



MEDCOENERGI 

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**PROVIDING ENERGY,  
RESPECTING NATURE**

The Energy Company of Choice

“ MedcoEnergi is committed to providing energy for society. Our near term goal is to double the current production rate by delivering successful major projects, growing our reserves organically and inorganically, while complying with high safety, health, and environmental standards. ”

Lukman Mahfoedz, CEO of MedcoEnergi



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# Foreword from CEO

PT Medco Energi Internasional Tbk (MedcoEnergi) is a publicly-listed Indonesian national company with current oil and gas production of around 80 thousand barrels of oil equivalent per day (including 20 thousand barrels oil equivalent per day under a service contract in Oman).

MedcoEnergi was founded in 1980 by Arifin Panigoro, one of Indonesia's leading oil and gas businessmen, as the first private national oil and gas drilling company.

Within three decades, we have significantly grown our business and become an integrated energy company engaged in exploration and production (E&P), integration of gas value chain, Liquefied Petroleum Gas (LPG) processing, high speed diesel marