employees and contractors. These numbers are not assured.

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Communication and Education Initiatives

Our culture of ethical compliance is supported by the initiatives we have introduced to improve awareness. These include:

1. Ethics Awareness Training

This year, the target audience for our ethics awareness training was contractor employees and we successfully delivered the training to at least three groups. The objective of this training was to improve awareness and understanding of the MedcoEnergi Code of Conduct and its application, as well as other issues such as information security and potential exposures to compliance risks from the use of digital media.

2. Compliance Awareness Training

We also delivered compliance awareness training to highlight increasing corruption and compliance risks to protect the Company from corporate crime liability. The training covered topics such as our Code and our ISO37001-compliant ABMS for leaders and staff of Block A Aceh, Tarakan and Bangkanai assets.

3. International Anti-Corruption Day

To reinforce our anti-corruption stance, as outlined in our Code, we celebrated International Anti-Corruption Day with several campaigns that included messages from the President Director and CEO as well as video, photo, and tagline competitions across oil & gas and power assets.

Detection

To maintain a sustainable and ethical business, systems must be in place to detect any misconduct against our corporate values and Code of Conduct, allowing for appropriate follow-up action.

MedcoEnergi Ethics Internal Hotline

We have an internal hotline for employees to raise compliance-related questions, and an external hotline for reporting fraud and concerns of misconduct.

Internal Ethics Hotline

Email	EthicsHotline@medcoenergi.com
Phone (Office Hours 7AM-4PM)	(+62-21) 2996 5899
Office Visit	The Energy Building - MedcoEnergi Audit & Integrity Compliance Division, SCBD Area Lot. 11A, Jl. Jend. Sudirman, Jakarta 12190

In 2021, we received 203 inquiries to our internal hotline, a lower number than the previous two years. This may be due to the shift from in-person meetings to virtual meetings, which has likely impacted the willingness to raise concerns.

MedcoEnergi Internal Hotline



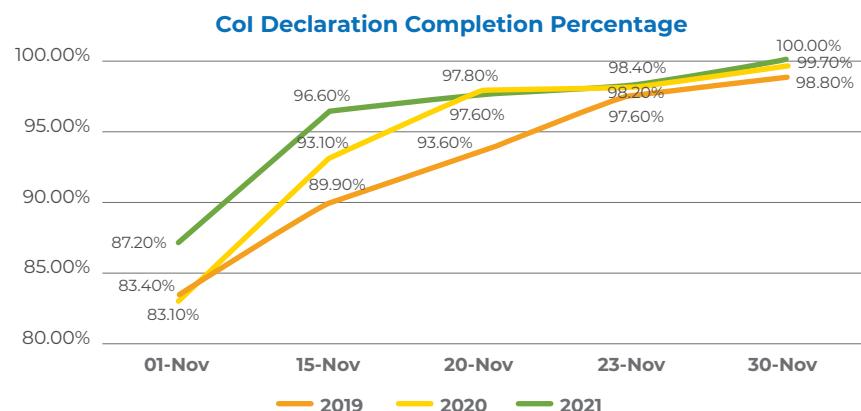
Annual Statement of Adherence (SoA) and Conflict of Interest (Col) Declaration

All MedcoEnergi employees must submit annual SoA and Col declarations. The potential risk is elevated for review by the direct supervisor, head of division, and the BOD depending on the nature of the declaration. Action plans are developed at the Company level to mitigate such risks and/or conflicts in the future. In 2021, 99.6% of our oil & gas employees and 100% of power employees have completed SoA declaration.

We conduct an analysis of the submitted Col declarations and track completion progress. Over the past three years, we have seen a significant improvement, and achieved 100% completion in 2021.

The graph of Col Declaration Completion Percentage is shown on the next page.

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Third-Party Risk and Compliance Management

In striving for transparency and stakeholder confidence in our governance, MedcoEnergi takes a proactive approach in communicating risks to our business partners as part of our third-party risk and compliance management. We do so through a series of quarterly articles and/or newsletters on anti-corruption, conflict of interests, and compliance for vendors and contractors. The Company also hosts the following events and initiatives:

1. Vendor Day

Vendor Day is MedcoEnergi's annual campaign and communication event attended by various participants and companies throughout our value chain. In 2021, the Company had several Vendor Days for our oil & gas and power businesses where the Audit & Integrity Compliance division reinforced our ethical standards in the way we do business. During this event, we presented our ISO 37001 ABMS, Corporate Crime Liability policies, and our Col declarations.

2. Anti-Bribery and Corruption (ABC) Vendor Audit

We conducted 22 ABC vendor audits after a risk-based selection of our supply chain during 2021. We also revisited our ABC Vendor Audit program to ensure its alignment with the ISO 37001 ABMS requirements in assessing our business partners.

Number of ABC Vendor Audits

No	Description	2016	2017	2018	2019	2020	2021
1	Oil & Gas	15	18	17	16	17	16
2	Power	-	-	1	4	4	5
3	JOB Tomori	-	-	-	-	-	1
Total		15	18	18	20	21	22

We are reviewing the current third-party compliance program to identify any potential improvements required to update our Corporate Third-Party Compliance Program for 2023-2025 with our Risk-Based Approach.

3. Due Diligence

Conducting appropriate due diligence on staff, third parties, business partners, and transactions is a fundamental element of our implementation of MedcoEnergi's ABMS program. In 2021, the Company strengthened its Due Diligence Program by equipping the Audit & Integrity personnel with the required skills for conducting the due diligence process. The process was carried out by our internal team as well as third party services that we engaged.

Our Due Diligence journey in 2021:

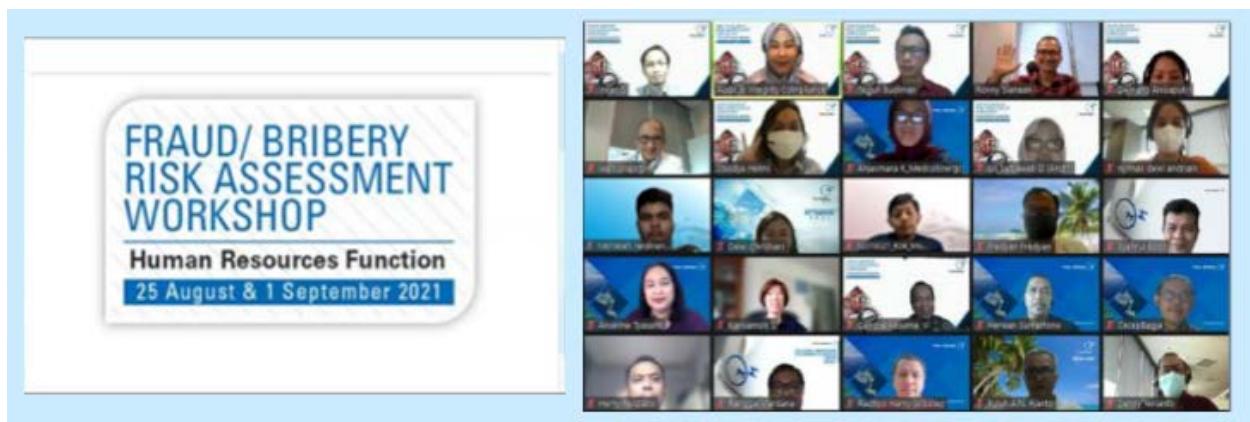
- Hosted the 1st and 2nd virtual Technical Due Diligence Workshop with subject matter experts;
- Performed desktop Due Diligence for 19 active vendors in MedcoEnergi Oil & Gas, 9 in Medco Power, and 3 in JOB Tomori;
- Reviewed and updated our Due Diligence Procedures and Guidelines (e.g. ABC Policy and ABMS Guideline); and
- Established a Due Diligence Database in Corporate, Oil & Gas, Power, and JOB Tomori.

Our Due Diligence journey will expand to mitigating third party risks in 2022.

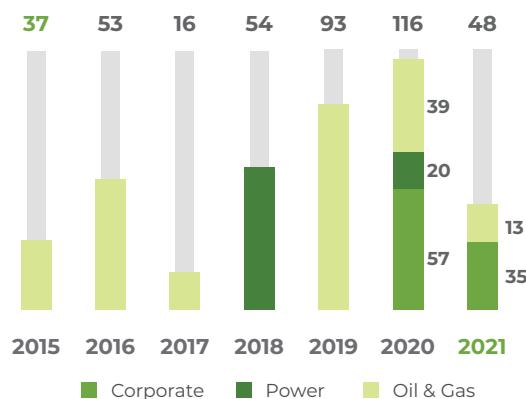
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4. Fraud Risk Assessment (FRA) Workshops

To prevent corruption in our business, we continue to conduct our Fraud Risk Assessment (FRA) Workshop for our high-risk assets and functions. Introduced in 2015, the objective of this workshop is to equip participants with the tools and capacity to identify potential fraud risks within their function or organisation. In 2021, FRA workshops were conducted for the Human Resources function and our Bualuang asset.



MedcoEnergi Fraud Risk Assessment Workshop Participants



Response

We take any violations and misconduct against our Code and ethical standards and policies seriously. Once claims and reports have been thoroughly validated, response measures are put in place to ensure appropriate resolution. We started disclosing our anti-corruption report according to the GRI 205-3 Standard on Anti-Corruption in this Report.

During 2021, we received 38 reports of alleged violations through our whistleblowing channels. This is an increase from the 21 reports we received in 2020. These reports are related to contract execution, standard operating procedure (SOP) breaches, procurement fraud, and other misconduct. They were subsequently validated and followed up on. The Company issued sanctions to three employees ranging from verbal warnings, reprimand letters, and formal written warnings up to termination of employment.

Monitoring and Evaluation

In our Corporate Governance Framework, monitoring and evaluating our response to claims or reports are essential for systematically tracking implementation and outputs. This helps us measure the effectiveness of our actions and improves the transparency and accountability of our corporate governance.

Internal Audit

We perform regular internal audits to provide independent objective assurance and advice to the BOD, corporate functions, and business units. Through the audit process, we evaluate the effectiveness and efficiency of our operations and programs. Our internal auditor also reviews compliance risk pertaining to COVID-19 in our assets during the pandemic.

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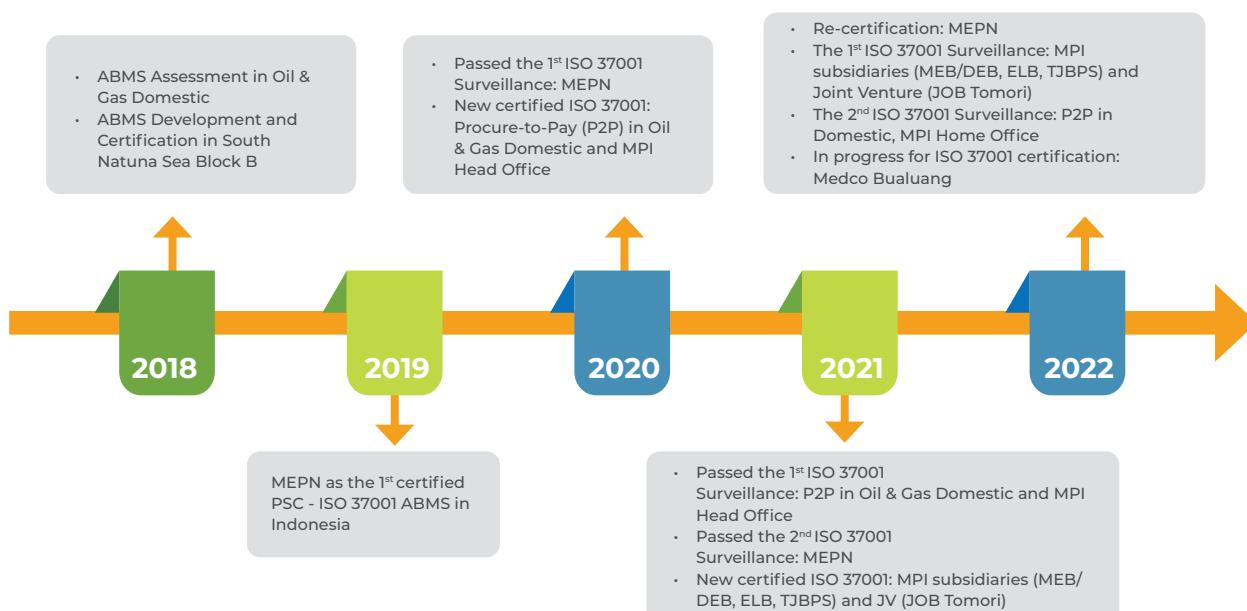
Internal Audit in MedcoEnergi Assets

		2018	2019	2020	2021
Oil & Gas	Corporate	PT Medco Power Indonesia (MPI), PT Tanjung Jati B Power Services (TJBPS)	Sarulla Operations Limited, PT Energi Gas Sumatra	PT Medco Power Indonesia	PT Donggi Senoro LNG
	Function			Information services, Well Operations Onshore	
	Oil & Gas (Domestic & International)		South Natuna Sea Block B, Tarakan, Block A Aceh	Tj. Laban Utilization, South Sumatera	Sampang (in progress audit finalization), Madura offshore (in progress audit finalization)
	Partnership with JOB		JOB Pertamina-Medco E&P Tomori Sulawesi		JOB Pertamina-Medco E&P Tomori Sulawesi (in progress audit fieldwork), JOB Simenggaris (plan to issue audit Notification on Dec, audit fieldwork Q1 2022)
	Internal Control Evaluation				COVID-19 handling, Contractor Safety Management System (CSMS), and social programs (in progress)
Power	Headquarters		Human Resources - MedcoPower	SCM - MedcoPower	
	Subsidiaries		PT Energi Prima Elektrika (EPE), PT Multidayra Prima Elektika (MPE), PT Medco Ratch Power Riau (MRPR), Mitra Energi Batam (MEB), Dalle Energi Batam (DEB)	PT Energi Listrik Batam (ELB), PT Medco Cahaya Geothermal (MCG), PT Bio Jatropha Indonesia (BJI), PT Pembangkitan Pusaka Parah�angan (PPP), PT Tanjung Jati B Power Services	

Anti-Bribery Management Systems

We have been developing an Anti-Bribery Management System (ABMS) to prevent, detect, and respond to bribery, corruption, and fraud risks since 2018. In 2021, we obtained ISO 37001:2016 certification for MPI subsidiaries (PT Mitra Energy Batam & Dalle Energi Batam, PT Energy Listrik Batam and PT Tanjung Jati B Power Services) and joint venture (JOB Tomori). In 2022, we will expand our ABMS to our Bualuang asset in Thailand.

Continuous Improvement and ISO 37001 ABMS Certification



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Operational Technology-Information Technology (OT-IT) Audit

Many of our operations are highly automated, and their operators rely on Industrial Control System for monitoring and/or controlling their operations. MedcoEnergi is aware of the increasing number of cyberattacks on Operational Technology (OT) with the growing trend towards digitisation. Therefore, ensuring adequate cybersecurity measures is critical to ensure the reliability and safety of our operations.

We engaged PricewaterhouseCoopers Indonesia to conduct an IT Security and Offshore Operation OT Audit to assess the adequacy of our internal IT security system. Based on the audit findings, we deployed our internal team to review OT Operations in other fields to ensure that any cyberattacks can be detected, contained, and remediated to ensure business continuity.

Continuous Improvement

In line with MedcoEnergi's expanding business portfolio and operations, it is critical for our Corporate Governance Framework to continuously update the standards, policies, and initiatives in place. The demands and challenges of the energy sector are constantly evolving. Periodic assessment of our governance systems helps to improve the effectiveness of MedcoEnergi's leadership and management of our organization.

ANTI-CORRUPTION COLLECTIVE ACTIONS

MedcoEnergi sees opportunity in establishing external collaborations to learn from experts in the field as well as the professional community. Through these collaborations, we aim to foster a culture of high integrity within the industry and to promote a level playing field.

We participated and sponsored several events alongside the Indonesian Petroleum Association Ethics & Compliance Committee (IPA ECC). These include:

- A sharing session on "Harassment Free Workspace" to bring awareness to the different types of workplace harassment and how to handle various situations. The session was hosted by BP Ethics & Compliance Asia Pacific.
- A discussion on "Corruption Risks Prevention Program in the Oil & Gas Sector" with Mr. Aminudin, the Eradication Commission (Komisi Pemberantasan Korupsi/KPK) Director of Anti-Corruption for Private Sector, and Mr. Teguh Widodo, the Head of the Task Force of Anti-Corruption for the Private Sector. The discussion was part of the IPA ECC's 2021 Authority Engagement Program.
- IPA ECC Goes to Campus event with the Bandung Institute of Technology (ITB) on "Integrity and Anti-Corruption Programs in the Oil & Gas Sector". The event was attended by 968 participants from various faculties of the university.
- A second IPA ECC Goes to Campus event with Paramadina University on "Corruption Prevention in the Oil & Gas Sector" which focused on conflict of interest risk management. The event was attended by 487 participants and was opened by the Vice Rector of the University and attended by the IPA's Executive Director.

In early 2022, we also conducted stakeholder engagement through virtual focus group discussions on the topics of governance and anti-corruption to provide input for our process of revisiting our materiality assessment. This was done to ensure inclusivity and improve our holistic approach in defining which topics are material to the Company. The discussion was attended by Transparency International Indonesia (TII), Aceh Anti-Corruption Movement (Gerakan Anti Korupsi Aceh/GerAK), Indonesia Business Link (IBL), Bandung Institute of Technology and Paramadina University.



IPA ECC Goes to Campus event with the Institute Technology of Bandung, Indonesia.



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WHISTLEBLOWING CHANNELS

MedcoEnergi recognises that having a whistleblowing system in place is our ethical obligation to protect the well-being of our employees and organisation against misconduct. We hope to create a work environment that encourages all parties to raise their concerns, especially in matters relating to the following:

- Fraud
- Corruption
- Bribery
- Conflict of interest
- Misconduct
- Financial Statement Fraud
- Breaches of Code of Conduct and other policies
- Other unethical behaviour

At MedcoEnergi, whistleblowing channels for our employees and stakeholders are part of our Anti-Bribery Management System (ABMS). Our whistleblowing system utilises a variety of platforms such as our website, telephone, text messages (SMS), and WhatsApp in Indonesian, English, Thai, and Arabic. The whistleblowing reports are then processed with oversight from our BOD.

To maintain independence and protection for those raising concerns, we employ Deloitte Consultants Indonesia (Deloitte) to operate the Company's external whistleblower channel. Deloitte helps to screen and categorise incoming information and submits reports to the President Commissioner, President Director, and Head of Corporate Audit & Integrity Compliance. MedcoEnergi then conducts an independent investigation and takes the necessary follow-up actions.

External Ethics Hotline (managed by appointed independent party)	
Direct Website	https://lapor-medcoenergi.tipoffs.info
Email	lapor-medcoenergi@tipoffs.com.sg
INDONESIA	
Phone	0800-150-3020
Text Messages (SMS) & WhatsApp Messenger	(+62-813) 8870-3300
THAILAND	
Phone	1800-010-316
Text Messages (SMS)	(+66) 655986 1887
WhatsApp Messenger	(+62-813) 8870-3300
OMAN	
Phone	80074565
Text Messages (SMS)	(+27) 72 014 4445
WhatsApp Messenger	(+62-813) 8870-3300

We value the willingness to report misconduct and violations against our ethical standards and policies. Within our whistleblowing system, the Company safeguards anonymity to prevent retaliation. The Company takes reports of retaliation seriously and will validate them thoroughly and determine the appropriate action. MedcoEnergi considers acts of retaliation to be misconduct, which if substantiated, can result in disciplinary actions up to, and including, termination of employment.

Awareness and accessibility of our whistleblowing channels are key to a successful system. We proactively promote these channels through the Company's Ethics and Compliance Programs as well as other awareness-raising activities.

Anyone may file a report of a violation via various channels listed on the MedcoEnergi website at www.medcoenergi.com or via Deloitte websites at <https://lapor-medcoenergi.tipoffs.info>.

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- Protecting the Health and Safety of Our People

ANTI-CORRUPTION INITIATIVES AT OUR JOINT VENTURES

The Joint Operating Body Pertamina-Medco E&P Tomori Sulawesi (JOB Tomori), as the operator of Senoro-Toili working area, implemented various anti-corruption initiatives to strengthen its governance. These initiatives are aligned with MedcoEnergi's anti-corruption programs.

JOB Tomori Values and Code of Conduct		
	Revised the Code of Conduct in late 2020 and updated the Anti-Bribery Policy	
	Developed the Contractor Anti-Bribery and Corruption (ABC) Audit Procedure and ABC Function	
	In 2022, JOB Tomori will update policies and procedures on whistleblowing, conflict of interest and gratification	
Implemented the Anti-Bribery Management System (ABMS) in reference to SNI ISO 37001:2016 and carried out the following activities:		
		Internal Audit of the ABMS
		ABC Function review
		Management review
		Obtained ISO 37001:2016 certification
		Training and certification of ABMS implementers. In 2021, 12 personnel achieved the ISO 37001:2016 Lead Implementation certification
Prevention		
		
Compliance campaigns to improve awareness on anti-gratification, anti-bribery and personnel integrity	Attended by 200 participants	
		
		Knowledge sharing sessions on GCG and Anti-Bribery Management Systems
Detection		
	In 2021, the COI declaration was signed by 100 % of employees	
Require JOB Tomori employees to read the Company's Code of Conduct and sign the Annual Integrity Pact and COI declaration , which are continuously monitored	Hosted a Vendor Day to communicate GCG principles and ABMS to vendors	
	Developed the ABC Vendor Audit Program in 2021 Target in 2022: three high-risk contractors	
	Conducted due diligence for three vendors in 2021 Target in 2022: five vendors and/or contractors	
	Conducted the Fraud Risk Assessment (FRA) Program in survey-form in 2021 and hosted Fraud and Compliance workshop virtually	
Monitoring and Evaluation		
	ISO 37001:2016	
As part of securing the certification for JOB Tomori's ABMS, monitoring, evaluation, audit and management review are periodically performed to improve the adequacy and effectiveness of the JOB Tomori ABMS.		

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ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

The following table maps our sustainability initiatives in Corporate Governance against the UN SDG targets. This mapping does not constitute a claim that MedcoEnergi has measured or set targets for the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	4.7	Policies and initiatives on ethics and compliance, fraud risks, human rights, anti-bribery and corruption.
	12.6	Publication of sustainability reporting
	16.3, 16.5, 16.6, 16.7	<ul style="list-style-type: none"> Policies and initiatives on ethics and compliance, fraud risks, human rights, anti-bribery and corruption; and Annual SoA and Col declarations.
	17.17	External collaborations in promoting business transparency, integrity and anti-corruption measures.

ACTION PLAN

The following action plan has been designed for us to meet our objectives and continue improving our management of corporate governance issues. We are measuring, monitoring, and reporting our progress and performance against these actions on a regular basis.

	Short Term Actions	Medium-Long Term Actions	Status
Anti-Corruption	Require all employees to sign an annual anti-corruption declaration after completing an online evaluation.	Employees in domestic and international assets annually sign an anti-corruption declaration.	
	Communicate and conduct training on anti-corruption to employees.		
	Conduct regular training on hosting government officials, Fraud Risk Assessment (FRA), and discuss anti-corruption programs in Oil & Gas forums.	Completed trainings on hosting government officials in Block A and Bangkanai & Tarakan, and FRA workshops in Indonesia, Singapore, Thailand, Oman.	
	Pilot the Ethics Liaison Officer (ELO) program for South Natuna Sea Block B, with 30+ officers in each department/ field in 2018.	Establish the Ethics Ambassador Program at all MedcoEnergi Oil & Gas and Power Assets.	The ELO personnel expanded from 27 in 2018 to 56 in 2021. Workshops to equip 2022 ELO personnel at domestic and international assets were completed by January 2022.
	Expand the ELO program at Rimau, South Sumatra, Lematang, and Block A with 48 officers in each department/ field in 2019.		
	Expand the ELO program to newly acquired Indonesia and Thailand assets in 2020.		
	Expand the ELO program to Tarakan in 2021.		
	Expand the ELO program to Singapore in 2022.		

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	Short Term Actions	Medium-Long Term Actions	Status
	Establish the Compliance Champion Program for the Power business.		Established in 2019, there are 13 Compliance Champions from 10 subsidiaries by 2021.
	Implement and obtain ISO 37001:2016 certification on Anti-Bribery Management System (ABMS) for pilot projects in Medco E&P Natuna Ltd.	Implement and obtain ISO 37001:2016 ABMS certification for all MedcoEnergi Oil & Gas and Power high-risk assets.	
	Implement and obtain ISO 37001:2016 ABMS certification for Medco E&P Natuna Ltd.		Process started in 2018 and the certification was obtained in May 2019. The first surveillance was completed in Q4 2020 and the second in July 2021.
	Implement and obtain ISO 37001:2016 ABMS certification for Procurement Process and Rimau, South Sumatra, Lematan, Block A, Tarakan, South Natuna Sea Block B.		Implementation and certification was obtained in Q2 2020. The first surveillance was completed in July 2021.
	Implement and obtain ISO 37001:2016 ABMS certification for Power assets.		Certification for Power headquarters was obtained in 2020, with the first surveillance completed in Aug 2021. Subsequently, the certification for our MEB, ELB, DEB and TJBPS subsidiaries was obtained in August 2021.
	Implement and obtain ISO 37001:2016 ABMS certification for JOB Tomori.		The certification obtained in September 2021.
	Plan to implement and obtain ISO37001:2016 ABMS certification for Thailand – Bualuang.		The development process for the ABMS implementation started in 2021.
	Conduct Anti-Bribery and Corruption Vendor Audits (minimum of 20 vendor audits per year).		Completed 22 vendor audits and conducted the program annually.
	Establish a standard for vendors' due diligence process.	Standardise the vendor due diligence process for Medco Oil & Gas assets.	Established procedures, standards and initiated implementation for South Natuna Sea Block B in 2019. Developed and standardised vendor due diligence process for Medco Oil & Gas, Power, and JOB Tomori. Currently developing the vendor due diligence database.
	Participate in Collective Action to combat corruption.	Develop the Collective Action Framework and Program.	
	Develop strategy and describe commitments for the Company's Collective Action activities.		On-going discussion to develop the strategy and commitments since February 2022.
	Through the Indonesia Petroleum Association (IPA) Ethics & Compliance Committee, advance engagement with government authorities on anti-corruption practices in the oil & gas industry.		In collaboration with IPA, facilitated sharing session from other IPA ECC members. Conducted IPA ECC Goes to Campus event with Paramadina University on "Corruption Prevention in the Oil & Gas Sector." Through IPA ECC's 2021 Authority Engagement Program, discussed "Corruption Risk Prevention Program in the Oil & Gas Sector."
			In Q1 2022, in collaboration with Business for Social Responsibility (BSR), facilitated Focus Group Discussion (FGD) with Transparency International Indonesia (TII), Aceh Anti-Corruption Movement (Gerakan Anti Korupsi Aceh/GerAK), Indonesia Business Link (IBL), Bandung Institute of Technology and Paramadina University on feedback to MedcoEnergi Anti-Corruption Program.
Business Ethics	Carry out Code of Conduct (CoC) Assurance: Statement of Adherence (SoA) self-test.		SoA self test and Col deterrence automated across the organisation referring to the revised Code of Conduct.
	Automate Conflict of Interest (COI) Deterrence.		
	Standardise CoC Practices related to SoA Declaration, COI Declaration, Governance & Ethics Policy, Government Hosting Policy, and Contribution & Donation Policy.		Completed the required alignment at the corporate level and oil & gas. Medco Power completed developing Gift & Entertainment Policy in 2019 and Anti-Bribery and Corruption and Government Hosting Policies in 2020.

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	Short Term Actions	Medium-Long Term Actions	Status
Internal Audit	Ensure alignment between audit and compliance practice at the corporate level.	Implement continuous improvement compliance program and disciplinary actions related to retaliation clauses in CLA across the group.	Completed the audit and compliance practice alignment at the corporate level. Vendor Due Diligence is ongoing. Oil & gas CLA established retaliation clauses to reinforce disciplinary actions.
	Reinforce disciplinary actions related to CoC Violations in the Collective Labor Agreement (CLA) for Oil & Gas assets.		
	Finalise and implement a standardised, rigorous compliance program (covering Prevention, Detection, Response) across MedcoEnergi.		Implemented one CoC standard across MedcoEnergi (including the newly acquired assets in Indonesia), ABMS implementation in key overseas assets and standardised third party risk management.
Sanction Compliance Program (SCP)	Update the Internal Audit Charter.		Internal Audit Charter updated in early 2022.
	Ensure the effectiveness of the 2021 audit plan (>90% audit plan completion) that covers key business risks and controls within assets, partnership, and functional areas.		Completed audit plans for Oil & Gas at Sampang, Madura Offshore, JOB Pertamina-Medco E&P Tomori Sulawesi, JOB Simenggaris, and on the corporate level at PT Donggi Senoro LNG. Conducted internal control evaluation on COVID-19 handling, CSMS, and social programs.
	Conduct Operational Technology (OT) and Information Technology (IT) Security Audit.		Conduct OT Security Audit through independent third party using NIST cybersecurity framework in South Natuna Sea Block B. Conduct IT Security Audit through independent third party.
Human Rights	Initiate sanction risk assessment in oil & gas, establish SCP Guideline, and implement SCP education and communication to key assets in oil & gas and power.	Establish the SCP in oil & gas and power.	SCP researched since 2019. Obtained Sanction Compliance Competencies for AIC personnel on SCP through external training, obtained familiarisation with tools (e.g. World Check), and developed the draft Sanction Policy. Launched the Corporate Sanction Guideline and developed Organisation Capability (through the first awareness program for critical functions at corporate level and in Oman and Thailand). Established the SCP, including facilitating the first OFAC Risk Assessment for corporate level and domestic assets. In 2022, plans to further develop communication and education programs, and replicate OFAC Risk Assessments in key domestic and internal assets. Integrate OFAC risk controls in the business process review.
	Develop human rights policy and framework.		Initiated the Corporate Human Rights Assessment in 2021.
	Conduct human rights training for relevant employees and vendors.		Conducted training for security guards with a human rights component.
Public Policy	Conduct human rights assessment for major assets.		Initiated the Corporate Human Rights Assessment in 2021. AIC initiated internal collaboration and facilitated discussions. Plans for 2022 include continued support for Human Rights Assessment.
	Develop an accountability mechanism to monitor MedcoEnergi's public policy statements versus execution, and agenda versus implementation.		Completed the accountability mechanism and reporting to BoD by 2021.
Socioeconomic Compliance	Through the IPA Ethics & Compliance Committee, support industry efforts to increase simplification and transparency around social and environmental permits for oil & gas assets.		Ongoing authority engagement under the National Anti-Corruption Strategy Forum.



Chapter

#06

Strengthening our Environmental and Social Safeguards

Climate Change Adaptation and Disaster Mitigation Program
Tarakan, North Kalimantan, Indonesia

Approach, Commitment and Goals

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STRENGTHENING OUR ENVIRONMENTAL AND SOCIAL SAFEGUARDS

APPROACH, COMMITMENT AND GOALS

MedcoEnergi is committed to achieving our goal of zero environmental or social incidents. At the core of our Operational Excellence (OE)¹ framework is our pledge to minimise environmental risk and safeguard the environment. We aim to protect our employees, stakeholders, and the surrounding environment where we operate, and we regularly monitor our goals and performance in this area. We continually strengthen our OE by enhancing our safety culture, stakeholder engagement, and environmental stewardship.

Our OE framework ensures that we conduct a safe and sustainable business with a systematic approach to maintain the consistent delivery of MedcoEnergi's operations. Having this rigorous framework in place helps us minimise any negative impact on the environment and protect our ecosystems and biodiversity. Further details on our OE framework are available in Chapter 10.

We are also committed to comply with all applicable laws and regulations related to our social performance, and to respect human rights in line with the UN Guiding Principles for Business and Human Rights and the Voluntary Principles on Security and Human Rights (VPSHR). These principles provide an overarching framework to ensure the protection of our employees, assets, facilities, operations, and reputation.

OUR MANAGEMENT SYSTEM

Health, Safety, and Environment Management System (HSEMS)

Consistent environmental compliance provides a foundation for reliable and safe operations. Our integrated Health, Safety, and Environment Management System (HSEMS) ensures our compliance with all applicable environmental laws and regulations. We developed the system in alignment with international best practices and standards, particularly ISO 14001:2015 on Environmental Management Systems, and we implement it across all our operations. At MedcoEnergi, we utilise this system to identify, assess, control, and monitor our operational health, safety, and environment (HSE) risks to our business, employees, contractors, and the surrounding environment. We require each operating asset and business unit to plan, coordinate, and monitor HSEMS implementation.

As of 2021, 53% of our assets are ISO 14001:2015 certified. Furthermore, two of our operated assets, Block A and Medco Ratch Power Riau (MRPR), and a non-operated asset, JOB Tomori, adhere to the Asian Development Bank (ADB) Safeguards and the International Finance Corporation (IFC) Performance Standards (PS). These assets were developed with financing support from institutions that have adopted the Equator Principles.

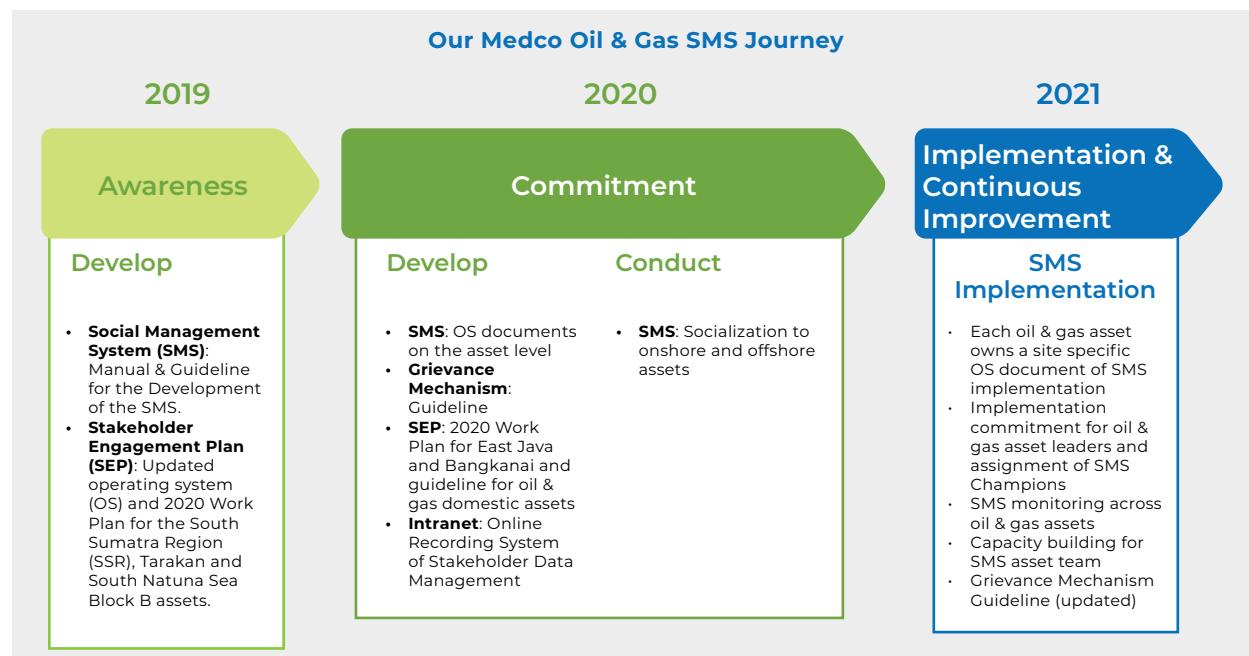
¹ The Operational Excellence framework is a systematic approach to ensure the consistent delivery of HSE, Asset & Operating Integrity (A&OI), Operating Efficiency, and Cost Management performance improvements through organisational learning, knowledge sharing, and application of best practices utilising the Plan-Do-Check-Adjust (PDCA) cycle.

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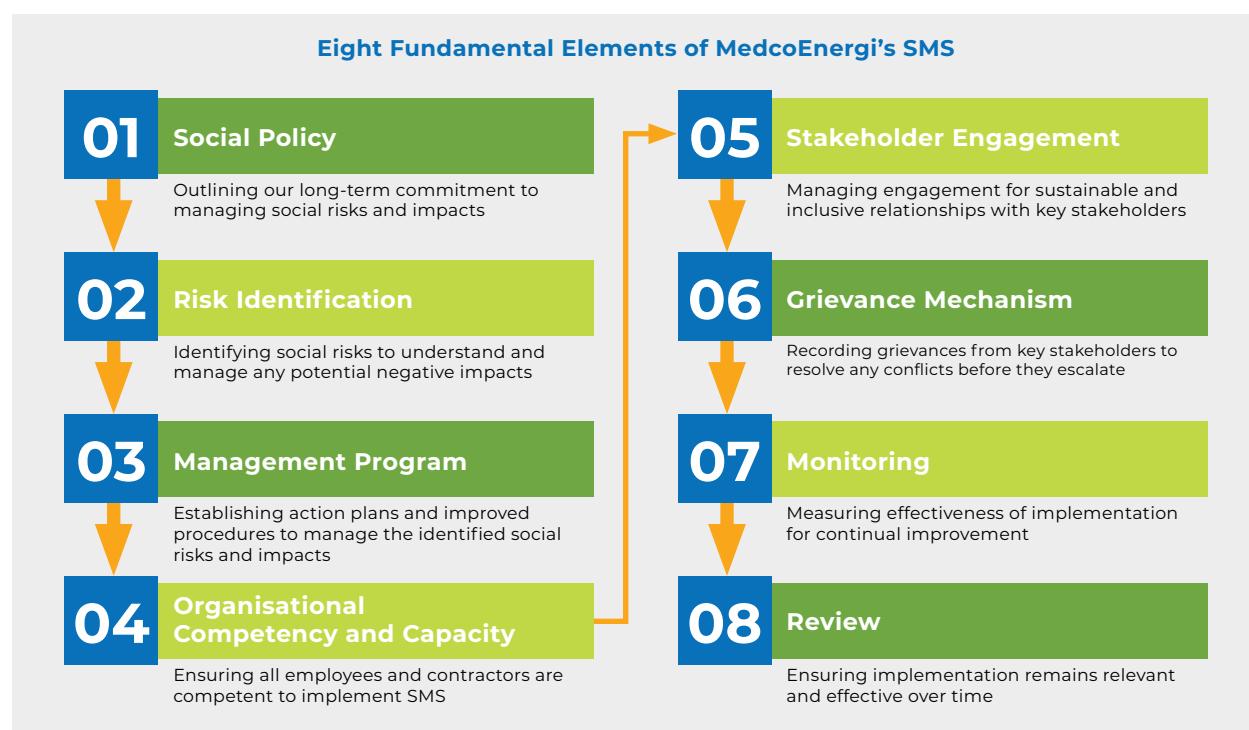
Social Management System (SMS)

One of our key social development programs in 2021 was the implementation of the Social Management System (SMS) across our assets. Our SMS is a set of processes and procedures that serve as a guideline for our Company to manage social risks and their

impacts¹. The system was developed in 2019 in accordance with the IFC's basic principles, and it is one of MedcoEnergi's Sustainability goals and key performance indicators (KPI) established following our materiality assessment in 2018. Our SMS Journey is highlighted below.



MedcoEnergi's SMS encompasses eight fundamental elements, each with a set of indicators to measure its implementation progress and maturity level, as seen below.



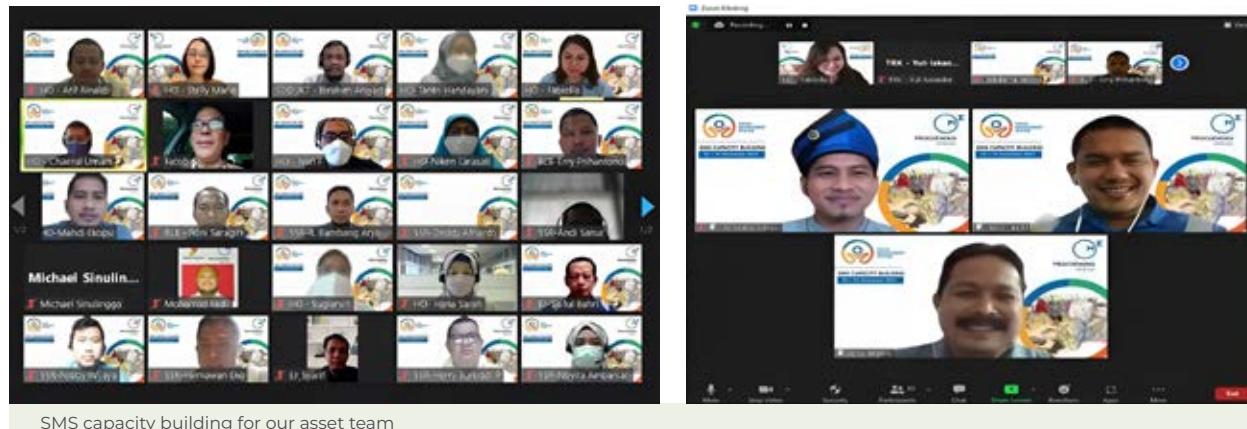
¹ We define social risk as a combination of the probability of hazard occurrences related to our employees and the surrounding community and the severity of impacts resulting from such an occurrence. Social impact refers to any change, potential or actual, that affects our employees and the surrounding community, as a result of MedcoEnergi's business activities and operations.

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SMS Implementation

As part of the SMS implementation roadmap, we organised in-house capacity-building sessions for our asset team. The objective of these sessions was to equip our team with the necessary knowledge and skills to implement the SMS effectively in their operating areas, using the Plan-Do-Check-Adjust (PDCA) iterative and continuous improvement cycle. The interactive sessions involved breakout room discussions, simulations, and case studies. They took place in December 2021 and were attended by approximately 50 participants from various functions. The sessions covered key topics such as:

- SMS Fundamentals and Business Processes;
- Practical Measures related to Social Risk and Impact Identification;
- The Enterprise Risk Management Framework; and
- The Community Emergency Response Plan.



SMS capacity building for our asset team

SMS Monitoring

As part of the PDCA process, we conducted the first SMS evaluation of our onshore asset teams in the South Sumatra Region¹, and both Bangkanai Block and Tarakan Block in Kalimantan. The process involved a series of self-assessments, interviews, and gap analysis.

We utilised the IFC Standard's Maturity Level to review our SMS and concluded that our onshore assets have reached Level 3 out of 5. The results of the evaluation indicated that although the systems approach has been adopted, there is still room for improvement in its development and implementation.

For continual improvement, we enhanced our SMS implementation by updating our SMS Implementation and Management Plan, expanding our Social Policy awareness, and socialising our grievance mechanism to affected communities.

Environmental Management Performance Rating Program

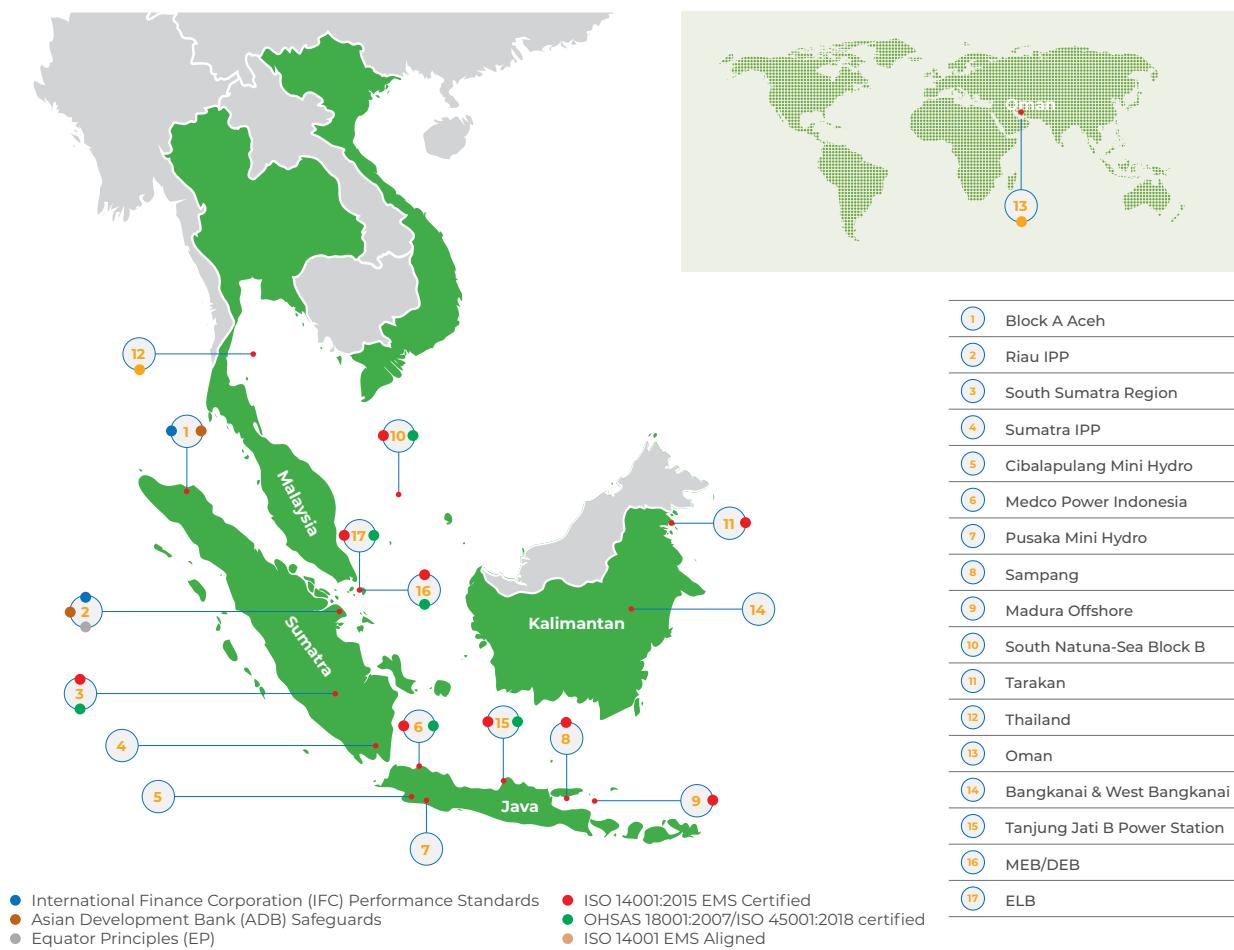
The Performance Rating Program in Environmental Management (*Penilaian Kinerja Perusahaan Dalam Pengelolaan Lingkungan*), also known as PROPER, is an annual assessment by Indonesia's Ministry of Environment and Forestry to evaluate company's performance operating in Indonesia. The program evaluates companies' adherence to the national environmental regulations and covers a range of regulatory topics, including environmental impact assessments, emissions, wastewater pollution, and hazardous and non-hazardous wastes.

As of 2021, all of our Indonesian assets that participated in the PROPER have received blue ratings complying with all government regulations related to environmental impact assessments, emissions, noise, waste, and wastewater, except South Natuna Sea Block B which received green rating. Our non-operated assets, JOB Tomori and Tanjung Jati B Power Station, both received gold ratings, demonstrating the best of beyond compliance efforts.

¹ The South Sumatra Region encompasses the South Sumatra Block, Rimau Block, and Lematang Block.

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Implementation of International Standards



In all of our oil & gas and power activities, we have allocated the necessary funds to carry out our environmental and social stewardship. These include funds to conduct environmental and social assessment and/or studies, wastewater and solid waste management and other pollution prevention programs. Meanwhile, the total costs incurred for community development programs can be found in Chapter 8 of this report.

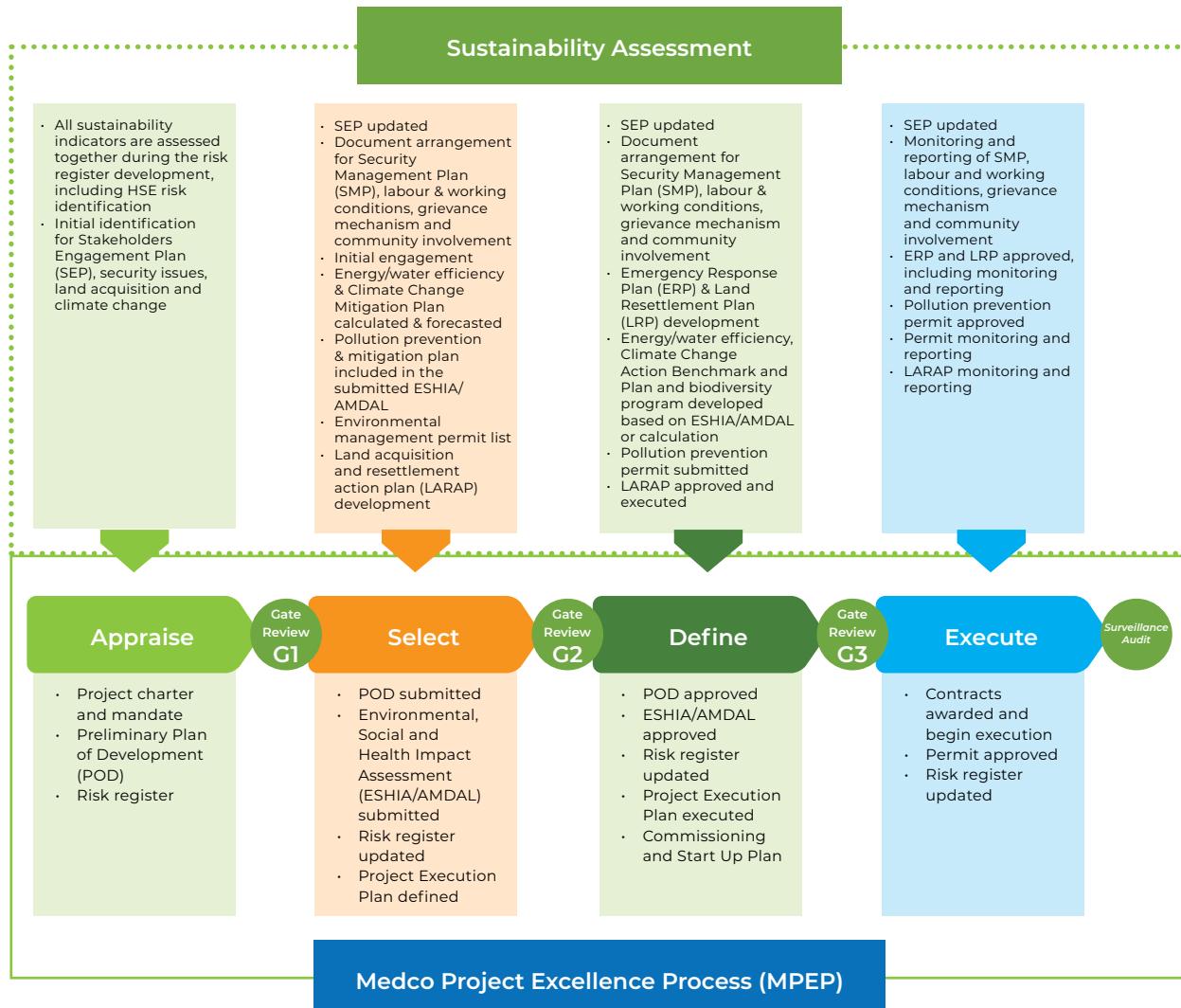
During 2021, there were zero incidents of non-compliance with environmental laws or regulations that resulted in material monetary fines, non-monetary sanctions, or cases brought through dispute resolution mechanisms across all operational sites. Furthermore, there were no material penalties or sanctions imposed on any of the Company's business units for regulatory violations or compliance issues.

SUSTAINABILITY ASSESSMENT

At MedcoEnergi, we implement a Sustainability Assessment as part of our capital project assurance system, Medco Project Excellence Process (MPEP). The tool is based on our Sustainability Policy, and guides the management and assessment of our projects' environmental and social risks across all stages. It consists of processes and output indicators that enable us to understand the risk levels associated with each project. Once the risks have been identified and categorised, mitigation measures are then introduced and monitored on a regular basis.

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Medco Project Excellence Process (MPEP) and Sustainability Assessment



Sustainability Assessment Indicators

During this reporting year, we improved our Sustainability Assessment by including a surveillance audit checklist to enhance the execution process. The checklist consists of 20 indicators which encompass the priority pillars of our Sustainability Policy. The following table displays these indicators and their groupings.

MedcoEnergi's Sustainability Assessment Indicators

Group Indicator	Indicator
Human Rights and Community Health, Safety and Security	<ul style="list-style-type: none"> Health and safety risk identification Emergency Response Plan Stakeholder engagement Indigenous communities Security Management Plan (SMP)
Labour and Working Conditions	<ul style="list-style-type: none"> Working conditions and management of worker relationships Retrenchment Plan Grievance mechanism for employees
Pollution Prevention	<ul style="list-style-type: none"> Air emissions and noise management Wastewater or effluent discharge management Waste and hazardous waste management
Sustainable Resources and Use	<ul style="list-style-type: none"> Energy and water efficiency
Climate Change Mitigation	<ul style="list-style-type: none"> Climate change action plan (calculation, forecast, and mitigation)

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Group Indicator	Indicator
Environmental and Biodiversity Protection and Natural Habitat Restoration	<ul style="list-style-type: none"> Biodiversity Management Plan
Environmental Impact Assessment	<ul style="list-style-type: none"> Environmental permit Environmental and social risk and impact identification and assessment
Local Community Empowerment	<ul style="list-style-type: none"> Land acquisition and involuntary resettlement Grievance mechanism for communities Livelihood Restoration Plan Community involvement

MPEP Scorecard

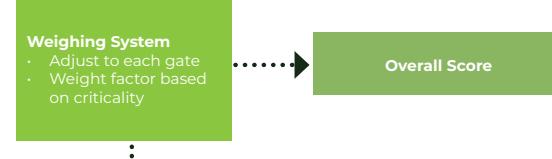
To quantify the progress of our Sustainability Assessment, we integrate the tool with our MPEP scorecard, and assign a minimum passing grade to continue onto the next step. The MPEP scorecard is applied and validated at each gate review (G1, G2, and G3) in Sustainability Assessment. The scorecard measures the maturity of all our major projects and we utilise it to help the Company decide which projects to execute.

Project maturity is calculated based on the overall score of each discipline. The result of the assessment is reviewed by the assurance committee, which consists of subject matter experts in risk management, sustainability, engineering, and commercial. During the project gate review, the committee evaluates the project deliverables and assigns a score. The MPEP scorecard structure is outlined in the figure below.

MPEP Scorecard Structure

Disciplines

Business Case	Drilling & Completion
Risk Management	Facilities Design
Sustainability	Cost Estimation
Health, Safety and Environment (HSE)	Project Execution
Subsurface	Operability Assurance



The following table displays the minimum expected score to pass from one gate review to the next.

Expected Scoring for Each Gate Review

Gate	Expected Score
G1	1.5 – 2.5
G2	2.5 – 3.5
G3	3.5 – 5

The criteria for the expected scores are listed below.

Criteria for MPEP Scoring

Score	Status
1	Not started
2	Major deficiencies
3	Some deficiencies
4	Minor deficiencies
5	Complete

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Hiu Development Project

Our Hiu Development Project has been classified as mature, achieving an MPEP scorecard of 4.40 at the third gate review (G3). Our Sustainability Assessment found that the project demonstrated an effective Stakeholder Engagement Plan and implementation, resulting in timely governmental approval.

MPEP Scorecard for Hiu Development Project



In 2021, we applied the Sustainability Assessment to 17 major projects at various gate reviews. The projects assessed are shown below.

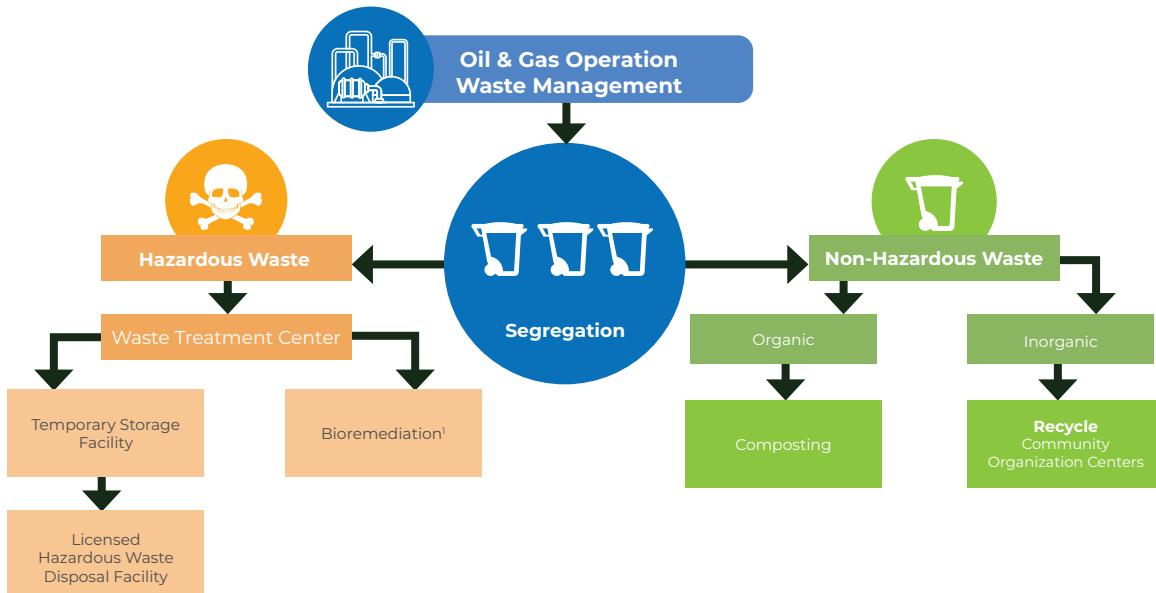
Map of Implementation of Sustainability Assessment in Major Projects



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WASTE MANAGEMENT

To safely treat our waste, we implement an integrated waste management approach, covering waste segregation, disposal, and treatment using the best available technologies (BAT).



Achieving Zero Waste at Bualuang, Thailand

At Bualuang, we achieved zero waste to landfill by redirecting all combustible non-hazardous waste to the Chonburi Clean Energy (CCE) Power Plant, which utilises waste to generate electricity. It supplies energy to Chonburi Province and has the capacity to accept 100,000 tonnes of waste per year, producing 8.63 MW of electrical power. The plant is also equipped with a flue gas treatment process to reduce pollutant emissions.

Chonburi Clean Energy Power Plant Process²



¹ Bioremediation process is only conducted in Rimau.

² The infographic is reproduced based on Chonburi Clean Energy presentation (<http://www.chonburicleanenergy.com/process/>).

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Non-Hazardous Waste

MedcoEnergi uses the Reduce, Reuse, and Recycle (3Rs) principle to manage the waste from our operations. Our non-hazardous waste is separated into two categories:

- Organic waste, which is sent to composting centres; and
- Inorganic waste, consisting mainly of plastic and paper from domestic sources that is sent to recycling centres.

We continuously engage with our stakeholders, both internal and external, to implement waste management measures and initiatives that are effective and impactful.

In 2021, our oil & gas and power assets generated 728 tonnes of non-hazardous waste, a 28.4% reduction from the previous year. This is mostly due to the reduction of activities at our operational facilities due to the COVID-19 pandemic.

Oil & Gas Non-Hazardous Waste¹



Hazardous Waste

To mitigate environmental risks, we engage third-party disposal companies to handle any hazardous waste generated in our operations. During this reporting year, our oil & gas and power assets generated 1,522 tonnes of hazardous waste, a 34% reduction from 2020 levels.

Oil & Gas Hazardous Waste²



Hazardous Waste Management Initiatives

Extended Producer Responsibility (EPR)

In South Sumatra Block asset, we initiated an Extended Producer Responsibility (EPR) initiative to return used chemical drums back to our vendors. This reduces the need for disposal of the drums as hazardous waste, as they can be reused as chemical containers.

The initiative has successfully resulted in savings of approximately IDR 50 million in disposal costs, and a 7% reduction of hazardous waste generated from used chemical drums compared with the previous year.

Improving our Filtration Maintenance System

We introduced an initiative to reduce costs and hazardous waste generation by improving the filtration maintenance system at the Singa Central Processing Plant (CPP), Lematang. We now replace the filters based on actual conditions instead of the traditional time-based approach.

As a result, hazardous waste was reduced by 357 kg, with cost savings of approximately IDR 170 million from January 2019 to June 2021.



Used filter replaced during maintenance

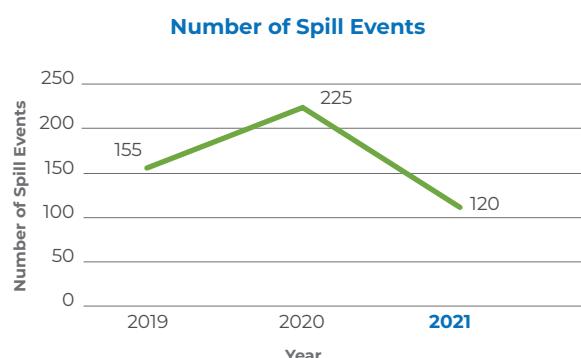
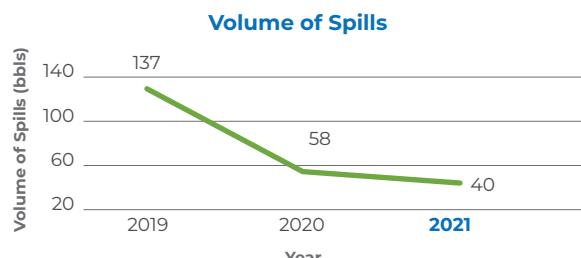
¹ Hazardous and Non-Hazardous Waste 2019-2021: International: Thailand and Oman; Domestic: Rimau, South Sumatra, Lematang, Tarakan, Block A, South Natuna Sea Block B, Bangkanai, Sampang, Madura Offshore.

² As stipulated by applicable regulations.

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OIL SPILL INCIDENTS

In 2021, the number of spill events and the volume of oil spilled were both lower than the previous year, by 47% and 31%, respectively. This year, we continued our pipeline replacement and revitalisation campaign to increase the integrity of our facilities and reduce potential spills due to pipeline corrosion.



Each of our oil-producing assets has an oil spill prevention, preparedness, and response plan in place, together with a preventive and corrective maintenance program. Our Indonesian oil & gas assets are members of the Oil Spill Combat Team (OSCT) Indonesia, a private oil spill response organisation with six bases across the country. Membership of the OSCT services helps us improve our spill preparedness and response capacity through access to equipment, experts, and competency training.

Our asset in Bualuang, Thailand has been a long-term member of both the Oil Spill Response Limited (OSRL)¹ and the Thailand Oil Industry Environmental Safety Group (IESG)². Bualuang has also been working with the OSCT Thailand in a preventive maintenance program for oil spill response equipment and provision of annual response training for offshore crews.

Oil Spill Response Equipment Deployment Exercise

In April 2021, we conducted our annual oil spill response equipment deployment exercise at Bualuang offshore, Thailand. The exercise helped test our ability to promptly respond to a spill event to mitigate potential impacts to our people and the surrounding environment.



Bualuang spill response equipment deployment exercise

¹ An international organization providing a wide range of services in oil spill preparedness and response.

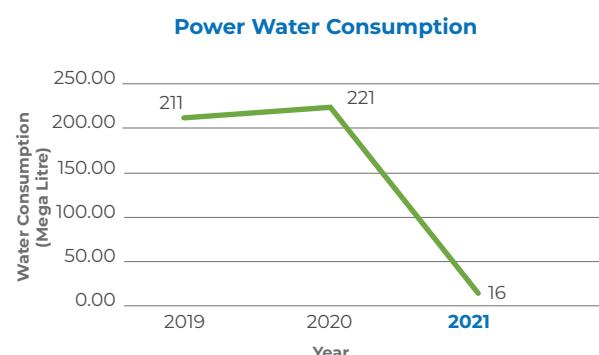
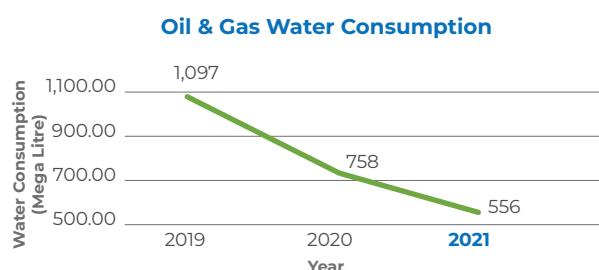
² A cooperative dedicated to develop Thailand's incident prevention capabilities and its ability to respond to oil spills and emergencies related to oil industry operations across the country.

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WATER MANAGEMENT

Our water consumption is mainly from usage at our supporting offices, with only a small portion required for our oil production activities. We implement efficiency initiatives to reuse water through reinjection technology and rainwater harvesting to lower our consumption of treated water.

In 2021, our water consumption for our oil & gas operations was 556,350 m³, a 27% decrease from 2020 levels. This reduction is mainly due to workforce adjustments during the pandemic, when we employed only skeleton crews in our operational facilities. Water consumption for our power operations also decreased by 92%, since the chiller in our gas power plant was not used in 2021 due to low market electricity demand. This chiller was the most significant contributor to water consumption during its operation.

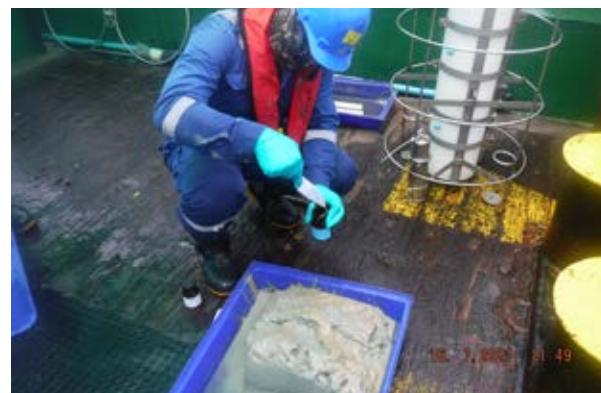


ENVIRONMENTAL MONITORING PROGRAM

At MedcoEnergi, we regularly conduct environmental monitoring programs across our operations as part of our regulatory compliance and implementation of our own assessment recommendations. The main objective of these programs is to manage and minimise the impact of our operations and protect the health of the surrounding environment. Some examples are highlighted here.

Seawater and Sediment Analysis at Bualuang Offshore, Thailand

In June 2021, we conducted an environmental monitoring program at Bualuang Offshore, Thailand. The program included sampling and analysis of seawater, sediments, and fish to gain an understanding of the ecosystem health and biodiversity of the area. We have been regularly conducting this sampling program in collaboration with Thailand's Department of Mineral Fuels (DMF).



Bualuang Environmental Monitoring Program, Thailand

Wastewater Monitoring at Medco Oil & Gas Lematang

We installed an automatic and continuous wastewater monitoring system known as SPARING¹. This installation is in compliance with the regulations established by the Indonesian Ministry of Environment and Forestry on Continuous Wastewater Quality Online Monitoring.

The system is used to monitor, record, and report the levels and/or discharge of wastewater in the oil & gas production process. It ensures that effluent parameters are lower than the Threshold Limit Value (TLV) from both internal and external sampling analysis before discharge.

¹ Sistem Pemantauan Kualitas Air Limbah secara Terus Menerus dan Dalam Jaringan (Continuous Wastewater Quality Online Monitoring).

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BIODIVERSITY CONSERVATION

Our commitment to safeguarding the environment is outlined in our Sustainability Policy. We acknowledge the importance of supporting biodiversity conservation and we have implemented various conservation initiatives across our operations. Our main activities focus on replanting trees, going beyond regulatory requirements, and conserving endangered species. An overall summary of our replanting activities are shown below:



The following table shows the costs incurred for our replanting activities.

Description	2019 (in USD)	2020 (in USD)	2021 (in USD)
Revegetation beyond regulatory requirements	71,864	24,742	24,653
Revegetation as per Leasehold of Forest Area License (IPPKH)	87,512	228,614	114,299

Biodiversity Conservation Initiatives across MedcoEnergi Assets

We have implemented various initiatives in the surrounding area of our assets aimed at conserving and promoting local biodiversity. These are outlined in the following table.

Sampang	South Sumatra	Rimau
2,500 mangroves (<i>Rhizophora spp.</i>) planted in Taddan Village, Sampang Regency	1,092 pine trees (<i>Casuarina spp.</i>) planted in Tambaklekok Village, Sampang Regency	636 hectares of watershed rehabilitation by replantation
		12.3 hectares in Sriwijaya National Park replanted with endangered and endemic vegetation such as Ramin (<i>Gonystylus bancanus</i>), Medang (<i>Phoebe</i>), Merawan (<i>Hopea odorata</i>) and Bayur (<i>Pterospermum javanicum</i>)



Biodiversity monitoring activity in Rimau, Indonesia

Biodiversity Conservation Initiatives at JOB Tomori

Mangrove Conservation and Education Program

Mangroves not only provide essential habitat for numerous local species, but they also stabilise shorelines, prevent erosion, and protect the coastline ecosystem. JOB Tomori's mangrove conservation program aims to improve the health of the mangrove ecosystem to optimise its ecological function. The program has set a target of planting 10,000 mangrove seedlings to enrich the area's biodiversity, and to improve the local community's knowledge and skills in planting and managing mangrove forests. Initiatives are also in place for monitoring and reporting on forest growth.

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By August 2021, the program reached its planting target across eight locations, covering a total area of 6.79 hectares.



Mangrove planting in JOB Tomori, Indonesia

In addition to mangrove planting, JOB Tomori hosted knowledge-sharing sessions through its Tomori Teaches program. The sessions were hosted in collaboration with local volunteers from RELASI (Relawan Abdi Generasi) in the South Batu District. The program educates local youths on the importance of conserving mangroves for future generations, particularly for coastal communities.



Mangrove conservation education by RELASI

Transplanting Coral Reefs

JOB Tomori has been engaging in coral reef transplanting since 2010 in Sulawesi, where the coral reef ecosystem in the area is in critical condition due

to the impacts of dynamite fishing. The project's goal is to increase the percentage of coral cover and improve the survival rate of transplanted coral seedlings, which will eventually become a breeding ground for fishes.

As of 2021, the coral coverage was at 9,425 m² with transplanting activities conducted by Tadulako University, Palu, Central Sulawesi.

Coral Reef Expansion in Tiaka Field, Sulawesi



Coral reef transplantation by Universitas Tadulako, Indonesia

Conservation of Sulawesi Masked Owls

The owl conservation program has been one of KEHATI Foundation's flagship programs since 2019. The objective of the program is to increase the population of the Sulawesi Masked Owl (*Tyto rosenbergii*), an endemic species in Sulawesi.

JOB Tomori collaborated with local NGOs to build owl nests in the area. The team also gathered feedback from local communities in Sumberharjo Village to understand more about project development and implementation challenges.

In 2021, the population of owls successfully increased by 60.9% in Batui Sub-district and 30.4% in Molong Sub-district. This increase in owl population is expected to contribute to the reduction of rats in both locations and the overall use of pesticides by farmers.

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Sulawesi masked owl conservation to reduce rat pest population

HUMAN RIGHTS

Awareness of critical human rights risks allows our employees to identify human rights-related issues and to introduce measures for improvement, in line with our ongoing human rights assessment in 2022. Throughout 2021, we conducted various engagement sessions on human rights for our employees. The sessions are outlined in the following table.

Engagement Session	Month	Number of Participants
Human Rights Brainstorming Group Discussion by Asset Integrity & Compliance (AI&C)	April 2021	24
Virtual Knowledge-Sharing Session on Human Rights Issues in collaboration with the Human Rights National Commission (Komnas HAM) of the Republic of Indonesia	September 2021	64
Human Rights Assessment Training led by Business for Social Responsibility (BSR)	October 2021	40
Human Rights Prevention Effort Awareness as part of the 2022 Ethics Liaisons Office (ELO) Program Workshop	November 2021	59

Another training session on the VPSHR was conducted in September 2021. The session was attended by 7 personnel from Medco Power where they learned about the 10 categories and principles of human rights.

ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

The following table maps our sustainability initiatives in strengthening our environmental and social safeguards against the UN SDG targets. This mapping does not constitute a claim that MedcoEnergi has measured or set targets for the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	3.9	<ul style="list-style-type: none"> • Health, Safety, and Environment Management System (HSEMS); • Sustainability Assessment; and • Environmental compliance.
	6.3, 6.4, 6.6	<ul style="list-style-type: none"> • Wastewater monitoring and management; • Water conservation and efficiency; and • Seawater and sediment analysis.
	12.2, 12.4, 12.5, 12.6	<ul style="list-style-type: none"> • Waste and effluent management, including hazardous and non-hazardous; and • Environmental data reporting.

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UN SDGs	Relevant Target	Key Initiatives
	14.1, 14.2, 14.5, 14.b	<ul style="list-style-type: none"> • JOB Tomori coral reef transplantation program; and • Oil spill reduction efforts.
	15.1, 15.2, 15.4, 15.5	<ul style="list-style-type: none"> • Revegetation programs; and • Biodiversity conservation and education initiatives.

ACTION PLAN

The following action plan has been designed to enable us to meet our objectives and continue to strengthen our environmental and social safeguards. We are measuring, monitoring, and reporting our progress and performance against these actions on a regular basis.

	Short Term Actions	Medium-Long Term Actions	Status
Environmental Compliance	Ensure that all new major projects comply with national legislation and international standards, where relevant.	<p>Continue implementing the Health, Safety, and Environment Management System (HSEMS) at all assets.</p> <p>Obtain ISO 14001:2015 certification for Block A (in addition to Rimau, Lematang, South Sumatra, Tarakan, and South Natuna Sea Block B).</p> <p>Conduct baseline analysis and determine opportunities for improvement to further lower GHG intensity.</p> <p>Conduct baseline analysis and determine opportunities for improvement to further lower energy intensity.</p> <p>Conduct baseline analysis and determine opportunities for improvement to further lower water consumption and waste generation (hazardous and non-hazardous).</p> <p>Obtain Green PROPER rating for all new assets within 4 years.</p>	HSEMS implemented, monitored and improved continuously at all assets. Block A has been implementing the Environmental Management System (EMS) and progressing towards ISO 14001:2015 certification. Benchmarking study and baseline analysis completed. GHG reduction and energy efficiency opportunities identified. Emission reduction projects initiated/implemented. For example: flared gas utilization in Tarakan, optimization of fuel gas consumption in South Natuna Sea Block B. Identifying and assessing challenges and opportunities.
Environmental Performance	Disclosure of all assets' GHG and environmental performance data.	<p>Calculate Scope 1 GHG emissions for all assets.</p> <p>Calculate energy consumption for oil & gas assets.</p> <p>Calculate water consumption for oil & gas assets.</p> <p>Calculate hazardous and non-hazardous waste generation for oil & gas assets.</p> <p>Waste utilisation and recovery.</p> <p>Low-pressure gas utilisation.</p>	Standardised methodology for GHG emission accounting, including emission sources, calculation, and emission factors, in alignment with international standards. Disclosed Scope 1 and 2 GHG emissions, energy consumption, water consumption, waste and hazardous waste generated, and waste utilisation and recovery to Ministry of Environment and Forestry (MoEF), SKK Migas, local environmental offices, and in Sustainability Report. Low-pressure gas utilisation has been included in the GHG emissions accounting, as part of Scope 1 combustion sources.

Chapter

#07

Paving the Ground for Net Zero

Solar PV Power Plant 26 MWp,
Sumbawa, West Nusa Tenggara, Indonesia

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PAVING THE GROUND FOR NET ZERO

For the energy sector, global climate change means that we must address the environmental impacts of energy production and consumption by transitioning into lower-carbon energy, while at the same time meeting increasing energy demand. To maintain business and operational resilience, we are integrating climate change issues into our business strategy, both mitigating risks and exploring opportunities. We established our Climate Change Strategy in October 2021 and announced our climate aspirations to achieve net zero for Scope 1 and Scope 2 emissions by 2050 and net zero for Scope 3 emissions by 2060.

APPROACH, COMMITMENT, AND GOALS

As a leading energy and natural resource company in Southeast Asia, MedcoEnergi aspires to be part of the solution to climate change.

Our Climate Change Strategy addresses the transition and physical risks of climate change. The strategy was developed based on our vision and mission, the framework of our sustainability aspirations, the Paris Agreement, and the Nationally Determined Contribution (NDC) of the host governments in the countries where we operate.

We are expanding our natural gas portfolio and are developing renewable energy sources, as part of our energy transition strategy to support the achievement of the United Nations Sustainable Development Goals (UN SDGs).

We are adding this new chapter on climate change into our sustainability report to communicate to our stakeholders on our progress towards our climate aspirations. This chapter encompasses elements of climate reporting that are aligned with the recommendations set out by the Task Force on Climate-Related Financial Disclosures (TCFD). The full version of our first TCFD report can be accessed here: www.medcoenergi.com

In May 2021, MedcoEnergi became a reporting member of CDP (formerly known as the Carbon Disclosure Project). By actively participating in this widely recognised reporting platform, we aim to improve the accountability and transparency of our climate actions.

INTEGRATING CLIMATE CHANGE INTO OUR GOVERNANCE

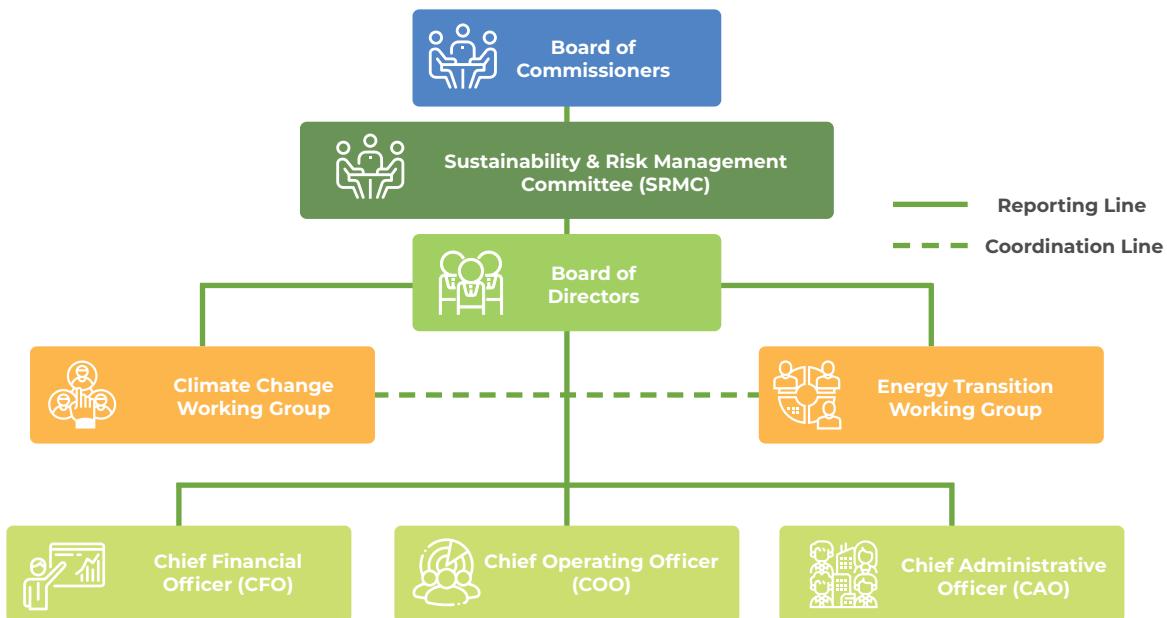
MedcoEnergi strategically integrates climate change considerations into the Company's governance structure. The MedcoEnergi Board of Commissioners (BoC) provides supervision to the Board of Directors (BoD) on risk management for all businesses, including climate-related risks, through the Sustainability & Risk Management Committee (SRMC).

The BoD is supported in addressing climate risks by a climate change working team which includes relevant corporate functions, such as Corporate Sustainability and Risk Management (CSR), Corporate Health, Safety, and Environment (HSE),

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Corporate Planning and Investor Relations, and the Operations team at the asset level of both Medco Oil & Gas and Medco Power. These key functions report on their operations to the BoD and participate in Quarterly Performance Review (QPR) meetings, supporting the BoD's integration of climate-related risks and opportunities into business strategy and decision-making. The figure below illustrates our current climate governance organigram.

MedcoEnergi's Climate Governance Organigram



Board of Commissioners (BoC)

The BoC supervises the BoD and provides assurance on the Company's progress regarding our Climate Change Strategy. The BoC is tasked with overseeing the integration of climate-related issues, risks, and opportunities into strategic planning and decision-making, as well supervising the climate-related risk management process.

Sustainability & Risk Management Committee (SRMC)

The BoC carries out its corporate governance oversight responsibilities related to sustainability and risk management through the SRMC. This responsibility includes addressing climate-related risks pertaining to the implementation of our Climate Change Strategy.

Board of Directors (BoD)

Our BoD is responsible for establishing and implementing our Climate Change Strategy, and ensuring that climate-related issues, risks, and opportunities are integrated within the Company's overall business strategy and objectives. They are responsible for formulating and implementing the climate-related Work Program and Budget, as well as overseeing the climate change risk management process. Climate-related issues are a scheduled agenda item in the BoD's weekly meetings, monthly performance reviews, QPR, project gate review meetings, and at the SRMC meeting.

Working Group

We are currently in the process of formalising two working groups responsible for overseeing and implementing key initiatives under our Climate Change Strategy: the Climate Change Working Group and the Energy Transition Working Group. These Groups will be formed from our existing climate change working team, and will have the responsibility of reporting on progress to our BoD.

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Climate-related Incentives

At MedcoEnergi, we provide performance incentives for attaining greenhouse gas (GHG) emissions reduction targets. These targets are part of our sustainability key performance indicators (KPIs) and are included in the Team Performance Contract (TPC) of relevant teams and individuals. We link the TPC outcomes to our reward programs, including salary review and performance incentives.

IDENTIFYING CLIMATE-RELATED RISKS AND OPPORTUNITIES

In 2021, MedcoEnergi conducted an initial scenario analysis of climate-related transition and physical risks that can potentially impact the Company. Further details on the findings of our climate-related risk assessment can be accessed through our website at www.medcoenergi.com

Climate-related Physical Risks

MedcoEnergi considers both acute and chronic physical risks in our physical risk assessment, as per our Enterprise Risk Management Policy. Acute physical risks refer to the occurrence of sudden risk

events with significant impacts, such as cyclones, hurricanes, and floods. Chronic physical risks are prolonged physical risk events due to longer-term shifts in climate patterns, such as sustained higher temperatures, sea-level rise, and chronic heatwaves.

In 2021, we conducted an initial Hot Spot Analysis for 19 onshore material assets - 15 assets in Indonesia, two in Oman and two in Thailand. The analysis was based on climate change projections for two Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) scenarios for the 2050 timeframe:

RCP 8.5

Business as Usual

The scenario corresponds to a 3.7°C rise by the end of the century due to low or no effort to reduce emissions.

RCP 4.5

Middle Path

The scenario corresponds to a 1.8°C rise by end of the century due to moderate efforts to reduce emissions.

In evaluating the physical risks, five natural hazard categories were used in the assessment, based on their relevance to the selected assets:



The following table provides an overview of the physical risk implications, as well as our proposed mitigation measures. Further details on the findings related to each hazard can be found in our full TCFD report.

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MedcoEnergi's Climate-related Physical Risks Assessment

Physical Risk	Key Implications	Proposed Mitigation Measures
Acute Physical Risk 	The increased frequency and severity of natural hazard events (such as floods and cyclones) can damage our asset infrastructure, compromise the safety of our employees, and increase costs related to asset damage and insurance.	Physical risk assessments on assets and businesses to improve their climate adaptation and resilience.
Chronic Physical Risk 	Chronic physical risks, such as water scarcity and extreme heat, may impact our operations, our equipment, and the safety and efficiency of our workforce. They may also affect our reputation in the long term if our adaptive measures are insufficient to mitigate their impacts.	Monitor climate trends and explore opportunities to maintain asset operation and the safety of a employees.

Climate-related Transition Risks

We also conducted an initial desktop-based qualitative assessment of transition risks and opportunities. The transition risk assessment aims to identify climate attributes based on the key transition drivers set out by TCFD: Policy & Legal, Technology, Market, and Reputation, against two International Energy Agency (IEA) scenarios, as outlined below:



The following table summarises the risk and opportunities as well as proposed mitigation measures associated with each climate attribute. A more detailed breakdown of the assessment's methodology and findings can be accessed in our full TCFD report.

MedcoEnergi's Climate-related Transition Risks Assessment

Physical Risk	Key Implications	Proposed Mitigation Measures
Carbon Pricing 	Risk: carbon pricing can potentially increase costs of exploration, production, and transportation related to our business activities and operations. Opportunity: implementing an internal carbon pricing mechanism will increase our readiness to comply with national regulations regarding carbon pricing or carbon tax.	Improve understanding of the potential impacts of carbon pricing to our businesses.
Stringent Regulations and Mandates for GHG Emissions 	Risk: this could potentially increase compliance costs for high-emission operations such as exploration and production of oil & gas, and gas-based power plants. Opportunity: stringent regulation of GHG emissions will encourage the development of renewable energy in our portfolio, benefiting our expanding Medco Power renewable energy business.	Monitor the regulatory landscape to anticipate changing regulations that may impact our business. We will utilise our findings to inform our business and operational strategy accordingly.

¹ Further reading: Stated Policies Scenario (STEPS) – World Energy Model – Analysis - IEA (<https://www.iea.org/reports/world-energy-model/stated-policies-scenario-steps>)

² Further reading: Sustainable Development Scenario (SDS) – World Energy Model – Analysis - IEA (<https://www.iea.org/reports/world-energy-model/sustainable-development-scenario-sds>)

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Physical Risk	Key Implications	Proposed Mitigation Measures
Low Carbon Energy Demand and Electrification Trends 	Risk: revenues of our oil & gas business may be impacted due to consumers' preference for low-carbon energy sources. Opportunity: since gas is recognised as a transition fuel, the expansion of gas and gas to power in our portfolio will sustain our business.	Capitalise on gas as a transition fuel and to expand our renewable energy business.
Market Shift to a Low Carbon Economy Transition 	Risk: lack of supporting infrastructure at the national level may compromise our plans for expanding our renewable energy portfolio. Research and Development (R&D) on other low-emission technologies may also require high capital expenditures (CAPEX). Opportunity: increasing our renewable energy portfolio may result in increased revenue for our power business. Additionally, since gas is recognised as a transition fuel, its demand could potentially increase.	With this market shift, capitalise on gas as a transition fuel and to expand our renewable energy business.
Adoption of Carbon Capture, Utilisation, and Storage (CCUS) Technologies 	Risk: CCUS may potentially require a high CAPEX for large-scale deployment. Opportunity: deployment of CCUS could help reduce our carbon-related costs and help to achieve our net zero climate aspirations.	Carry out CCUS feasibility studies and explore opportunities.
Increased Development of Commercially Viable Hydrogen 	Risk: utilisation of hydrogen-based technology requires high CAPEX for R&D and large-scale development. Opportunity: much like CCUS, deployment may reduce our carbon-related costs and help to achieving our net zero climate goal.	Carry out feasibility assessments of the technology to gauge market opportunities.
Stakeholder Pressure 	Risk: reputation-related issues could result in declining stakeholder trust and our access to investors. This could impact MedcoEnergi's valuation, earnings, and funding. Opportunity: our efforts to diversify our energy portfolio and build our Company's climate resilience will improve stakeholder confidence in our business.	Continuously monitor, track, and improve our climate-related disclosures to maintain transparency and accountability for our climate actions, e.g. through our CDP responses and TCFD reports.

Climate-related Risk Management

MedcoEnergi's climate-related risk management process takes into consideration international and national frameworks to ensure that our approaches align with the best available standards and key stakeholder expectations. These include Indonesia's NDC ambitions for GHG emissions reduction and for economic resilience to climate change impacts. At MedcoEnergi, CSRM is the division in charge of coordinating sustainability and climate-related risk management at the corporate level. The team regularly monitors our climate-related performance and identifies any potential risks based on periodic reviews across the Company.

Our Enterprise Risk Management (ERM) framework follows the ISO 31000:2018 standards on Risk Management, and it covers all facets of risks that may impact our operations. Through this framework, we acknowledge that climate change is an overarching topic that interacts with each and every category of MedcoEnergi's risk universe.

We require our assets and functions as the risk owners to register any risk occurrence and report it to the BoD during QPR, and this same principle applies to climate-related risk management.

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DEVELOPING OUR CLIMATE CHANGE STRATEGY

MedcoEnergi's Climate Change Strategy is the result of a multi-year process of building the required internal understanding and infrastructure for tackling climate-related issues.

2018-2019 Building the Foundation	<p>The materiality assessment we conducted in 2018 identified GHG emissions as one of our key priority issues for external stakeholders. We launched several programs and completed our GHG Scope 1 emissions inventory, followed by the development of a standardised methodology for emissions calculation. We also carried out a performance benchmarking of the Company's GHG emissions against industry peers.</p> <p>To maintain the accuracy and transparency of our calculations, our GHG emission numbers are verified by an independent third party.</p>
2020 Strengthening our Internal Capacity	<p>We started an internal initiative to gain a deeper understanding of key climate change concepts in 2020. We carried out peer benchmarking against leading oil & gas companies, regional players, and comparable energy companies to gain insight on industry best practices. We also started disclosing our Scope 2 emission. Furthermore, our team conducted a gap analysis to align ourselves with globally recognised standards and frameworks, such as TCFD and CDP, and assess the NDC of the countries we operate.</p> <p>These exercises helped us identify and determine the scope of climate action relevant to MedcoEnergi's business as an acquisitive regional company.</p>
2021 Developing our Climate Change Strategy	<p>In 2021, we collaborated with an external consultant to formulate a strategy to tackle climate-related issues. Our objective was to develop a framework for our climate action that aligns with MedcoEnergi's vision and mission and our sustainability aspirations, as well as international climate change treaties.</p> <p>In developing the strategy, we assessed our exposure to various climate-related transition and physical risks, and took into consideration our past and ongoing initiatives in energy efficiency and emissions reduction, and present and future regulatory frameworks of the host governments of the countries we operate.</p>

The processes above led us to establish our Climate Change Strategy and climate aspirations to achieve net zero for Scope 1 and Scope 2 emissions by 2050 and net zero for Scope 3 emissions by 2060.

Our Climate Change Strategy provides guidance for how we will achieve our net zero climate aspirations. It utilises MedcoEnergi's capabilities, technological expertise, and workforce to mobilise climate action. The strategy has three main pillars to ensure that we tackle the climate challenge holistically, addressing climate-related transition and physical risks and opportunities.

Within our Climate Change Strategy, we have also identified four key enablers to support effective implementation. They are Governance, Data Management, Transparency and Compliance, and Collaboration and Engagement.

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VISION

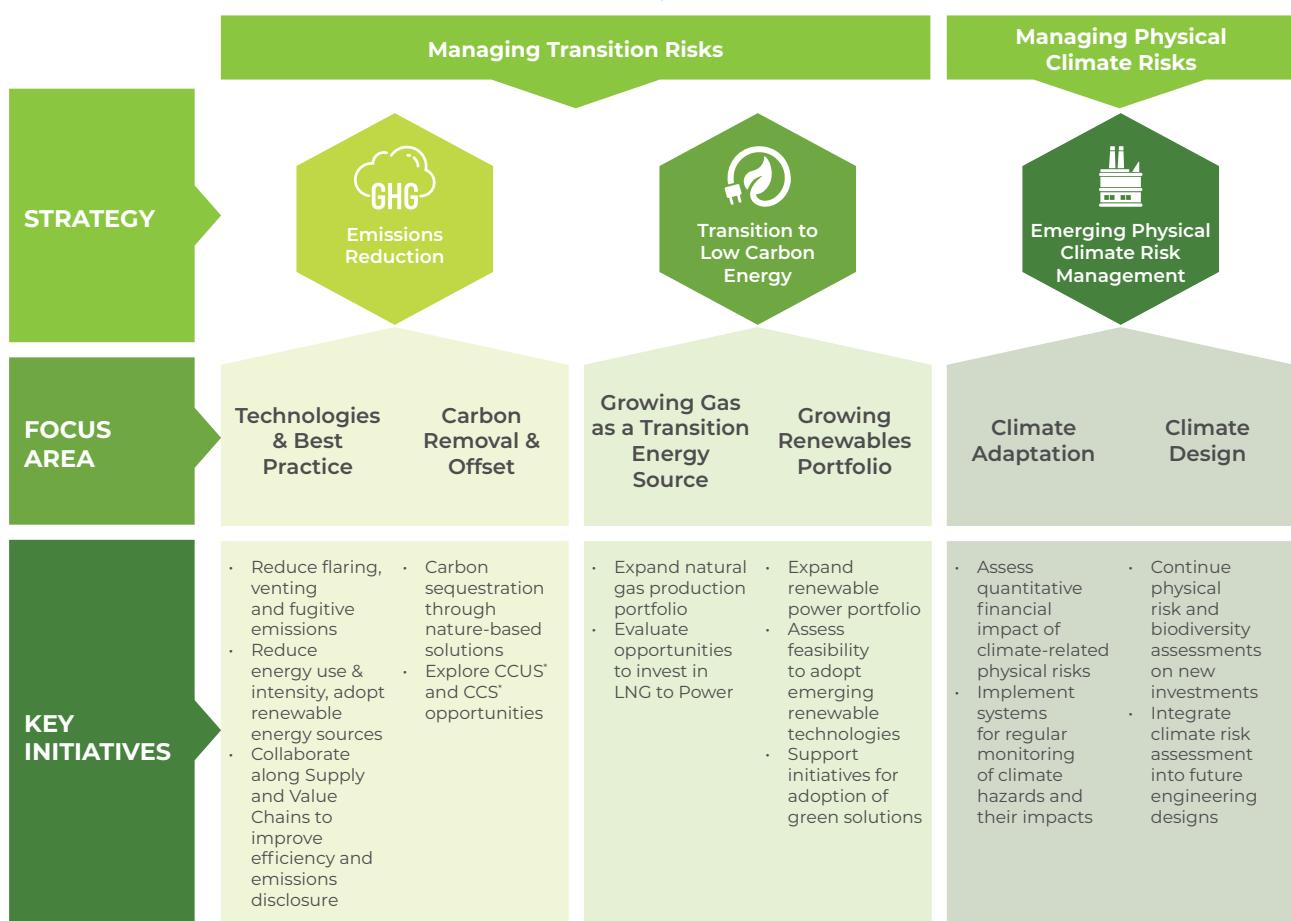
To be the Energy Company of Choice for our investors, shareholders, partners employees and the communities where we operate

MISSION

To build long-term value with a portfolio of sustainable energy and natural resource business

CLIMATE ASPIRATION

Achieve Net Zero for Scope 1 and Scope 2 Emissions by 2050 and Net Zero for Scope 3 Emissions by 2060



ENABLERS

Governance

- Board commitment and oversight
- Integration into business plans and performance management
- Staff engagement and capacity building

Data Management

- Improve Emission Data Management System
- Improve Scope 3 collection and calculation in alignment with protocols and standards

Transparency and Compliance

- Continue third party verification of emission disclosures
- Strengthen TCFD* disclosures and improve CDP* and ESG scoring

Collaboration and Engagement

- Engage with regulators and investors to monitor emerging regulations and trends
- Collaborate with stakeholders to drive the low carbon economy

* Notes

- CCUS : Carbon Capture Utilization & Storage
 CCS : Carbon Capture & Storage
 TCFD : Task Force on Climate Related Financial Disclosure
 CDP : Carbon Disclosure Project

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Strategic Actions and Initiatives

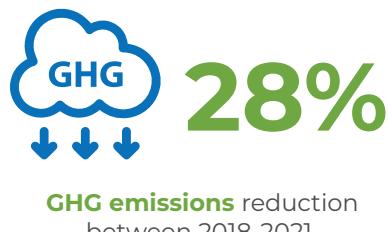
In developing our Climate Change Strategy, we considered past and ongoing initiatives which align with our pillars of Emissions Reduction, Transition to Low Carbon Energy, and Emerging Physical Climate Risk Management.

Emissions Reduction

Reduce Energy Use and Improve Efficiency

At MedcoEnergi we implement various measures to reduce energy use and improve efficiency across our assets.

South Natuna Sea Block B



In our South Natuna Sea Block B asset, we continued to optimise and digitise our compressor, turbine control, and operating conditions to reduce energy consumption and improve efficiency. We have introduced these measures since acquiring this asset in 2016, in line with our commitment to integrate operational excellence across our assets. This initiative supports our goal of strengthening climate action in all our current and future acquisitions.

Our GHG emissions reduction at the South Natuna Block B is as follows:

GHC Emissions Reduction at South Natuna Block B

	2018	2019	2020	2021
Total Emissions (tCO₂e)	1,022,315	938,991	752,803	733,492
Emission Reduction (tCO₂e)	83,324	186,188	19,310	
Emission Reduction (%)	8%	20%	3%	

We also implemented emission reduction and energy efficiency initiatives in other assets such as piloting the use of solar PVs at our Matak Base, and substituting the gas engine generator (GEG) for energy supplied from PLN at our Grati Onshore Processing Facility.

Moving forward, reducing emissions will play an integral role in achieving MedcoEnergi's Climate Change Strategy. We will continue to introduce initiatives across our assets to reduce energy consumption and GHG emissions. These measures include:

Grati Onshore Processing Facility



GHG emissions reduction from 2020 to 2021



Switching out diesel generators with **purchased electricity** in **Rimau, Bangkanai, and Oman assets**¹



Substituting nitrogen used in pneumatic supply with **electric air compressors** at **Oyong, Sampang**²



Replacing GEGs with solar power through **PV installation** at **Wortel, Sampang, and South Natuna Sea Block B**

¹ Purchased electricity from renewables for Rimau asset and purchased electricity from renewables is under assessment for Bangkanai.

² The effort aims to reduce diesel fuel consumption of marine mobilization to deliver nitrogen supply and to reduce CO₂ emission level from powering up hydraulic power pack for lifting.

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Reducing Flaring



Number of households our **Tarakan City Gas Program** has supplied with electricity and gas

Our Tarakan City Gas Program is a program that we began in 2011 to use associated gas to supply local households with gas and electricity. The program enabled us to simultaneously achieve our flaring reduction targets and deliver benefits to the surrounding communities in the form of safe and affordable energy. By 2021, the program supplied electricity and gas to 31,390 households, over 90% on Tarakan Island.

In the past, we have also implemented initiatives at our liquefied petroleum gas (LPG) plant in Banyuasin, South Sumatera, to process associated gas from the Kaji Semoga oil production fields into condensate, lean gas, and LPG. Although we no longer operate the plant, we included this in our consideration when developing our Climate Change Strategy.

Workshops on Energy Efficiency and GHG Emissions Reduction

MedcoEnergi conducted a series of capacity-building workshops for our employees, with the objective of improving employee awareness of the benefits and potential opportunities of improving energy efficiency and reducing GHG emissions. Hosting these workshops is part of implementing our Climate Change Strategy, as we recognise that staff capacity-building is a key enabler to achieving our climate aspirations.

Exploring Technological Opportunities

Carbon Capture Utilisation and Storage (CCUS) is an integrated emissions reduction technology that can prevent large quantities of CO₂ from being released into the atmosphere. CCUS has been lauded as an essential technology solution to achieving the goal of net zero emissions. By removing carbon from the atmosphere, CCUS can potentially balance the release of hard-to-abate emissions from carbon-intensive sectors.

In 2021, we have initiated a plan for feasibility study of the technology by conducting several capacity-building activities on CCUS, led by our Technical Assurance team.

Transition to Low Carbon Energy

Natural gas has been cited as a key transition fuel expected to drive the energy transition from conventional to renewable energy. It presents a reliable, affordable, and versatile energy source in stabilising the path to renewables, while reducing carbon emissions in the medium-term.

Expanding our Natural Gas Portfolio



275 MW

Gas-fired combined cycle power plant (CCPP) in **Pekanbaru, Riau**

The project is being developed by Medco Power and RATCH and has a potential output of 1,330 GWh. It will be operational in 2022.

We have also recently acquired the Corridor PSC from ConocoPhillips Indonesia Holding Ltd. (CIHL). The acquisition encompasses seven producing gas fields located onshore in **South Sumatera**, making us the main gas supplier to Singapore.

Establishing an EV Ecosystem



Medco Power launched the Electric Vehicle Ecosystem in early 2021, as part of our business expansion in the EV sector.

We signed a **Memorandum of Understanding** (MoU) with PLN, Grab Indonesia, and Bank Mandiri during the last reporting period, and we are currently developing the groundwork to establish EV ecosystems in **Jakarta, Batam, Riau, Bali, and South Sumatera**.

Exploring Opportunities in the Carbon Market

Thailand Voluntary Reduction Program (T-VER) is Thailand's voluntary GHG emissions reduction program developed by the Thailand Greenhouse Gas Management Organisation (TGO). The program provides a platform for sectors to sell carbon credits in the domestic market. Carbon credits are tradeable certificates or permits that represent the right to emit one tonne of CO₂ or the equivalent amount of a different GHG (tCO₂e).

In 2021, we engaged T-VER to explore MedcoEnergi's potential for participating in Thailand's carbon market.



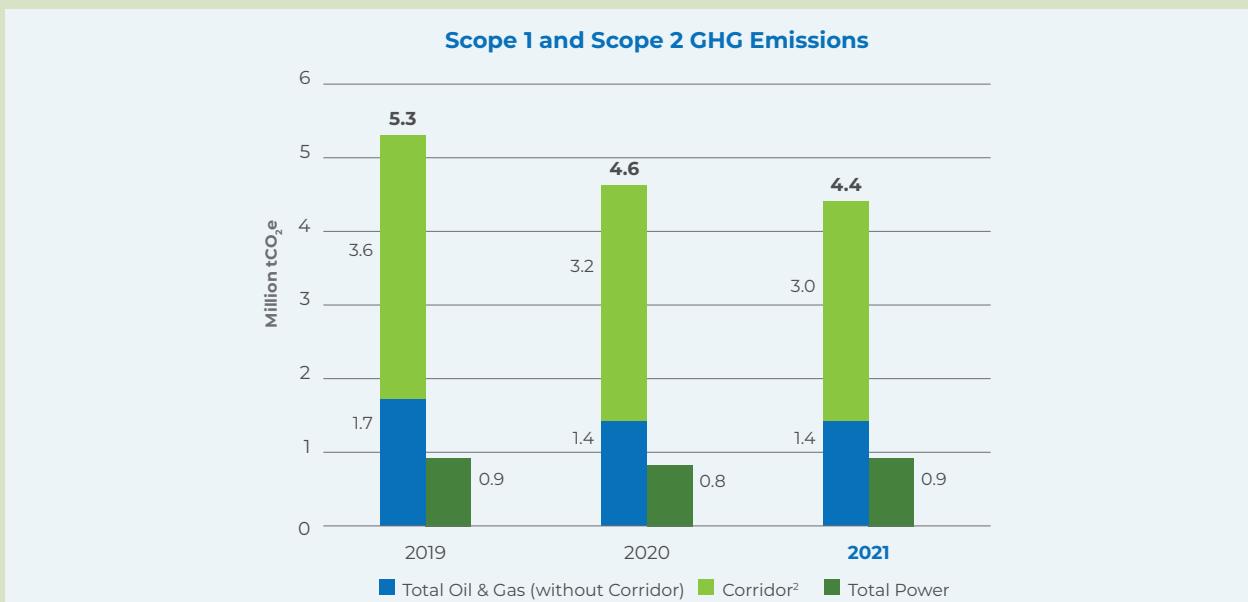


Corridor PSC facilities in South Sumatra, Indonesia

CORRIDOR ACQUISITION

As part of our strategy to grow gas as a transition energy source, we recently closed the Corridor PSC acquisition from ConocoPhillips Indonesia Holding Ltd (CIHL) in Q1 2022. The acquisition encompasses seven producing gas fields located onshore South Sumatra and indirect ownership of gas pipelines to Duri, Riau Province, and Singapore, expanding our natural gas portfolio from 60% to 79%. It will provide synergies with our existing portfolio and access to suitable reservoirs for potential Carbon Capture Storage (CCS). For this acquisition, MedcoEnergi was awarded the “2022 Asia Pacific Deal of the Year” by the Energy Council¹.

The graph below shows Corridor's scope 1 and scope 2 emissions as compared with Medco Oil & Gas and Medco Power portfolio from 2019-2021. Moving forward, we will include these figures in our emissions inventory as part of the asset integration into our business. We are assuring the data to evaluate the opportunities of implementing our Climate Change Strategy initiatives into its operations. A third party will be engaged to conduct limited assurance for our next reporting cycle.



¹ The world's leading network of senior energy executives with the primary mission to connect energy executives to each other and to the finance and investment communities surrounding them (<http://energycouncil.com>).

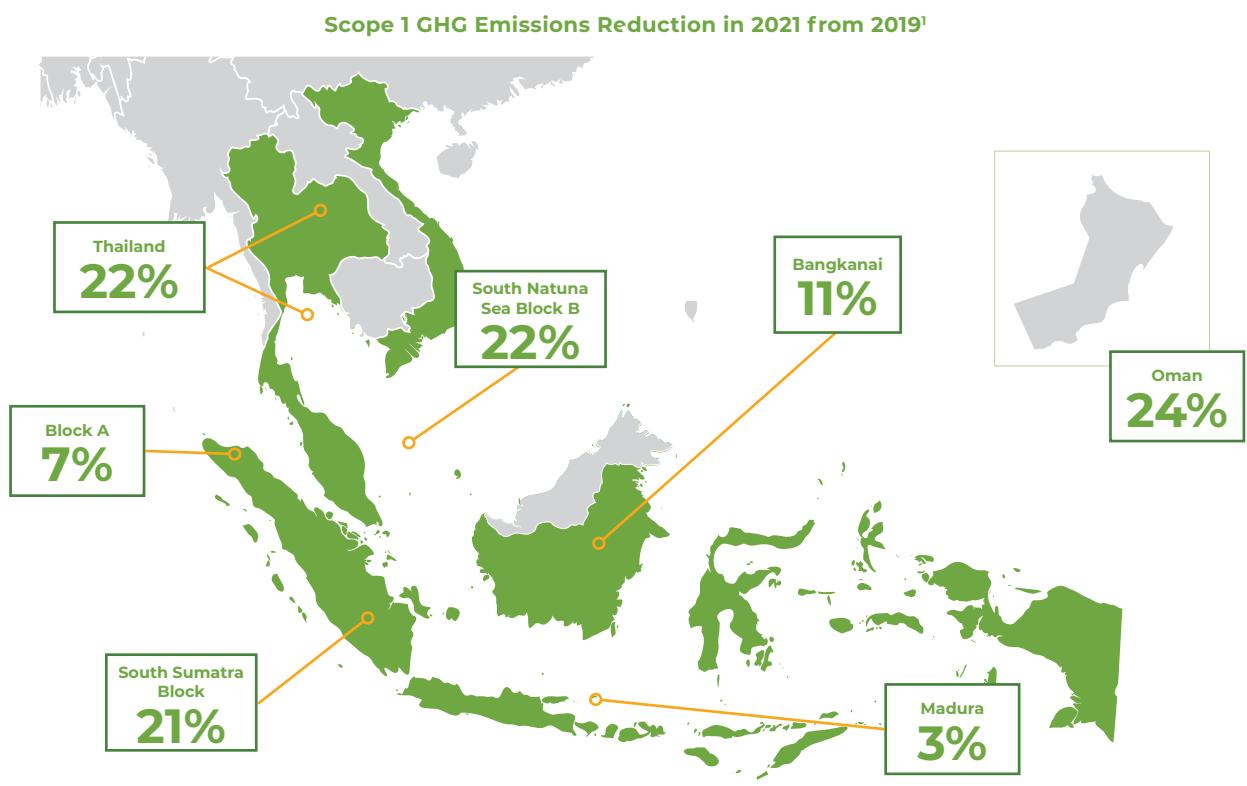
² The limited assurance for this Report covers Oil & Gas and Power emissions data for 2021, prior to the closure of the Corridor acquisition in 2022. The graph shows the total oil and gas Scope 1 and Scope 2 emissions from 2019-2021 if Corridor past emissions data are included. Moving forward, we will include these figures in our emissions inventory for determination of 2019 as the base year. Our 2019-2021 data that includes Corridor will be assured by a third party in the next reporting cycle.

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Emerging Physical Climate Risk Management

Through our climate-related physical risk assessment, we identified that climate change can potentially increase the frequency and severity of natural hazards. Thus, adapting our asset infrastructures to withstand extreme climate events is key in securing our business and operational resilience. Moving forward, we plan to conduct in-depth physical risk assessments of our assets and businesses. This will help us evaluate physical risk hotspots and address them accordingly. Furthermore, we will continue to monitor climate trends and explore opportunities to maintain our asset operation and the safety of our employees.

OUR ENVIRONMENTAL FOOTPRINT AT A GLANCE

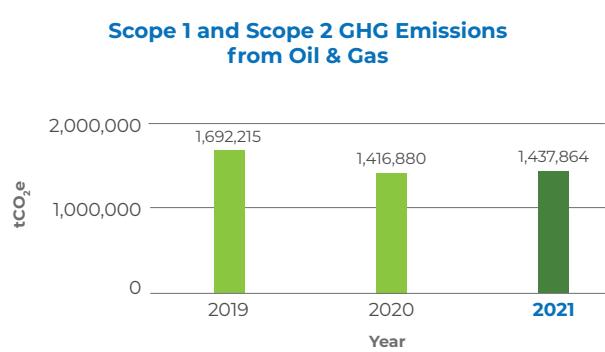


15%

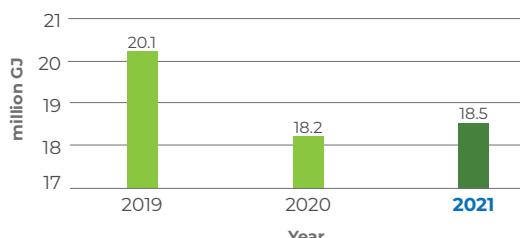
Reduced Oil & Gas Scope 1 and Scope 2 GHG Emissions in 2021 from 2019

8%

Reduced Oil & Gas Energy Consumption in 2021 from 2019



Energy Consumption from Oil & Gas



¹ 2019 is used as a comparison as 2020 is considered an anomaly due to impacts of the COVID-19 pandemic, where a reduction of energy demand and consequently lower emissions was observed due to social limitations.

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Renewable Highlights

Existing Operations



18 MW Hydropower Plants, Cianjur

Planned Projects

Exploration



110 MWe Ijen Geothermal Plant

Commercial Operation of Phase 1 by 2024

In Development



26 MWp Sumbawa PV Project

Operational by 2022



2 x 25 MWp Bali PV Project

Operational by 2024

Planned for Development



670 MWp Bulan PV Project

Operational by 2026

GHG EMISSIONS MANAGEMENT

We continue to manage and monitor our direct GHG emissions and began reporting our Scope 2 emissions in 2020. Furthermore, in 2021 we started assessing our Scope 3 emissions for the categories listed by the Greenhouse Gas Protocol¹. This is to address the growing expectations for companies to inventory their Scope 3 emissions and report them in addition to Scope 1 and Scope 2.

Direct GHG Emissions (Scope 1)

Our Scope 1 GHG emissions include direct emissions from our oil & gas and power assets. The key sources of our Scope 1 emissions are the combustion of fuels and the flaring and venting of natural gas in our operations. To monitor and report our GHG emissions, we continue to use our standardised Air and GHG Emissions Calculation Tool. The tool utilises references from the IPCC Guidelines for National Greenhouse Gas Inventories 2006, the GHG Protocol for Corporate Accounting and Reporting Standard from the World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) 2004, ISO 14064-1:2006 and API (American Petroleum Institute) Compendium 2009.

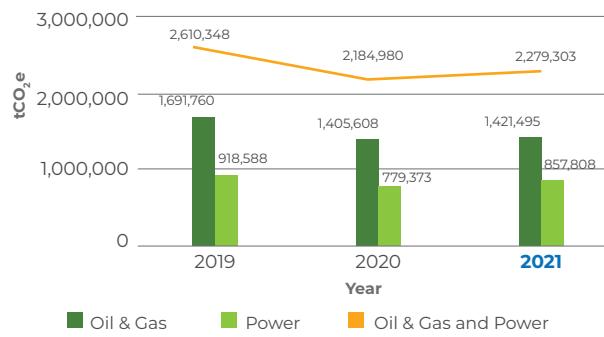
¹ For our initial Scope 3 assessment, MedcoEnergi utilises the categories and accounting methodology as set by the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard issued in 2011. This Scope 3 Standard is the only internationally accepted method for companies across sectors to account for these types of value chain emissions.

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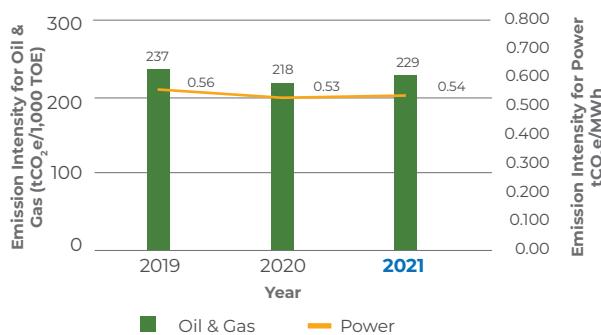
For our oil & gas operations, our absolute Scope 1 emissions in 2021 was 1,421,495 tCO₂e, a 16% decrease from 2019¹ as a result of numerous reduction initiatives implemented across our assets. Furthermore, between 2018 and 2021, we were able to reduce our Scope 1 emissions intensity² by 8% due to initiatives such as flare gas utilisation, energy efficiency efforts, and optimisation of our equipment and operating conditions. However, compared to 2020, we saw a 5% increase in our Scope 1 GHG emission intensity in 2021. This increase of our Scope 1 GHG emission intensity was due to operational variability and other temporary activities, such as well intervention.

For our power business, our absolute Scope 1 emissions in 2021 was 857,808 tCO₂e, a 7% decrease from 2019, but a 10% increase compared with 2020. This is due to variability in electricity demand following the gradual relaxation of COVID-19 restrictions by the government. Between 2018 and 2021, our power business reduced its Scope 1 emissions intensity by 2%.

Absolute Scope 1 GHG Emissions³



Scope 1 GHG Emissions Intensity

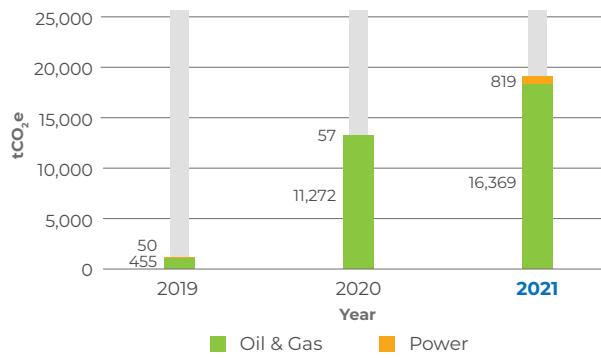


Indirect GHG Emissions (Scope 2)

Our Scope 2 GHG emissions include our indirect GHG emissions from the consumption of purchased electricity. This year, we continued to disclose our Scope 2 emissions⁴.

In 2021, our oil & gas operations emitted 16,369 tCO₂e of Scope 2 emissions, a 45% increase from 2020. This is mainly due to power source switching from the gas engine generator to purchased electricity in our Onshore Processing Facility in East Java⁵. Our power business reported Scope 2 emissions of 819 tCO₂e.

Absolute Scope 2 GHG Emissions



¹ 2019 is used as a comparison as 2020 is considered an anomaly due to impacts of the COVID-19 pandemic.

² Unit for Medco E&P Scope 1 emissions intensity is tCO₂e/1000 TOE.

³ For oil & gas assets, the following are included:

Scope 1 Emissions 2019—International: Oman, Thailand and Malaysia; Domestic: Rimau, South Sumatra, Lematang, Tarakan, Block A, Bangkanai, South Natuna Sea Block B, Sampang and Madura Offshore.

Scope 1 Emissions 2020—International: Oman, Thailand and Malaysia; Domestic: Rimau, South Sumatra, Lematang, Tarakan, Block A, Bangkanai, South Natuna Sea Block B, Sampang, Madura Offshore, and Jakarta Offices.

Scope 1 Emissions 2021—International: Oman, Thailand, Malaysia, and Singapore Office; Domestic: Rimau, South Sumatra, Lematang, Tarakan, Block A, Bangkanai, South Natuna Sea Block B, Sampang, Madura Offshore, and Jakarta Offices.

For power assets, the following are included:

Scope 1 Emissions 2019—Energi Listrik Batam, Energi Prima Elektrika, Multidaya Prima Elektrindo, Mitra Energi Batam and Dalle Energi Batam including mobile generator (TM2500)

Scope 1 Emissions 2020—Energi Listrik Batam, Energi Prima Elektrika, Multidaya Prima Elektrindo, Mitra Energi Batam and Dalle Energi Batam

Scope 1 Emissions 2021—Energi Listrik Batam, Energi Prima Elektrika, Multidaya Prima Elektrindo, Mitra Energi Batam and Dalle Energi Batam

⁴ The list of assets included in our Scope 2 emissions accounting are Tarakan, South Natuna Sea Block B, Sampang, Thailand, Oman, Malaysia, Singapore Office, and Jakarta Office.

⁵ The complete information on Scope 2 emission increase can be found in 2021 MedcoEnergi GRI Performance Data page 136.

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Indirect GHG Emissions (Scope 3)

Our Scope 3 emissions include indirect GHG emissions from activities pertaining to assets and/or operations that are not owned by MedcoEnergi, but exist within our corporate value chain. They include all emission sources that are not within our Scope 1 and 2 emissions.

In 2021, we conducted a preliminary assessment of our Scope 3 emissions based on the 15 categories outlined by the GHG Protocol's Corporate Value Chain (Scope 3) Standard. The assessment highlights our initial efforts to identify our Scope 3 emissions and to evaluate potential opportunities for management.

MedcoEnergi's Scope 3 Assessment

No.	Scope 3 Category	Relevance to Oil & Gas	Relevance to Power	Description
1	Purchased Goods and Services	+	+	Cradle-to-gate emissions of MedcoEnergi's purchases of goods and services, such as contractors' services and oils.
2	Capital Goods	-	+	Cradle-to-gate emissions of MedcoEnergi's purchases of capital goods, such as machinery and vehicles.
3	Fuel and Energy-related Activities	+	+	Extraction, production, and transport of MedcoEnergi's purchased fuels and energy not accounted for in Scope 1 and 2.
4	Upstream Transportation and Distribution	-	-	Fuel consumption by our suppliers and sub-contractors through transportation channels, such as fleets, trains, and trucks.
5	Waste Generated in Operations	-	-	Waste treatment and/or disposal by third parties.
6	Business Travel	-	-	Business trips conducted by MedcoEnergi's employees with any transportation by planes, trains, and cars.
7	Employee Commuting	-	-	Workplace commuting via private cars or public transportation by MedcoEnergi's employees.
8	Upstream-leased Assets	-	-	Any lease of assets, warehouses, and offices owned by MedcoEnergi to third parties.
9	Downstream Transportation and Distribution	-	-	Transportation and distribution of products sold by MedcoEnergi to customers, including retail and storage.
10	Processing of Sold Products	+	-	Emissions from the processing of MedcoEnergi's products by customers.
11	Use of Sold Products	+	-	Emissions from the direct use of MedcoEnergi's products by customers.
12	End-of-life Treatment of Sold Products	N	N	No end-of-life treatment for MedcoEnergi's products.
13	Downstream-leased Assets	N	N	MedcoEnergi does not have any downstream-leased assets.
14	Franchises	N	N	MedcoEnergi does not have any franchises.
15	Investments	-	-	Emissions pertaining to MedcoEnergi's investments.

Legend

+	Significant
-	Relevant
N	Not relevant

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ENERGY PERFORMANCE AND MANAGEMENT

Energy management is integral in ensuring the eco-efficiency and operational excellence of our business. At MedcoEnergi, we promote, support, and manage energy conservation efficiently in order to optimise our operations and minimise our footprint. We implement energy audits to continuously evaluate our energy consumption and identify potential opportunities where we could improve and adopt energy-saving initiatives.

Our Energy Performance

	Unit	2019	2020	2021
Total Energy Consumption	Oil & Gas	GJ	20,139,380 ¹	18,219,054 ^{2,4,5,6}
	Power	GJ	10,493,726 ⁸	8,606,234 ⁹
Energy Intensity	Oil & Gas	GJ/TOE HC Product	2.82 ^{1,3}	2.83 ^{2,4,5,6}
	Power	GJ/MWh	6.43 ⁸	5.86 ⁹

For our calculation, we utilised the American Petroleum Institute (API) Compendium 2009, the GHG Protocol for Corporate Accounting and Reporting Standard from WBCSD and WRI 2004, and the ISO 14064-1:2006 regarding guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

In 2021, the total energy consumption of our oil & gas business was 18.5 million GJ, a 8% decrease from our 2019¹¹ value of 20.1 million GJ. Our power business had a total energy consumption of 9.5 million GJ, a decrease of 9% compared to 2019.

Oil & Gas Energy Consumption (million GJ)

	2019	2020	2021
Electricity consumption	0.00	0.09	0.15
Renewable energy sources (e.g. biodiesel B20 gasohol E20 and solar energy)	0.02	0.01	0.01
Non-renewable energy sources (e.g. gasoline, natural gas, diesel and crude oil)	20.12	18.12	18.38

RENEWABLES

In transitioning to a low-carbon future, further advancements in the deployment of renewable energy are key to secure clean and affordable energy sources. To support this transition, and as part of our Climate Change Strategy, we continue to expand the renewable energy portfolio of our Medco Power subsidiary. In 2021, approximately 4% of our Medco Power sales were from renewables, including solar, geothermal, and mini hydropower sources.

Solar PV Projects

In the past two years, MedcoEnergi's renewable energy portfolio has grown rapidly. We are in the process of developing four solar photovoltaic (PV) projects in Indonesia. We expect all of them to be operational by 2025, providing nearly 750 MWp to the region.

Sumbawa PV Project (26 MWp)

Developed by Medco Power Indonesia and Amman Mineral Nusa Tenggara (AMNT), our Sumbawa PV Project is Indonesia's largest ground-mounted utility-scale solar PV. Once operational, the diesel replacement is expected to reduce AMNT's operational electricity costs by approximately USD 1 million/year and provide a CO₂ reduction of nearly 40,000 tonnes per annum (tpa).

¹ The list of assets in 2019—International: Oman, Thailand and Malaysia; Domestic: Rimau, South Sumatra, Lematang, Tarakan, Block A, South Natuna Sea Block B, Bangkanai, Sampang and Madura Offshore.

² Additional assets for 2020 and 2021 include Jakarta Offices and Singapore Office.

³ The list of assets in 2019 that consume energy from purchased electricity consist of Tarakan, South Natuna Sea Block B, Sampang, Thailand and Malaysia.

⁴ The list of assets in 2020 and 2021 that consume energy from purchased electricity consist of Tarakan, South Natuna Sea Block B, Sampang, Thailand, Oman, Malaysia, Singapore Office and Jakarta Offices.

⁵ The total purchased electricity consumption for Oman only covers the energy consumed from the generation of purchased electricity in May - December 2020. The electricity consumption in January - April 2020 was not available from the provider.

⁶ 2020 was the first year for Jakarta Offices and Oman to disclose their purchased electricity consumption, which was significantly higher compared to other assets.

⁷ 2021 was the first year for Grati Onshore Processing Facilities (OPF) in Sampang to switch its power source from natural gas generator to purchased electricity, which cause significant increase in total purchased electricity consumption figures.

⁸ The list of assets in 2019 — Energi Listrik Batam, Energi Prima Elektrika, Multidaya Prima Elektrindo, Mitra Energi Batam and Dalle Energi Batam include mobile generator (TM2500).

⁹ The list of assets in 2020 and 2021 — Energi Listrik Batam, Energi Prima Elektrika, Multidaya Prima Elektrindo, Mitra Energi Batam and Dalle Energi Batam.

¹⁰ The significant increases of energy consumption in 2021 is attributed to the returning electricity demand and production following the gradual relaxation of COVID-19 restrictions.

¹¹ 2019 is used as a comparison as 2020 is considered an anomaly year due to impacts of the COVID-19 pandemic.

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By mid-2021, two of the four blocks had initiated partial commercial operation and the project is currently on track to be completed by April 2022.

Bali PV Project (2 x 25MWp)

In collaboration with Solar Philippines, Medco Power Indonesia completed the Bali PV feasibility study in 2020 in West Bali and East Bali. Its development will increase our total renewable energy mix to 13% in 2024. In 2021, we initiated the project's early stages of development.

Bulan Island PV Project (670 MWp)

This year, we announced a potential pilot Solar Power Project located on Bulan Island in Riau Islands Province. The Project would be developed in consortium between Medco Power Indonesia, Pacific Power Pte Ltd, and Gallant Venture Ltd. and would have the potential to provide the equivalent of 100 MW of non-intermittent electricity.



Bulan Island PV Project signing ceremony at Singapore International Energy Week 2021, attended by representatives of ESDM Ministry of the Republic of Indonesia, MedcoEnergi, Pacific Light, and Gallant Venture.

Solar Rooftop

We have solar rooftop installed in two of our Power assets, ELB site office in Batam since 2019 and MRPR site office in Riau since 2022.

East Java Platforms

Our East Java offshore operations used solar PV installed on top of the wellhead platform (WHP) to generate the power. Madura Offshore asset has operated solar PV for Peluang WHP since 2014 and for Meliwis WHP since 2020. The other platform in Sampang asset, Oyong WHP, started the solar PV operations since 2017.



Sarulla Geothermal Operation, Indonesia

Geothermal Projects

We currently continue to expand our geothermal install capacity in Indonesia. In 2021, we also signed a Head of Agreement with Pertamina Geothermal Energy to further study and potentially develop a 400–500 MW equivalent power plant from five geothermal working areas.

Sarulla Geothermal

Located in North Sumatra, the 330 MW Sarulla geothermal power plant is one of the world's biggest geothermal power plants. The plant supplies power to the State-owned Electricity Company (Perusahaan Listrik Negara/PLN) through the electricity grid in Sumatra and is fully operational with three units. The project is owned and operated by Sarulla Operations (SOL), a consortium of Kyushu Electric Power, Itochu, Medco Power Indonesia, INPEX, and Ormat International.

Ijen Geothermal

MedcoEnergi has completed four geothermal exploration wells since 2019. In 2021, we initiated Phase 1 development of a 30 MW geothermal power plant located in Ijen, East Java. The target commercial operation date (COD) of Phase 1 is 2024, and we have secured a Power Purchase Agreement (PPA) with the State-owned Electricity Company (Perusahaan Listrik Negara/PLN) for 110 MWe. The project is a consortium between Medco Power Indonesia and Ormat International.

Bonjol Geothermal

Located in the Pasaman Regency in West Sumatra, Medco Power will initiate exploration of the Bonjol Geothermal prospect to develop a 50 MWe intermediate temperature resource.

Mini Hydropower

Our subsidiary, PT Medco Hidro Indonesia, is operating two mini hydropower plants in Cianjur, West Java, Cibalapulang, and Pusaka Parahiangan, with a total output of 18 MW.

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ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

The following table maps our sustainability initiatives in tackling climate change against the UN SDG targets. This mapping does not constitute a claim that MedcoEnergi has measured or set targets for the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	7.2, 7.3, 7.A, 7.B	<ul style="list-style-type: none"> Renewable energy development: solar PVs, hydropower, and geothermal power plants; and Tarakan City Gas Program.
	12.2, 12.6	<ul style="list-style-type: none"> Key initiatives within the Climate Change Strategy.
	13.1, 13.2, 13.3	<ul style="list-style-type: none"> Key initiatives within the Climate Change Strategy; Renewable energy development: solar PVs, mini hydropower, and geothermal power plants; Workshops on energy efficiency and GHG emissions reduction; and Participation in the Indonesian Climate Change Expo.

Chapter

#08

Creating Opportunities for Communities



Family Medicinal Plant Program
Rimau, South Sumatra, Indonesia

Approach, Commitment and Goals
Supporting Community Livelihoods
Measuring and Evaluating Our Impact

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CREATING OPPORTUNITIES FOR COMMUNITIES

With the MedcoEnergi Community Development Policy, we aim to empower our local communities and help them become more resilient and self-reliant. Our approach is based on understanding local concerns and developing solutions to address those concerns in an impactful and timely manner. The COVID-19 pandemic has highlighted the need for us to strengthen our efforts to secure community well-being. As we collectively navigate our way through the second year of a global pandemic, we continue to work closely with local communities and stakeholders in our community development programs.

Key Focus Area of the MedcoEnergi Community Development Policy



Our Community Development Policy is available on [MedcoEnergi's website at \[www.medcoenergi.com\]\(http://www.medcoenergi.com\)](http://www.medcoenergi.com)

APPROACH, COMMITMENT, AND GOALS

Engaging local communities is important for strengthening our relationships in the areas where we operate. To establish our community development programs, we assess and prioritise community needs, and we incorporate local renewable resources and local wisdom. The program objectives are to unlock and nurture local potential, increase social and economic productivity, and improve welfare through the principles of sustainable development, in line with the UN SDGs.

At MedcoEnergi, we are committed to creating a positive impact on surrounding communities in our operational areas. We assess all of our asset's operations and any future projects using an Environmental, Social, and Health Impact Assessment (ESHIA) study. The purpose of the ESHIA is to identify, manage, and assess any potential environmental, social, and health impacts of our operations. The ESHIA incorporates both desktop and field studies, and includes focus group discussions and stakeholder consultations. We utilise the findings of the study to develop an Environmental, Social, and Health Management Plan (ESHMP) to mitigate any adverse impacts that may arise, and to enhance positive benefits for the surrounding communities.

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SRI organic rice harvesting in Tarakan, Indonesia

In addition to the ESHIA, we also implement a Sustainability Assessment as part of our capital project assurance system. This assessment aims to evaluate both environmental and social risks for all stages of our projects and integrate mitigation measures into project schedules and budgets.

Meaningful Engagement with our Stakeholders

As part of the Social Management System (SMS), we conduct stakeholder engagements as we establish and assess our community development programs. We involve communities and local governments in planning, implementing, and evaluating our programs. These engagements are critical for ensuring that we understand and meet the needs of communities and implement our initiatives in a culturally appropriate manner.

Through our precautionary and participative approach, we aim to foster connections, trust, and confidence with local communities and other

stakeholders. We believe that effective engagement can mitigate potential risks and conflicts with community groups, which is necessary to ensure the success of our programs.

At MedcoEnergi, we utilise our Stakeholder Engagement Plan (SEP), which we regularly update, to analyse, review, and evaluate the implementation of our programs. Through this framework, we aim to provide a platform for effective engagement based on issues and risks.

We work side by side in partnership with local communities. We use multi-stakeholder engagement platforms that include district leadership coordination forums (Forum Komunikasi Pimpinan Daerah/FORKOPMIDA), local youth organisations (Karang Taruna), non-governmental organisations (NGOs), and other community-based organisations. We routinely work with these entities to improve our social performance.

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We engage with local communities on a regular basis to strengthen our relationships and maintain open and transparent communication. As an example, when there were health and safety concerns due to strong odors in Block A, we worked closely with the impacted communities and their leaders during the evacuation of community members. We also included the local government and independent parties, such as universities, in investigating the source of the odor. With this approach, we were able to respond quickly to evacuate the community members and then were able to return them to their homes as soon as the investigation was completed and the situation was declared safe. The engagement with our stakeholders allowed us to effectively expedite the resolution of this issue.

Human Rights and Security

Our Security Policy reflects our commitment to comply with all applicable laws and regulations and to respect human rights in line with the UN Guiding Principles on Business and Human Rights and the Voluntary Principles on Security and Human Rights (VPSHR).

In 2021, we introduced implementation of the MedcoEnergi Security Management System (MSMS) across all assets to manage security risks. We conducted training and capacity-building activities, and completed security risk assessments for all assets. We also conducted critical asset risk mapping followed by monthly monitoring and evaluation of the Security Management Plan.

In total, 98.4% of our oil & gas security personnel and 100% of our power security personnel participated in human rights training during 2021.

SUPPORTING COMMUNITY LIVELIHOODS

Direct engagement with local communities is an essential component of establishing and implementing our community development programs. This engagement enables us to design our programs in line with the capacity, resources, and needs of communities. In supporting local communities to become self-reliant, our programs focus on improving sustainable livelihoods, construction and infrastructure, capacity building, and initiatives that build community resilience during the COVID-19 pandemic.

Key Community Development Programs

The complete list of community development programs is available in the GRI Performance Data, GRI 203 on page 139-142 and GRI 413 on page 143-149.

Assets	Program Description	Program type
MedcoEnergi	Initiated an online tutoring program for 249 students near five Medco E&P assets to prepare for the state university entrance exam	Sustainable livelihoods
	Participated in the vaccination program with SKK Migas to vaccinate upstream oil & gas employees and contractors	Others: COVID-19 response
	Collaborated with the South Jakarta Health Office to provide vaccinations for senior citizens and teenagers	Others: COVID-19 response
	Collaborated with the South Jakarta Health Office to organise vaccination programs for the visually impaired group	Others: COVID-19 response
	Donated 100 packages of basic necessities and 100 packages of immune-boosting herbs to journalists in Banggai, Central Sulawesi	Others: COVID-19 response
	Donated 140 masks and vitamins to journalists in Aceh Timur	Others: COVID-19 response
Block A Sumatra, Indonesia	Provided training and coaching to farmers in utilising idle land around Medco E&P Malaka's operating area in East Aceh Regency to grow cassava	Sustainable livelihoods
	Provided monetary donations and support to the association of journalists in Aceh Timur Regency	Others: Donation

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Assets	Program Description	Program type
South Natuna Sea Block B Riau Islands, Indonesia	Supported Anambas Islands fishermen to establish a grouper aquaculture business with floating fishing nets	Sustainable livelihoods
	Provided online support for teacher training at Palmatak 1 junior high-school (<i>Sekolah Menengah Pertama Negeri/SMPN</i>), Anambas Islands, Riau	Sustainable livelihoods
	Supported eight junior high schools in the Anambas Islands with a Learning Management System (LMS) application and installed a wireless intranet network and tower	Sustainable livelihoods, construction and infrastructure
	Donated food packages to communities in the Anambas Islands	Others: Donation
Rimau Sumatra, Indonesia	Rehabilitated 18.83 hectares of watershed at Meranti Sungai Merah, South Sumatra and trained local communities on forest and land fire prevention	Sustainable livelihoods
	Donated 50 oxygen cylinders to the South Sumatra Provincial Government	Others: COVID-19 response
Bangkanai Kalimantan, Indonesia	Provided education on forest and land fire prevention for communities	Sustainable livelihoods
	Developed an internet network for students in Karendan Village, Central Kalimantan to support their long-distance learning due to the pandemic	Construction and infrastructure, and others: COVID-19 response
	Donated 2,500 masks to the North Barito Police in Central Kalimantan	Others: COVID-19 response
Bualuang , Thailand	Provided financial assistance to the Marine and Coastal Resource Area Office to restore mangroves covering 32 hectares of land at Bann Nam Lod Village, Chumphon Province	Sustainable livelihoods
	Provided tutoring programs for 800 students at Chumphon Province, Koh Samui, Koh Pha-ngan and Sattaship District	Sustainable livelihoods
	Donated 45 thermometers to the First Naval Area Command	Others: COVID-19 response
	Donated medical supplies to the Royal Thai Navy and Local Government Agencies in Chonburi Province	Others: COVID-19 response
Pamekasan Madura, Indonesia	Provided 1,000 learning tools to students and teachers	Sustainable livelihoods
Tarakan Kalimantan, Indonesia	Developed a climate village program in collaboration with the regional government of Tarakan City	Sustainable livelihoods
	Hosted a hackathon to provide a platform for local businesses to promote their products digitally	Sustainable livelihoods
	Supported a second dose vaccination program for Medco Oil & Gas employees	Others: COVID-19 response
Sampang Java, Indonesia	Planted 1,092 pine tree seedlings along the coast of Tambak Lekok Village, with the potential to develop into a new nature tourism spot	Sustainable livelihoods

Community Development Support

The table below shows MedcoEnergi's monetary support over the last three years in establishing and implementing our community development programs.

Program (US\$)	2019	2020	2021
Sustainable livelihoods	712,012	625,353	524,287
Construction and infrastructure	765,686	754,992	1,031,951
Others	409,913	377,088	425,754
Total	1,887,611	1,757,433	1,981,992

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Community Development Highlights

Caring for the Environment to Support Our Communities

Watershed Rehabilitation in South Sumatra

As part of our commitment to environmental stewardship and mitigation of climate change, we carried out a watershed rehabilitation program in the Meranti Sungai Merah Protected Area in South Sumatra. Our Rimau asset initiated this multi-year program in 2018 in collaboration with Gadjah Mada University and SKK Migas. It covers approximately 19 hectares, and 19,206 seedlings of various species were planted to improve the area's biodiversity.

We conducted a capacity-building program with a local organisation to empower the community and encourage environmental stewardship. The program provided training on seeding, planting, and maintaining growth to contribute to sustainable income. Through this program, we also helped the community improve their awareness and understanding of fire prevention and control. This effort led to the establishment of the Fire Care Community Group (*Kelompok Masyarakat Peduli Api*) through an inclusive process.



Senior Vice President of Medco Oil & Gas Onshore Asset shared the results of the watershed rehabilitation initiative with the Directorate General of the Watershed and Forest Reserves.

Mangrove Plantation in Chumphon Province

Mangrove forests offer a myriad of benefits to coastal communities. They are integral for maintaining the health of surrounding ecosystems by providing key environmental services such as coastal hazard protection, erosion control, water filtration, and biodiversity conservation. Furthermore, mangrove soils are highly effective carbon sinks with the ability to store large quantities of carbon and prevent it from being released into the atmosphere.

Our Thailand asset provided financial assistance to the reforestation program at the Mangrove Forest Development Station in Chumphon Province. This program was initiated in 2019 and we have expanded the reforested acreage on an annual basis with a total area of 32 hectares in 2019-2021.

Alongside this reforestation program, we are also exploring opportunities in mangrove research and development (R&D) in cooperation with Thailand's Department of Marine and Coastal Resources (DMCR) and other local government authorities. We are identifying key opportunities in carbon capture and carbon data verification with the aim of utilizing mangrove ecosystems as nature-based solutions for climate change.



The MedcoEnergi Thailand team with representatives of the Marine and Coastal Resource Area Office at the Mangrove Forest Development Station in Chumphon Province.

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Securing Sustainable Livelihoods and Improving Well-being

Strengthening Climate Adaptation with the Climate Village Program (*Program Kampung Iklim*)

With the increasing uncertainties of climate change, we recognize the need to support local communities and ensure sustainable livelihoods by strengthening their climate adaptive capacity. As part of our community development program, we have initiated the *Program Kampung Iklim*/Proklim (Climate Village Program).

Proklim is a national program which is managed by the Ministry of Environment and Forestry. The Proklim framework aims to increase community and stakeholder involvement in strengthening the region's adaptive capacity to climate change. At our Tarakan asset, Proklim was formed through an agreement between Medco Oil & Gas and the regional government of Tarakan City.

We pledge to continually work hand-in-hand with the Tarakan Municipal Environment Agency and the North Kalimantan Province to maximise the program's positive impacts on the environment and the surrounding communities. We actively participate in the Tarakan Municipal Corporate Social Responsibility (CSR) Forum that is held by the regional government for Proklim implementation.

"Proklim has provided many benefits to the people of Tarakan. Hopefully, the Tarakan Municipal CSR Forum will even be more active and will have more focused activities in such a way that the CSR program can have positive impacts on the social, economic, and cultural aspects of the Tarakan people."

- Mayor of Tarakan

In 2021, water supply reservoir from local water springs and its distribution pipeline to households were installed. This has given the communities access to clean water.



MedcoEnergi's Proklim was conducted in collaboration with the regional government of Tarakan City, Indonesia to improve the local community's climate resilience.

The program will see the launch of various pilot projects in Mamburungan and East Mamburungan sub-districts, North Kalimantan, under two stages: 'Adaptation' and 'Mitigation'. Potential initiatives for each of these stages are:



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Promoting Local Businesses through Website Competition

The COVID-19 pandemic has greatly affected local businesses, particularly Micro, Small, and Medium-sized Enterprises (MSMEs). The social restrictions have created challenges for MSME, especially in rural areas, with mandated closures of their physical stores that resulted in significant revenue losses.

Providing the right support to MSMEs is key to securing a sustainable and inclusive economy on the road to recovery from the impacts of the COVID-19 pandemic. In North Kalimantan, we hosted a website design competition in collaboration with a local college, College of Information Technology and Management (*Sekolah Tinggi Manajemen Informatika dan Komputer/STMIK*) PPKIA Tarakanita Rahmawati.

"We are confident that by hosting this competition, we are able to give our local talent hope and an opportunity to refine their skills further."

- Principal of STMIK PPKIA Tarakanita Rahmawati



Twelve groups of students from STMIK PPKIA Tarakanita Rahmawati took part in the competition, with awards for the five best designs.

Participants competed in designing an e-commerce website, and the winning concept will be used to develop a digital platform where MSMEs can market their products online. In hosting the competition, we aim to foster local talent and creativity and provide support for local businesses. Once established, the platform will potentially be scaled to include other North Kalimantan provinces.

"Through these initiatives in promoting digitisation, the Company hopes that this could give an opportunity for local Tarakan products to be widely known and appreciated so their demand could increase in the wider market."

- VP of Relations and Security of MedcoEnergi

Supporting Grouper Fish Business Development

In the Anambas Islands, we supported the development of a grouper aquaculture business through the floating net cage/Keramba Jaring Apung (KJA) program. Before the implementation of this program, fishermen were affected by variability in local weather and other fishing conditions, which caused income fluctuation.

The KJA program provides grouper seedlings for aquaculture farming, creating consistent availability of fish stocks and reducing overall financial risk for participating fishermen. Those who joined the program have a higher and more reliable income, due to steady supply and demand from buyers in neighbouring countries. In the seven years since its launch, the KJA program has successfully distributed more than 185,000 grouper fish eggs and produced a turnover of IDR 4.8 billion.

At the 2021 National Capacity Forum in Jakarta, Mr. Azianto, a fisherman representing the MSME Hatchery Fish Center (*Balai Benih Ikan*) from the Anambas Islands Regency, shared his business success story. The forum was attended by a total of 11 companies and 14 community development-based MSMEs.



Mr. Azianto of *Balai Benih Ikan* and representatives from South Natuna Sea Block B at the 2021 National Capacity Forum in Jakarta, Indonesia.

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Improving Our Communities' COVID-19 Resilience

The pandemic has resulted in many hardships and challenges for the communities around our operating areas, particularly in rural communities with minimal access to healthcare and health facilities. As we navigate through the second year of the COVID-19 pandemic, MedcoEnergi has continued to launch community development programs aimed at strengthening community resilience to the impacts of the pandemic.

SKK Migas-Production Sharing Contract's (PSC) Vaccination Program

In 2021, MedcoEnergi participated in SKK Migas-PSC's Vaccination Program that provided access to vaccinations for upstream oil & gas workers and their families due to their role in maintaining energy delivery and business continuity.

During program implementation, MedcoEnergi's COVID-19 Task Force took on a lead role as the organising committee and was responsible for supporting the provision of vaccines to approximately 12,000 upstream oil & gas workers in Jakarta, Indonesia.

We also collaborated with local governments to carry out vaccination programs for the workforce at our operational sites.

Providing Vaccination Access to Vulnerable Groups

Ensuring equitable access to the COVID-19 vaccine is key for building community resilience to the impacts of the pandemic, particularly within vulnerable social groups. In support of the Indonesian government's vaccination program, we worked in collaboration with the South Jakarta Health Agency Office to provide vaccination access to vulnerable groups, particularly senior citizens and the visually impaired.

In Indonesia, the visually-impaired community is one of the most groups most affected by the COVID-19 outbreak. Social restrictions have greatly impacted their mobility and many have lost significant income due to the limited employment opportunities. Extra support for vaccination access is a pressing need.

We opened a vaccination centre at our Medco Building in South Jakarta to provide access for these vulnerable groups in neighbouring areas. MedcoEnergi's vaccination committee provided vehicles to pick up residents from their homes, to support those with mobility issues. The program involved the Pasar Minggu and Kebayoran Lama Health Centres and a health service online application. In parallel, we donated organic rice to members of Pertunas, the Association for the Visually Impaired.



A vaccination centre was set up at the Medco Building in South Jakarta to provide vaccination access to vulnerable groups.

“Finally, I can receive the vaccine shot, too. I want everyone to be healthy and not getting infected by the virus. We also hope that the pandemic is over so that we can work normally again.”

**- Mrs. Emah,
a visually-impaired resident in South Jakarta, Indonesia**

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Donation of Medical Supplies

We implemented a number of initiatives in 2021 to address medical equipment shortages within the communities surrounding our operational areas.



Medco Oil & Gas donated 50 oxygen cylinders and 50 regulator units to the Provincial Government in South Sumatra, Indonesia.



Medco Energi Bangkanai donated over 2,500 masks to the North Barito Police in Central Kalimantan, Indonesia.



Medco Energi Thailand donated standing infrared thermometers to the First Naval Area Command in the Plataluang sub-district and the Public Health Office at Sattahip district.



Medco Energi Thailand delivered USD 7,000 of personal protective equipment (PPE), thermometers and medical masks to the Royal Thai Navy and local government agencies in Chonburi Province.

Highlights from South Natuna Sea Block B

Engaging Communities in Securing the State-owned Goods License (Barang Milik Negara/BMN)

In 2021, we successfully secured a State-Owned Goods Land Certificate of our Matak Shore Base asset in the Anambas Islands, covering a total area of 1,424,228 m². Obtaining this license is required by Indonesian regulations for entities intending to operate on state-owned land. Our asset falls under this category as the Matak Base is also used by the Indonesian National Army as a Naval Air Base.

This land has been part of our community activities in the Anambas Islands Regency since our early operations in the 1980s. We recognise the need for inclusivity and ensuring that the needs of the community are being heard and understood. In the process of obtaining the license, we performed a series of internal assessments, conducted stakeholder engagements, and delivered workshops on the certification agreements between relevant parties. In doing so, we ensured a holistic, rigorous, and transparent approach for achieving legal and administrative security as well as maintaining the physical safety of surrounding communities and terrestrial ecosystems.



Medco Oil & Gas conducted workshops on BMN Certification with the Indonesia National Land Agency and relevant local governmental bodies.

We engaged a total of 15 external stakeholder groups which included the Directorate General of Land Procurement and Development, SKK Migas' North Sumatra representative and members of the nearby Payamaram Village. Our proactive approach resulted in the completion of the BMN Certification Program in just under 3 years, which was initiated in 2018.

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Community Development at JOB Tomori

At our non-operated asset, JOB Tomori focused on the implementation of community empowerment programs aimed at supporting local development. We utilised the findings from the social mapping study we conducted in 2018 to tailor these programs to the needs of the communities. Several program highlights are listed in the table below.

Program	Activities
Women Empowerment through Herbal Business Development	 <ul style="list-style-type: none"> • Conducting training on herbal business development • Hosting knowledge sharing webinars for herbalist forums • Strengthening the marketplace network
Capacity Building Programs	 <ul style="list-style-type: none"> • Improving child literacy and creativity through programs such as One Day One Book (<i>Satu Hari Satu Buku</i>) and Green Learning at Home (<i>Belajar Penghijauan di Rumah</i>) • Kick-starting the creative economy by promoting e-commerce and the online marketplace • Enhancing community volunteering and support to improve education accessibility
Strengthening Emergency Response and Infrastructure	 <ul style="list-style-type: none"> • Implementing COVID-19 awareness and prevention initiatives • Improving local emergency preparedness against natural disasters • Providing post-disaster psychological and social support to vulnerable communities

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Promoting Sustainable Farming Practices

JOB Tomori encouraged and supported local farmers to implement sustainable farming practices in Banggai Regency, Central Sulawesi. Through a community-based program, we carried out initiatives aimed to improve local farmers' knowledge on sustainable farming, establish farmer organisations and expand the local employment network.

The program was first initiated in 2018, where a series of knowledge sharing sessions were conducted to improve awareness on sustainable farming, soil ecology and eco-friendly composting techniques. In 2021, the program focused on strengthening farmer organisations' self-reliance by implementing capacity building initiatives aimed at equipping local farmers to manage and expand their business.

Year	Stage	Activities	Targets
2018	Empowerment: strengthening the capacity of farmers and farmers' organisations	<ul style="list-style-type: none"> Farming facilities support Cultivation training Strengthening farmer organisations (training and studies) Post-harvest processing training 	<ul style="list-style-type: none"> Improved awareness of sustainable farming practices Established an organisational function Connected farming businesses within the supply chain
2019	Empowerment: establishing coordination between business functions	<ul style="list-style-type: none"> Post-harvest knowledge and skills improvement Organic rice business management training (finance and marketing) Establishing of an organic rice processing factory 	<ul style="list-style-type: none"> Improved quality of management and packaging Farmers' products utilised independently by group-owned factories
2020	Strengthening of farmers' organisations' self-reliance (expanding the business)	<ul style="list-style-type: none"> Strengthening business management, finance and marketing skills 	<ul style="list-style-type: none"> Expertise gained in running an organic farming business Expansion of farmers' organisations to other regions
2021	Strengthening of farmer organisations' self-reliance	<ul style="list-style-type: none"> Capacity building for managing finances, businesses and product marketing Developing supply chain and market network 	<ul style="list-style-type: none"> Competency increased in running the business Expansion of the business
2022	Sustainable self-reliance	<ul style="list-style-type: none"> Establishing sustainable farming schools 	<ul style="list-style-type: none"> Schools established in three locations: two in Senoro Block and one in Tiaka Block



Sustainable farming case study visit by Bumi Beringin village farmers to Sumber Tani Lestari Group, a JOB Tomori foster partner.



Capacity building session on soil ecology and waste management.

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MEASURING AND EVALUATING OUR IMPACT

Utilising the Social Return of Investment (SROI) Approach

Understanding the impact of our community development programs is critical for informing our decisions on the design and scale of future programs.

At MedcoEnergi, we implement a SROI framework to quantify the social, environmental, and economic value of our community development programs. The approach provides a robust and rigorous methodology for measuring change in ways that are relevant to the people and organisations that experience or contribute to the change. The

SROI method assigns a monetary value to project outcomes and has been widely used as a quantitative approach to program evaluation.

There are two types of SROI implementation:

- **Evaluative**, where the SROI is done retrospectively, based on actual results of the implemented program; and
- **Forecast**, where the SROI is utilised to predict the social, environmental, and economic value of the planned community development program. Forecast SROI is useful to ensure maximum impact, and also to identify and determine which indicators to measure when a program is implemented.

The following diagram illustrates the six key stages of conducting an SROI assessment.



Measuring Our Impact in Indonesia

In 2021, we assessed the outcome of our Digital-based Smart School Program (*Program Sekolah Pintar berbasis Digital*) in four schools in the Anambas Islands Regency. The program's objective was to improve digital learning practices to support long-distance learning during COVID-19 restrictions. We quantified the program's impact through desk-based research as well as interviews and focus group discussions (FGDs) with key stakeholders, such as the Department of Youth Education and Sports and principals, teachers, and students.

The SROI calculation valued the program outcome at IDR 433,886,300 compared to a total investment of IDR 313,686,500. Thus, the SROI value is 1.38, with every IDR 1 investment resulting in a benefit of IDR 1.38. This effort supports the realisation of the SDG-4 Quality Education (Target 4.1 and 4.7).

Understanding Our Impact in Thailand

In Thailand, we assessed the impact of three community development programs in the Chumphon Province from October 2020 to December 2021. The programs included:

- Hydroponic and Organic Vegetable Farm project, with produce provided for school lunch, promoting the physical health and well-being of schoolchildren at Ban Bang Long School, Mueang District. The Hydroponic and Organic

Vegetable Farm project grew vegetables for five cycles, producing 200 kg of vegetables, valued at THB 6,000. The Oil Palm Leaf Paper Production project produced 500 sheets of mulberry paper worth THB 5,000.

- Reducing plastic and styrofoam usage by Betel Nut Husk Food Containers by the Food Vendors Association of Pak-Naam. A key output of the Betel Nut Husk Food Container project was successful prototype of moulding machines for producing containers. We also gained strong support and cooperation from both inside and outside the community. The idea for a community business has been expanded to producing processed goods from waste such as shells, crab carapace, and local bamboo waste to boost local incomes.
- Oil Palm Leaf Paper Production project, aimed at promoting skills and employment for community members in Ban Rap Ro School, Rap Ro subdistrict, Tha Sae District. The target and stakeholders of the project are the group of teachers and school students, the parents, community members, cookers, tourists, and related government agencies in the area.

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Adopting the S-Curve

Our community development programs aim to nurture local potential, increase productivity, and improve well-being. The programs are long-term and designed to empower communities to be self-reliant. Our focus is on infrastructure development and sustainable livelihoods.

We have integrated S-Curve principles within our community engagement and development process, with stakeholder engagement taking place at strategic milestones throughout this process. This has enabled us to build strong social ties with local communities based on mutual understanding and cooperation. The S-curve approach, as seen below, has guided us to develop long-term projects for creating shared value with communities and ensuring that our initiatives have a positive impact.



EMERGENCY AND DISASTER RELIEF INITIATIVES

Through our Medco Cares (*Medco Peduli*) program, we provide assistance and support to those in need, with a focus on affected communities in our operational areas who have been impacted by disasters or emergencies such as the COVID-19 pandemic, floods, landslides, or earthquakes.

Medco Educational Support Program (*Peduli Pendidikan*)

Restrictions imposed due to the pandemic have resulted in schools being required to switch to long-distance learning. Access to education for students in rural areas has been greatly impacted due to the lack of internet infrastructure and access. This was the case in Karendan Village in Central Kalimantan, where students had to rely on the internet connection of a company operating in the area.

To expand access, Medco Foundation helped to build internet networks in three locations: the Village Administration Office, a local elementary school, and

in a residential area. This aid is part of the Medco *Peduli Pendidikan* initiative for improving access to education for all.



Medco Energi Bangkanai's Lead Public Affairs & Security (PASEC) and General Services handing over the program to the Head of Karendan Village, Central Kalimantan, Indonesia.

"This internet access is very helpful for the education of the students and the people in Karendan Village. Our community is very grateful for this aid from MedcoEnergi."

- Head of the Karendan Village

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Medco Foundation distributed staple food and essential supplies to the victims in Nusa Tenggara Timur affected by landslide and flood disasters in 2021.

Medco Emergency Disaster Relief (*Peduli Bencana Alam*)

Forest fires are increasingly common in Indonesia, impacting the well-being of local communities and the natural environment. These fires are due to a combination of factors including increasing global temperatures and unsustainable land management practices. MedcoEnergi recognises the need to equip local communities with the knowledge to mitigate and minimise the occurrence of such catastrophic events.

Through the Medco *Peduli Bencana Alam* initiative, we worked with the Lahei District police force, the Regional Disaster Management Agency, and the Forest Management Unit in Central Kalimantan to host a series of capacity-building workshops on

best practices to prevent forest fires. The workshops equipped local communities and agencies with technical knowledge and skills on fire control, including fire prevention techniques for local communities and agencies in Haragandang and Karendan Villages.

A fire-fighting community was established to protect people from the threat of future forest fires and improve the fire management response.

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ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

Our sustainability initiatives focused on local community empowerment are part of MedcoEnergi's efforts to contribute to the UN Sustainable Development Goals (SDGs). We map these initiatives against relevant SDGs targets below. This mapping does not constitute a claim that MedcoEnergi has measured or committed targets to the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	1.4	<ul style="list-style-type: none"> • Business development support for local fishers. • Capacity-building program for farmers on planting and growing various plants and vegetables. • Training of local communities on Gambo-based Jumputan (textile colouring).
	2.4, 2.A	<ul style="list-style-type: none"> • Distribution of food aid through COVID-19 emergency response and disaster relief programs. • Capacity-building program for farmers on planting and growing various plants and vegetables. • Provided fishing equipment and capacity-building program to local fisher groups to increase product volume and income.
	3.3	<ul style="list-style-type: none"> • Vaccination programs and access to vulnerable groups. • Engagement with local communities to support and improve awareness of COVID-19. • Capacity-building training on emergency response programs for local communities.
	4.1,4.2, 4.3, 4.4, 4.7, 4.C	<ul style="list-style-type: none"> • Online tutoring program for students. • Development of internet infrastructure for distance learning. • Support for school renovation and provision of learning tools. • Digital based Smart School Program (<i>Program Sekolah Pintar berbasis Digital</i>) in schools.
	5.5 , 5.A	<ul style="list-style-type: none"> • Empowerment through capacity-building programs and equipment provision for women's groups. • Small scale enterprise capacity-building for women's groups.
	6.1, 6.B	Support for providing access to clean water and relevant facilities.
	7.1, 7.B	<ul style="list-style-type: none"> • Public Road Solar Lighting (<i>Penerangan Jalan Umum Tenaga Surya/PJUTS</i>).
	8.3	<ul style="list-style-type: none"> • Development of e-commerce platform for local businesses. • Renovation of Job Training Center (<i>Balai Latihan Kerja</i>).
	17.17	<ul style="list-style-type: none"> • Multiple stakeholder engagements, including with local governments, communities, NGOs, and educational institutions.

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ACTION PLAN

The following action plan has been designed to enable us to meet our 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 actions on a regular basis.

	Short Term Actions	Medium-Long Term Actions	Status ¹
Local Communities	Develop a grievance mechanism manual and support business processes.	Socialise and implement grievance mechanisms for internal and external parties, for all assets	<ul style="list-style-type: none"> • Updated the corporate-level Grievance Mechanism guidelines. • Developed a community grievance procedure for Medco Ratch Power Riau (MRPR). • Monitored the received, closed, and overdue grievances.
	Develop and implement stakeholder engagement plans (SEPs) for all assets.		<ul style="list-style-type: none"> • Developed tactical SEPs for certain assets and critical projects. • Stakeholder Data Management online recording system is being improved and used by oil & gas assets to record their engagement activities. • Established SEP for MRPR.
	Develop Social Management System (SMS) for all assets.		<ul style="list-style-type: none"> • Site-specific SMS implementation documents are in place for all oil & gas assets. • Each oil & gas asset appointed an SMS Champion for program implementation. • Completed SMS monitoring for domestic oil & gas assets. • Completed capacity building training for SMS teams in oil & gas asset, in collaboration with Medco Power.
	Complete standardisation of community satisfaction survey methodology.	<p>Implement a community satisfaction survey, establish a baseline score, and determine a target score.</p> <p>Achieve target community satisfaction score.</p>	<ul style="list-style-type: none"> • Community perception survey for oil & gas used the Environmental Management Plan and Environmental Monitoring Plan (RKL-RPL) reports. • Medco Power continues to incorporate questions related to community satisfaction into its Environmental and Social Impact Assessment (UKL-UPL/AMDAL) social monitoring survey.
	Conduct community needs mapping and determine community development pillars and strategy.	Develop strategic partnerships with government and NGOs to expand the impact of existing programs and to enable synergy of community development programs in priority pillars across all business units.	<ul style="list-style-type: none"> • Developed the following partnerships for community development programs: <ul style="list-style-type: none"> - Block A – Aliksa Foundation, Medco Foundation - South Natuna Sea Block B – Asosiasi Pengusaha Desa Indonesia (Apedi), Detara Foundation, Sutra Foundation, Karsa Community, Umar Kayam Foundation, Tim Pelaksana Kegiatan (TPK)/Implementation Team, Kute Siantan, School of Universe, Anthropological Association of Indonesia - South Sumatra Region (SSR) – Medco Foundation - East Java – Madura Development Watch NGO & BISMA NGO - Bangkanai – Village's CSR Execution Team - Tarakan – city government (offices of environment, education, tourism, regional library), provincial government (Forestry Service), Tidung Hakebabu Traditional Center (<i>Balai Adat Tidung Hakebabu</i>), STMIK PPKIA Tarakanita Rahmawati - MRPR – Pusat Studi Lingkungan Hidup (PSLH)/Center for Environmental Studies of the University of Riau for Livelihood Restoration Plan (LRP) implementation (e.g. growing catfish farm, handicrafts from palm material).

¹ Status applies to all Medco Oil & Gas and Medco Power assets unless otherwise specified.

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	Short Term Actions	Medium-Long Term Actions	Status¹
	Enhance MedcoEnergi's existing employee volunteer program and expand the program to all business units to strengthen the company's relationship with local communities.	Implement broader employee volunteer pilot program. Review employee volunteer pilot program results and expand the program to other assets.	<ul style="list-style-type: none"> • Emergency disaster relief (<i>Medco Peduli Bencana Alam</i>): Employees' donation for natural disaster victims in various regions in Indonesia. • Educational support program (<i>Medco Peduli Pendidikan</i>): Continued the delivery of devices for students in Pekanbaru, Siak, Pamekasan Regency and internet network in Karendan Village Barito Utara (Central Kalimantan) as part of "Movement of 1,000 Devices for the Nation's Children". • Educational support program (<i>Medco Peduli Pendidikan</i>): Held an online tutoring program for 249 students in 5 oil & gas assets, funded by donation from employees and management.
Infrastructure	Monitor budget and the number of people affected by the development and maintenance of project infrastructure.		<ul style="list-style-type: none"> • Conducted SROI self-assessment for South Natuna Sea Block B distance learning infrastructure. • Ongoing development of SROI guidelines for our oil & gas assets.
Security	Review security provider company compliance against Police Regulation 4/2020 regarding self-defense security (<i>Pengamanan Swakarsa</i>) for all assets.	<p>Complete security risk/threat assessment (SRA) for all assets.</p> <p>Establish and implement security policy, risk management plans, and training in reference to the Voluntary Principles on Security and Human Rights (VPSHR) for all assets.</p>	<ul style="list-style-type: none"> • Oil & gas domestic assets: <ul style="list-style-type: none"> - Conducted SMP focus group discussion and socialisation to develop site-specific SMP and update each asset's SRA and security risk register. - Conducted critical asset risk mapping. - Completed SRA activity and documents for all domestic assets. • Power assets: <ul style="list-style-type: none"> - Developed security management for MPRR. - Conducted security assessment.
Key Stakeholder Engagement	Strengthen internal partnership between business units.		<ul style="list-style-type: none"> • A collaboration between Medco Oil & Gas and the Medco Foundation for several activities for emergency disaster relief (<i>Medco Peduli Bencana Alam</i>) and educational support program (<i>Medco Peduli Pendidikan</i>). • Joint task forces between oil & gas and power for COVID-19, Work from Office Resumption, and Social Impact. Vaccination programs (SKK Migas Sentra Vaksinergi and "Gotong Royong"), the 45th Indonesian Petroleum Association (IPA) Convex.

Chapter

#09

Empowering our People, Securing Sustainable Growth



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EMPOWERING OUR PEOPLE, SECURING SUSTAINABLE GROWTH

We are committed to creating an inclusive and supportive work environment by continuously strengthening our organisational capability, reinforcing industrial peace and maintaining healthy industrial relations, as well as delivering performance improvements to our employee systems, services and organization effectiveness. We nurture our talent pipeline and ensure equal opportunity for all, with numerous initiatives and development programs which support our employees to reach their fullest potential.

APPROACH, COMMITMENT, AND GOALS

MedcoEnergi recognises that our employees are our most valuable asset in delivering on the Company's sustainable growth objectives. Our Corporate Values are to be professional, ethical, open, and innovative in all that we do. Our employees who consistently demonstrate our Corporate Values in their day-to-day work drive the success of our company.

From a sustainability perspective, we continuously improve our organisation's performance by investing in the development of leadership and technical abilities of our people. We strive to create a stimulating work environment where our employees are valued and engaged, and provided with career advancement opportunities, skill development programs, and performance-based remuneration.

Our commitment to employing a diverse workforce is reflected by our pledge to recruit, train, and reward our employees based on their skill and competency, regardless of their ethnicity, race, skin colour, religion, gender, age, marital status, or nationality. We believe that a diverse and empowered workforce enriches the Company with fresh perspectives. We will continue to maintain a fair and inclusive culture by eliminating any bias or discrimination in the practices and policies of our human resources management.

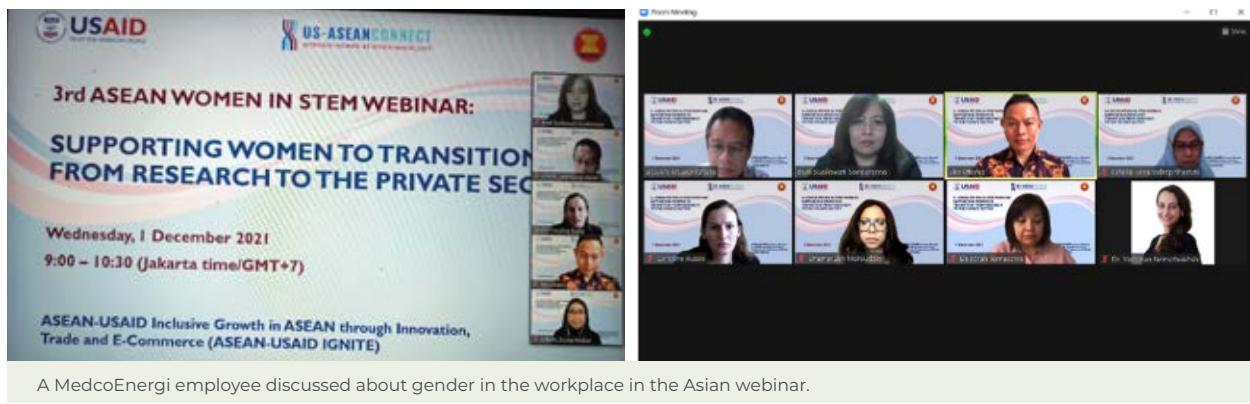
We uphold human rights principles and we strictly comply with all regulations relating to our workforce in the countries where we operate. As an example, we pay our employees more than the minimum regional wages (*Upah Minimum Regional/UMR*) in Indonesia. The lowest level remuneration for our full-time permanent employee in Jakarta is 19% higher than the provincial minimum wage mandated by the DKI Jakarta Government.

We established policies, guidelines, and procedures, such as a Labor Management Plan, Individual Development Plan, and Mentoring Guideline, as part of our Human Resources (HR) system to help guide, empower, and protect our employees. In 2021, MedcoEnergi reinforced equal opportunity and discrimination-free working environment in our new Corporate Career Management Guideline, Corporate Recruitment Guideline and Management of Change Organization & Management of Change Personnel Procedures.

PEOPLE AT A GLANCE

MedcoEnergi values a diverse and inclusive workforce. In alignment with supporting diversity and equal opportunity, we encourage employees to be involved in initiatives and sharing sessions on the topic of gender in the workplace. In 2021, a female MedcoEnergi employee spoke at the 3rd Asian Women in Science, Technology, Engineering and Mathematics (STEM) Webinar – Supporting Women to Transition from Research to the Private Sector, organized by ASEAN-USAID IGNITE.

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We prioritize developing the capacity of our employees, with various training courses suited to individual needs. In 2021, we offered 659 training courses, an increase from the previous year, and invested nearly USD 2 million in training for MedcoEnergi and its subsidiaries.

Training Investment (USD)	Training Courses	Participants	Total Mancourse	Total Training Hours	Average Training Hours
1,963,100	659	5,055	5,826	60,302	21

Strengthening Organisation Capability

The development of our people plays an important role in securing our long-term success. At MedcoEnergi, we work to retain our best talent by providing opportunities to develop their skills and access new career perspectives within the Company. In 2021, we expanded our Employees Capability programs and other initiatives to maximise employee performance and growth.

Supporting the Growth of our Talent

MedcoEnergi believes in developing our people to enable them to achieve high performance. Our Talent Mapping and Succession Planning program helps employees unlock their potential. Through the Individual Development Program (IDP), we are able to identify, assess, and support the growth of our high-potential employees as both managers and professionals.

Shaping Future Leaders

Strong leaders are critical to ensure the resiliency of MedcoEnergi's business and operations, and we are equipping future leaders within the Company with the necessary skills to help our business grow. Despite the ongoing challenges of the COVID-19 pandemic, the first group of our Medco Senior Leadership Development Program (MSLDP) were able to complete their class-centred learning in 2021, delivered in partnership with INSEAD, a Singapore-based graduate business school. The program offered participants the opportunity to grow and practice their leadership skills using various methods from coaching to case studies.

Following the success of our first group, we initiated a second MSLDP group in partnership with Harvard Business Publishing, a subsidiary of Harvard Business School. Due to the constraints of the pandemic, the MSLDP second group participated in the program through online delivery channels and is currently on track to complete its class-centred learning in 2022.

In addition to MSLDP, we kicked off our Leadership Essential Development Program (LEAD), which will provide MedcoEnergi leaders with a targeted curriculum to sharpen their leadership skills in alignment with the Company's values.

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Mentoring Program

To encourage the growth of our next-generation talent, we continued our Mentoring Program, which was piloted in 2020. The program connects senior leaders and professionals with junior employees to support their career development. In 2021, we established 58 mentoring pairs across various business functions at MedcoEnergi.

"Lead & Inspire" Webinar Series

We also continued our successful Lead & Inspire internal webinar series in 2021. We invited industry leaders to share their experiences and give insights on various skill set and leadership styles. The selected topics are current popular topics that are practical to be applied. For example, the themes of the webinars were about making the best of the digital learning environment and coping with the challenges of the pandemic.



Webinar	Date	No. of Participants
1. The Importance of Digital Mindset	January 2021	360
2. Connect, Develop and Engage your Team	February 2021	164
3. Building Mentoring Culture	April 2021	450
4. Happiness at Work	June 2021	520

Sharpening our People's Technical Capabilities

In 2021, we continued implementation of our Technical Development Committees (TDC) as part of our continuous effort to strengthen MedcoEnergi's technical capacity of all employees.

TDC was established in 2020 for the following petro-technical disciplines: Production Operations & HSE, Surface Engineering & Project, Subsurface & Exploration, and Well Operations. The TDC is an ad-hoc committee, appointed by our BOD, which is responsible for driving the skill development agenda. The TDC aims to establish initiatives in specific disciplines across the Company, encompassing the following areas:



Other programs launched include the Medco Project Management Academy (MPMA) and 30 technical training programs for Commercial Operation Date (COD) preparation of our Riau Gas Fire Power Plant.

Moving forward, the TDC will continue to launch technical enhancement programs to fulfil current and future business requirements and meet the demands of renewable technology.

Reinforcing Industrial Peace

We are committed to providing a work environment built on the foundation of a healthy and productive relationship with our employees. Freedom of association and expression are an important component of healthy industrial relations. We recognise and respect our employees' right to join and form trade unions and organisations. In 2021, we completed a series of negotiations with various labour unions for the renewal of four Collective Labour Agreements (CLAs), involving Medco E&P Natuna Ltd. (MEPN), PT Medco E&P Indonesia (MEPI), Medco Energi Bangkanai Ltd. (MEBL), and PT Medco Energi Internasional Tbk. (MEI), as well as the conversion of two Company Regulations, Medco Energi Sampang Pty. Ltd (MESL) and PT Medco E&P Malaka (MEPM), from six entities within MedcoEnergi. CLA negotiation with PT Medco E&P Malaka (MEPM) has been completed in 2022. These agreements provide our employees with guidance on their rights and responsibilities as stated under relevant labour laws, regulations, and negotiations.

We have also published Employee Handbooks for our Thailand and Singapore operations to ensure transparency of our employees' rights. Additionally, we implemented Law No. 11/2020 on 'Job Creation' as well as the Presidential Regulation No. 35/2021

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regarding 'Termination Compensation' for all of MedcoEnergi's direct hires and workforce contracts, based on guidance by SKK Migas and the Aceh Oil & Gas Management Agency (*Badan Pengelola Migas Aceh/BPMA*).

Our Industrial Relations team at MedcoEnergi will continue to enhance industrial and employee relations through proactive engagement programs and other activities, such as our Quarterly Bipartite Meetings and Industrial Relations Forums.

Delivering Sustainable Performance Improvement

In 2020, we initially launched Sustainable Performance Improvement (SPI) project in partnership with Kearney, a leading global management-consulting firm. We identified the ways of working initiative to capture the opportunities for cost saving and staff well-being from remote working. As a continuation of this project, we revisited the way we structure our Operations and Maintenance organisations this year to strengthen the sustainability of our business by looking after our people. Other initiatives to support our employees included improving our HR Shared Service, which encompasses payroll management and an HR hotline, and the New Ways of Working (NWOW) initiative.

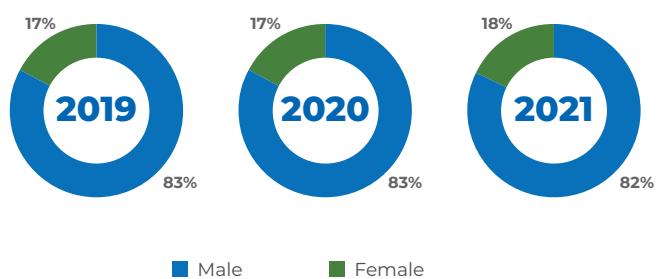
Starting this year, we included sustainability-related objectives in the Team Performance Contract (TPC) of MedcoEnergi functions, which we will measure as part of our employees' overall performance. We link the TPC outcomes to our reward programs, including salary review and performance incentives.

Employee Breakdown Data

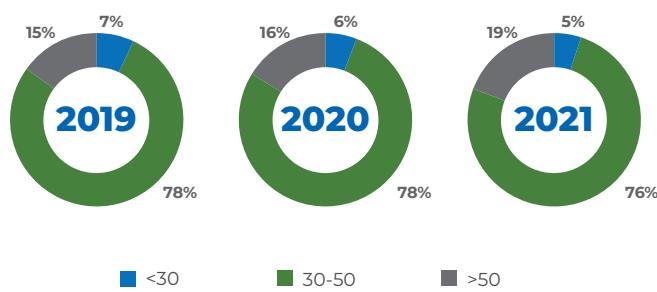
Number of Employees in Oil & Gas and Power based on Employment Contract



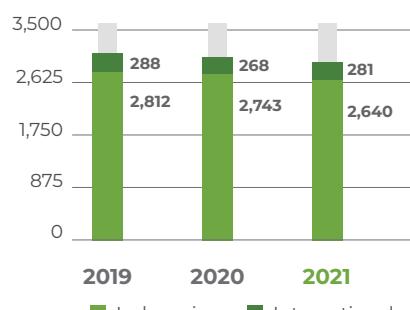
Number of Employees (Permanent and Temporary) in Oil & Gas and Power based on Gender



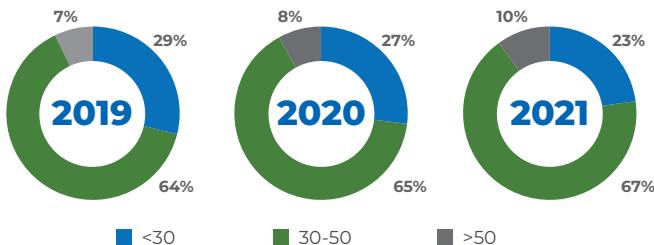
Percentage of Employees (Permanent and Temporary) in Oil & Gas based on Age



Number of Employees in Oil & Gas and Power based on Geographical Locations (Local vs. International)



Percentage of Employees (Permanent and Temporary) in Power based on Age



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ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

The following table maps our sustainability initiatives in Human Resources against the UN SDG targets. This mapping does not constitute a claim that MedcoEnergi has measured or set targets for the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	4.3	<ul style="list-style-type: none"> • Technical Development Committees (TDC); • Mentoring programs; • Talent Mapping and Succession Planning Program; • Medco Senior Leadership Development Program (MDSLP); • Leadership Essential Development Program (LEAD); and • "Lead & Inspire" webinar series.
	5.1, 5.5	<ul style="list-style-type: none"> • Development of HR policies and guidelines; • Collective Labour Agreements (CLA); • Sustainable Performance Initiatives (SPI); • New Ways of Working (NWOW); and • Employee training.
	8.2, 8.5, 8.6, 8.8	<ul style="list-style-type: none"> • Salary grade entitlements; and • Benefits alignment.
	10.2, 10.3	<ul style="list-style-type: none"> • Industrial relations engagement with labour unions; and • Collective Labour Agreements.
	16.b	

ACTION PLAN

The following action plan is designed to enable us to meet our objectives and improve our management, in order to empower our people and secure sustainable growth. We measure, monitor, and report our progress and performance against these actions on a regular basis.

	Short Term Actions	Medium-Long Term Actions	Status
Diversity	<p>Establish a diversity and anti-discrimination policy for MedcoEnergi, which complies with International Labour Organisation (ILO) Conventions and local laws.</p>	<p>Revise the MedcoEnergi Human Resources manual and/or guidelines to clarify the Company's standards and expectations on diversity and anti-discrimination.</p> <p>Set diversity-related targets to ensure successful implementation of the policies.</p>	<p>Established new Code of Conduct that incorporates human rights and communicated to all employees through the campaigns and annual Statement of Adherence (SoA) declaration and to business partners through Vendor's Day.</p> <p>Diversity and anti-discrimination are stated in the Corporate Career Management Guideline, Corporate Recruitment Guideline, and Recruitment Guidelines of Medco Power.</p> <p>Continue regular monitoring on diversity performance, focusing on gender diversity as an input for the human rights assessment.</p>
Employment	<p>Establish MedcoEnergi policy on the hiring of local community members.</p>		<p>Policy on the hiring of local community members is in place for Block A.</p> <p>Maintain the number of local community members based on 2021 target and continue monitoring on a regular basis.</p>

Chapter

#10

Strengthening Our Health & Safety Culture



Tank Cleaning Activities
Lematang, South Sumatra, Indonesia

Approach, Commitment, and Goals

Operational Excellence

Health, Safety, and Environment Management System (HSEMS)

Health and Safety Performance

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the UN SDGs

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STRENGTHENING OUR HEALTH & SAFETY CULTURE

At MedcoEnergi, we are dedicated to creating a healthy, safe, and environmentally-friendly workplace. This is underpinned by our Health, Safety, and Environment Management Systems and our Operational Excellence Framework.

APPROACH, COMMITMENT, AND GOALS

The health and safety of our employees and stakeholders is an essential and integral part of our overall sustainability. MedcoEnergi's Health, Safety, and Environment (HSE) Policy emphasizes protecting the well-being of those involved in our business and operational activities, and underlines the need for strong HSE leadership at all levels. We believe that all work-related incidents, injuries, occupational illnesses, and process safety events are preventable. We are committed to complying with government regulations and ensuring alignment with industry best practices and relevant international standards. Our HSE policy is available on the MedcoEnergi website at: www.medcoenergi.com.

We continually strengthen our safety culture and leadership to achieving zero incidents, injuries, and illnesses in our operations. We regularly establish and monitor HSE goals and performance. We also provide training to all employees, contractors, and neighbouring communities to mitigate risk.

With the challenges of the COVID-19 pandemic, we continue to closely monitor and follow guidance from the government, public health agencies, and external experts to maintain the health and safety of our employees.

OPERATIONAL EXCELLENCE

Our rigorous Operational Excellence (OE) framework supports the reliability and safety of our operations. In 2021, we developed a robust roadmap along with a company-wide campaign to help improve OE awareness of our people and achieve our target of OE Maturity Level 3 for all of our Indonesian oil & gas assets. We expanded the implementation of the OE framework with introductory sessions to our international oil & gas and power businesses to improve awareness and understanding of the OE expectations. Our OE framework encompasses HSE, Asset and Operating Integrity (A&OI), Operating Efficiency, and Cost Management.



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Our OE Implementation is divided into four maturity levels.

Maturity Level	Definition
1	Some evidence that the practice exists
2	Documented, but implementation is ongoing/not effective
3	Documented and effectively implemented
4	Effective and efficient. Visible continuous improvement culture efforts in place

During 2021, we implemented various key initiatives aimed at strengthening our safety, operational effectiveness, and efficiency, such as:



Through our structured application of the Plan-Do-Check-Adjust (PDCA) cycle, we have improved our performance, as highlighted below.



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To embed a culture of excellence, we held a company-wide campaign on integrating OE across all our subsidiaries. The campaign was conducted through various media such as posters, articles, and informative videos. We also hosted a virtual OE Day, with a series of pre-event programs and competitions attended by almost 1,000 participants. The day ended with a webinar featuring leaders from global and Indonesian companies sharing the importance of pursuing excellence.

To measure our progress in meeting the requirements of the OE Framework, a Corporate Operational Excellence self-assessment was conducted and the result showed improvements from the previous year. Some of our assets, South Natuna Sea Block B, Sampang and JOB Tomori, received the Operational Excellence Achievement awards from SKK Migas.



MedcoEnergi's OE Day webinar featuring speakers from PT. Toyota Motor Manufacturing Indonesia, PT. Solusi Bangun Indonesia (SBI) and PT. Shell Indonesia.

HEALTH, SAFETY, AND ENVIRONMENT MANAGEMENT SYSTEM (HSEMS)

MedcoEnergi's Health, Safety, and Environment Management System (HSEMS) enables us to systematically identify, assess, control, and monitor operational HSE risks to our business, employees, and the environment. At MedcoEnergi, we require our contractors and suppliers to adhere to this management system to ensure that our safety culture is maintained across our business and operations.

Our HSEMS was developed in alignment with ISO 45001:2018 for Occupational Health and Safety Management Systems. The ISO standard represents globally recognised best practices for companies to provide a reliable and safe workplace by preventing work-related incidents, injuries, occupational illnesses, and process safety events, as well as improving overall occupational health and safety performance. We have obtained and maintained ISO 45001:2018 certification for 35% of assets in our oil & gas and power operations. For a complete list of MedcoEnergi's certified assets, please refer to page 55 of this report.

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Hazard Identification and Implementation of Associated Controls

Hazard identification is a critical element in an effective health and safety management system. In 2021, we are continuing the Hazard Identification and Implementation of Associated Controls Strengthening Program. Subsequently, we carried out Hazard and Operability Study (HAZOP) revalidation for our offshore facilities in Belida, Kerisi and Madura Offshore. In onshore assets, we finalized the major hazard assessment to identify high operational risks and ensure personal safety by introducing short-term mitigations such as safety barriers, signage, access control, procedures, and personal competencies. The leadership team regularly monitors the completion of follow-up actions.

Contractor HSE Management System (CHSEMS)

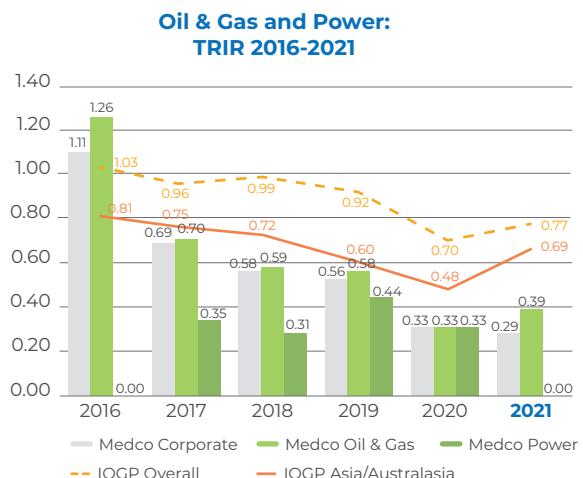
Contractors make up the majority of MedcoEnergi workforce. Our Contractor HSE Management System (CHSEMS) and Contractor HSE Management Framework provide guidance to contractors on the expectations for their HSE performance, and ensure that they meet the standards and criteria set by the Company. We integrate MedcoEnergi's HSE principles into our contractor's operations by setting shared roles and responsibilities to create a collective safe and healthy working environment.

We carried out an assessment of CHSEMS implementation in 2020 to identify gaps and root causes and define strategic corrective actions. This process helps to ensure consistent CHSEMS implementation across all assets.

HEALTH AND SAFETY PERFORMANCE

We monitor our Occupational Health & Safety (OHS) performance, tracking key indicators to identify areas for improvement and ensure the effective implementation of our programs. We have improved our Total Recordable Injuries Rate (TRIR) for both oil & gas and power operations over the past few years, and it is currently lower than the TRIR of the International Association of Oil & Gas Producers (IOGP) Asia/Australasia.

Across MedcoEnergi's business and operations, our overall safety performance showed a continued improvement with the Corporate TRIR decreasing from 0.33 in 2020 to 0.29 in 2021. Furthermore, we managed to achieve zero fatalities for the first time after recording fatality incidents in the previous years. This continued trend is the result of our multi-years effort since 2016 to enhance our safety records in collaboration with our contractors. The graph below displays our safety performance benchmarking¹.



Our HSE performance this year is presented in the tables below.

Oil & Gas	2019	2020	2021
Number of Fatalities	1	0	0
Lost Time Incident Rate ^{2,3}	0.27	0.09	0.00
Total Recordable Incident Rates ³	0.58	0.33	0.39
Occupational Disease Rates ³	0.00	0.00	0.00
Percentage of Incidents Involving Contractors	100%	100%	100%

Power	2019	2020	2021
Number of Fatalities	1	1	0
Lost Time Incident Rate ^{2,3}	0.22	0.11	0.00
Total Recordable Incident Rates ³	0.44	0.33	0.00
Occupational Disease Rates ³	0.00	0.00	0.00
Percentage of Incidents Involving Contractors	100%	100%	0

¹ The number of recordable injuries (fatalities + lost work day cases + restricted work day cases + medical treatment cases) per million hours worked. Source for benchmarking: Data Series International Association of Oil & Gas Producers (IOGP) Safety performance indicators - 2021 data, issued in June 2022.

² Lost Time Incident including Fatality, Permanent Disabilities, and Lost Work Day Case.

³ Workforce includes employees and contractors. Incidents include both injuries and illnesses.

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Process Safety Performance

MedcoEnergi's process safety includes standards and procedures, equipment testing and certification, staff competency, contractor requirements, safety cases, a two-barrier policy and incident response, and recovery mitigation plans. We gauge asset and operating integrity on these parameters and evaluate process safety performance to reduce process safety events.

In 2021, we focused on the achievement of Asset and Operating Integrity as part of our Operational Excellence framework. We assessed the effectiveness of process safety implementation for our domestic oil & gas assets, and rolled out the process safety implementation plan for our power assets and international oil & gas assets.

Process Safety Event (PSE)	2019	2020	2021
Tier 1 ¹ PSE	6	0	0
Tier 1 PSE Rate per 1,000,000 Work Hours	0.22	0.00	0.00
Tier 2 ¹ PSE	10	2	3
Tier 2 PSE Rate per 1,000,000 Work Hours	0.37	0.09	0.19



HSE Contractor Forum attended by representatives of the Asset Leadership Team and the top management of our business partners.

KEY INITIATIVES

We demonstrate our commitment to protecting the health and safety of our people through various HSE programs and initiatives developed for our employees, contractors, and stakeholders.

HSE Engagement with Contractors

Effective engagement with our contractors is essential for maintaining the HSE culture throughout our businesses and operations. We aim to instil accountability and promote transparency among our contractors using the programs described below.

Contractors HSE Forum

In 2021, we held our regular Contractor Forum with the theme "Strengthening HSE Culture to Improve Hazard Identification and Implementation of COVID-19 Prevention Health Protocols." Through interactive sessions and video presentations, the forum highlighted the need for our employees and contractors to continually adhere to our HSE policy and maintain excellence in HSE performance. We also shared protocols and guidelines to ensure safety during the COVID-19 pandemic. The event was attended by representatives of MedcoEnergi's asset Leadership Team and the top management of our business partners, and provided a platform to communicate to our business partners about MedcoEnergi's commitment to creating an interdependent safety culture.



¹ The definition of Tier 1 and Tier 2 Process Safety events refers to American Petroleum Institute Recommended Practice 754 Process Safety Performance Indicators for the Refining and Petrochemical Industries; Second Edition.

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Contractor Safety Ambassador Program

We implemented our Contractor Safety Ambassador Program at one of our offshore assets in Belanak, Indonesia. The objective is to improve awareness of MedcoEnergi's safety culture and CHSEMS implementation among our contractors at the asset level. Contractor Safety Ambassadors were selected to carry out HSE campaigns throughout the facilities, and participated in a mentoring program with specific topics such as MedcoEnergi's Safety Card, Permit to Work, Life Saving Rules, and Waste Management.



Mentoring sessions of our Contractor Safety Ambassador Program.



Sharing sessions on CHSEM implementation by our appointed ambassadors.

Contractor Management and Leadership Engagement

We hosted a joint engagement session on HSE management attended by MedcoEnergi employees and senior management representatives from our contractors at our Nimir Site in Oman. As part of the annual HSEMS program, this session aimed to strengthen engagement between management and the field team on upholding MedcoEnergi's safety culture. Attendees learned insights from field-site incidents to prevent and mitigate future workplace injuries and illnesses.



Joint management HSE engagement between senior management representatives of MedcoEnergi and contractors at our Nimir site, Oman.

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Contractor HSE Management in Major Capital Projects

Implementation of the Contractor HSE Management System (CHSEMS) is a critical element of our major capital projects. At Medco Ratch Power Riau (MRPR), our MPI gas power plant project in Sumatra, the CHSEMS has been integrated throughout the project's phases starting from procurement, mobilisation, construction, and then the commissioning phase in the end of 2021. CHSEMS implementation will continue during pre-startup and the operations phase. Integrating the system across the project's phases ensures that our safety culture and HSE performance are maintained throughout.

In ensuring that our HSE performance standards are translated into actions in the field, we engage our contractor management team on regular basis through HSE leadership training and site visits. This is to communicate our HSE expectations and secure their commitment.



Contractor management site visit at our Power Plant Project.



Contractor management site visit at our Gas Pipeline Project.



CHSEMS Site Audit (Work in Progress) attended by contractor's management.

Emergency Preparedness

MedcoEnergi implements various systems to ensure our preparedness for a wide range of emergency events, including operational incidents and natural disasters. We have established cross-functional emergency response teams at all of our facilities and assets, and emergency preparedness and responses are practised regularly through training and tabletop exercises. Table-top exercises are sessions where participants are facilitated by the Emergency Response Team and Crisis Management Team to discuss their roles and responsibilities and develop responses to a series of emergency scenarios.

Emergency Preparedness in Operating Assets

In 2021, we carried out an Emergency Response Table-Top Exercise in Thailand. The objective of the exercise was to demonstrate our Thailand Emergency Management Team's (EMT's) readiness to plan and execute response measures in alignment with the country's National Oil Spill Contingency Plan. We also conducted an exercise with the Crisis Management Team (CMT) at our headquarters in Jakarta, Indonesia.

Due to the constraints of the COVID-19 pandemic, we utilised a hybrid approach of in-person and virtual settings to conduct these exercises. Our exercise with the Thailand EMT was conducted virtually, while our Corporate CMT combined virtual and in-person participation.

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Table-Top Exercises with our Thailand EMT and Corporate CMT.

Emergency Preparedness for New Assets

As part of the MRPR's project commissioning and start-up phases in 2021, we developed and implemented a site-specific Emergency Preparedness and Response Management Plan. It involves preparing and training for emergencies and the hazards to be aware of when an emergency occurs. The objective of the emergency preparedness is to improve and strengthen our capacity to respond various emergency situations. We established a site-specific Incident Management Team (IMT) along with training and hands-on emergency response exercises at our MRPR site.



Hands-on emergency response exercises at MRPR, Riau Province, Indonesia.

ALIGNMENT OF SUSTAINABILITY INITIATIVES WITH THE UN SDGs

The following table maps our sustainability initiatives for occupational health and safety against the UN SDG targets. This mapping does not constitute a claim that MedcoEnergi has measured or set targets for the host governments of our operational areas regarding the achievement of UN SDGs.

UN SDGs	Relevant Target	Key Initiatives
	3.4, 3.6, 3.8, 3.9	<ul style="list-style-type: none"> • Health, Safety and Environment Management System (HSEMS); • Hazard Identification and Implementation of Associated Controls; • Emergency preparedness and table-top exercises.
	8.8	<ul style="list-style-type: none"> • HSE campaigns, programs and initiatives; • Contractor HSEMS; • Emergency preparedness and table-top exercises.

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ACTION PLAN

The following action plan will enable us to meet our objectives and continue improving our management of occupational health and safety issues. We measure, monitor, and report on our progress and performance against these actions on a regular basis.

	Short-Term Actions	Medium-Long Term Actions	Status
Occupational Health and Safety	To implement a work safety culture towards: 1. Contractor HSE management 2. Hazard identification and risk management 3. Process safety	To achieve zero fatalities in all assets. To achieve a lower average Lost Time Incident Rate (LTIR) compared with the equivalent industry in Indonesia.	We achieved zero fatalities. Our 2021 oil & gas LTIR is 0.00. The 2021 IOGP Asia/Australasia LTIR is 0.14. LTIR for power is 0.00. Benchmarking with an equivalent power industry in Indonesia and International is not available.
		To achieve a lower average Total Recordable Incident Rate (TRIR) compared with equivalent industry in Indonesia.	Our 2021 oil & gas TRIR is 0.39. The 2021 IOGP Asia/Australasia is 0.69. TRIR for power is 0.00. Benchmarking with an equivalent power industry in Indonesia and International is not available.
		To complete occupational health hazard assessment in all assets.	All assets continued to implement action items from the assessment.

2021 Awards

Operation	Name of Award	Awarded By	Description
CORPORATE GOVERNANCE			
Oil & Gas	The Most Committed and Cost Efficient Drilling Rig Award.	SKK Migas	The achievement of supporting the cost efficient and timely drilling programs to meet SKK Migas' production targets.
	Subroto Award	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Certificate for financial performance and energy efficiency in upstream oil & gas sector, awarded to JOB Tomori
	Gatra Energy Appreciation	Gatra Media Group	Recognition of the Company's resilience and consistency as an oil & gas producer during the COVID-19 pandemic, awarded to MedcoEnergi
	Environmental, Social and Governance (ESG) Awards 2021	Investor Daily and Bumi Global Karbon Foundation	Awarded the CCC "Commitment" rating to MedcoEnergi (on a scale of AA-A for "Leadership", BBB-B "Management, CCC-C "Commitment" and "Awareness")
	The Most Improved Public Listed Company in Big Cap Category	Indonesia Institute for Corporate Directorship	Recognition for the company with good corporate governance in big cap category
HEALTH AND SAFETY			
Oil & Gas	Operational Excellence Achievement in the 10 – 50 MBOEPD category	SKK Migas	First Place, awarded to South Natuna Sea Block B
	Operational Excellence Achievement in the >50 MBOEPD category	SKK Migas	Third Place, awarded to JOB Tomori
	Operational Excellence Achievement in the <10 MBOEPD category	SKK Migas	Second Place, awarded to Sampang
	Patra Karya Raksa Madya	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Safety Management – Oil & Gas Safety Category: Recognition of Safety development achievement of PT Donggi Senoro LNG
	Patra Karya Raksa Tama	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Safety Management – Oil & Gas Safety Category: Recognition of Safety development achievement of JOB Tomori
	Patra Nirbhaya Karya Madya	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Exploitation – Large Companies Category: Recognition of safety performance for zero LTIs in South Natuna Sea Block B, Block A and Lematang
	Patra Nirbhaya Karya Pratama	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Safety Management: Recognition of safety management of Rimau
	Patra Nirbhaya Karya Utama	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Exploitation - Small Companies Category: Recognition of safety performance for zero LTIs in Mitra Energi Gas Sumatra

Operation	Name of Award	Awarded By	Description
Power	Patra Nirbhaya Karya Utama Adinugraha I	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Exploitation - Large Companies Category: Recognition of safety performance for zero LTIs in JOB Tomori
	Patra Nirbhaya Karya Utama Adinugraha I	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	Refinery – Large Companies Category: Recognition of safety performance for zero LTIs in PT. Donggi Senoro LNG
Power	Zero Accident Award	Ministry of Manpower of the Republic of Indonesia	Recognition for accident-free work hours, awarded to Tanjung Jati B
ENVIRONMENT			
Oil & Gas	PROPER – GOLD Rating	Ministry of the Environment and Forestry of the Republic of Indonesia	Recognition of the Company's environmental conservation efforts that exceed regulation standards, awarded to JOB Tomori
	PROPER – Green Rating	Ministry of the Environment and Forestry of the Republic of Indonesia	Recognition of the Company's environment, sustainability and community development and empowerment efforts, awarded to South Natuna Sea Block B
	PROPER – Blue Rating	Ministry of the Environment and Forestry of the Republic of Indonesia	Recognition of the Company's environmental sustainability compliance, awarded to Lematang, Rimau, Sampang and Madura Offshore
Power	PROPER – GOLD Rating	Ministry of the Environment and Forestry of the Republic of Indonesia	Recognition of the Company's environmental conservation efforts that exceed regulation standards, awarded to PLN Tanjung Jati B, operated by PT TJB Power Services
PEOPLE			
Oil & Gas	Subroto Award	Ministry of Energy and Mineral Resources of the Republic of Indonesia, Directorate General of Oil and Gas	First Place, awarded to MedcoEnergi for human resources development in the energy and mineral resources sector
	2021 HR Excellence Award	Human Resources Online	Silver Award for achievement under the category of "Excellence in Business Transformation" in Indonesia
COMMUNITY EMPOWERMENT			
Oil & Gas	Corporate Social Responsibility (CSR) – Partnership and Community Development Program Award 2021	Muara Enim Regency Forum	Third Place, awarded to Lematang
	Dunia Usaha Dunia Industri (DUDI) Awards 2021	Ministry of Education, Culture, Research and Technology of the Republic of Indonesia	Recognition of the Company's contribution and dedication to the development of vocational programs in Indonesia, awarded to Medco Power Indonesia (MPI)

Mapping Against Indonesian Financial Services Authority (OJK) Requirements

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Acronym and Abbreviations

3R	Reduce, Reuse, and Recycle	EP	Equator Principles
AIC	Audit and Integrity Compliance	EPE	PT Energi Prima Elektrika
A&OI	Asset and Operating Integrity	ERM	Enterprise Risk Management
ABC	Anti-Bribery and Corruption	ESDM	Ministry of Energy and Mineral Resources
ABMS	Anti-Bribery Management System	ESG	Environmental, Social, and Governance
ADB	Asian Development Bank	ESHIA	Environmental, Social, and Health Impact Assessment
API	American Petroleum Institute	ELB	PT Energi Listrik Batam
BAT	Best Available Technologies	FRA	Fraud Risk Assessment
BBLS	Barrels	GCG	Good Corporate Governance
BMN	State-owned Goods License	GEG	Gas Engine Generator
BOC	Board of Commissioners	GHG	Greenhouse Gas
BOD	Board of Directors	GJ	Gigajoule
BOE	Barrel of Oil Equivalent	GMS	General Meeting of Shareholders
BSR	Business for Social Responsibility	GRI	Global Reporting Initiative
CAPEX	Capital Expenditures	HSE	Health, Safety, and Environment
CCS	Carbon Capture and Storage	HSEMS	Health Safety and Environment Management System
CCUS	Carbon Capture, Utilization and Storage	IBCSD	Indonesian Business Council for Sustainable Development
CDP	Formerly the Carbon Disclosure Project, an international non-profit organisation that helps companies and cities disclose their environmental impact	IDR	Indonesian Rupiah
CEO	Chief Executive Officer	IFC	International Finance Corporation
CHSEMS	Contractor HSE Management System	ILO	International Labour Organisation
CLA	Collective Labour Agreement	IOGP	International Association of Oil & Gas Producers
CNG	Compressed Natural Gas	IPA	Indonesia Petroleum Association
CO ₂ e	Carbon dioxide equivalent	IPCC	Intergovernmental Panel on Climate Change
COC	Code of Conduct	IPP	Independent Power Producer
COL	Conflict of Interest	ISO	International Organisation for Standardization
COO	Chief Operating Officer	IT	Information Technology
COP26	2021 United Nations Climate Change Conference	JOB	Joint Operating Body
CSR	Corporate Social Responsibility	KADIN	Indonesian Chamber of Commerce and Industry (Kamar Dagang dan Industri)
DEB	PT Dalle Energy Batam	KPI	Key Performance Indicator
E&P	Exploration and Production	KPK	Indonesian Corruption Eradication Commission (Komisi Pemberantasan Korupsi)
ECC	Ethics & Compliance Committee	LTI	Lost Time Incident
ELB	PT Energi Listrik Batam	LTIR	Lost Time Incident Rate
ELO	Ethics Liaison Officer		
EMS	Environmental Management System		
EMT	Emergency Management Team		

MBOEPD	Million Barrel of Oil Equivalent Per Day
MEB	PT Mitra Energi Batam
MEI	Medco Energi Indonesia
MEPI	PT Medco E&P Indonesia
MEPM	PT Medco E&P Malaka
MEPN	Medco E&P Natuna Ltd (South Natuna Sea Block B)
MESL	Medco Energi Sampang Pty. Ltd
MoEF	Ministry of Environment and Forestry
MPE	PT Multidaya Prima Elektrindo
MPEP	Medco Project Excellence Process
MPI	Medco Power Indonesia
MRPR	PT Medco Ratch Power Riau
MSCI	Morgan Stanley Capital International
MSME	Micro, Small, and Medium-sized Enterprise
MSLDP	Medco Senior Leadership Development Program
MW	Megawatt
MWp	Megawatt peak
NDC	Nationally Determined Contribution
NWOW	New Ways of Working
NGO	Non-governmental organisation
OE	Operational Excellence
OFAC	Office of Foreign Assets Control
OHS	Occupational Health and Safety
OHSAS	Occupational Health and Safety Assessment Series
OJK	Financial Services Authority (Otoritas Jasa Keuangan)
OT	Operational Technology
P2P	Procure-to-Pay
PDCA	Plan-Do-Check-Adjust
PLN	Indonesian State-owned Electricity Company (Perusahaan Listrik Negara)
PPE	Personal protective equipment
PSC	Production Sharing Contract
PSE	Process Safety Events
PROPER	Performance Rating Program in Environmental Management
PT	Limited Liability Company (Perseroan Terbatas)
PV	Photovoltaic
QPR	Quarterly Performance Review
R&D	Research & Development
SAE	Standards on Assurance Engagement
SCBD	Sudirman Central Business District
SCM	Supply Chain Management
SDGs	Sustainable Development Goals
SEP	Stakeholder Engagement Plan
SKK Migas	Special Task Force for Upstream Oil & Gas Business Activities (Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi)
SMP	Security Management Plan
SMS	Social Management System
SoA	Statement of Adherence
SPI	Sustainable Performance Improvement
SRI	System of Rice Intensification
SRMC	Sustainability and Risk Management Committee
SROI	Social Return on Investment
TCFD	Task Force on Climate-related Financial Disclosures
tCO ₂ e	Metric tons of carbon dioxide equivalent
TJBPS	PT Tanjung Jati B Power Services
TOE	Ton of Oil Equivalent
TRIR	Total Recordable Injury Rate
UN	United Nations
US	United States of America
US\$	US Dollar
VPSHR	Voluntary Principles on Security and Human Rights

Feedback Form

This Sustainability Report provides an overview of MedcoEnergi's 2021 sustainability performance. We look forward to receiving suggestions for improvement from our stakeholders. Please share your feedback and/or comments about this Sustainability Report by completing this feedback form and returning to us by email, fax, or mail.

Stakeholder Group

- | | | | |
|-------------------------------------------------------|------------------------------------|-----------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Shareholders | <input type="checkbox"/> Employee | <input type="checkbox"/> Partners | <input type="checkbox"/> Government & Regulator |
| <input type="checkbox"/> Bank & Investor | <input type="checkbox"/> Community | <input type="checkbox"/> Customer | <input type="checkbox"/> Media |
| <input type="checkbox"/> Others, please specify _____ | | | |

Please choose the most appropriate answer(s) to the questions below:

- | | Yes | No |
|---------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1 This report is useful to you | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 This report describes the Company's performance in sustainability development | <input type="checkbox"/> | <input type="checkbox"/> |

Please rate the following material aspects based on the level of importance according to your view of MedcoEnergi's sustainability performance (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 suggestions/comments for this report:

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

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BUILDING OUR FUTURE **SUSTAINABLE ENERGY** AND NATURAL RESOURCES



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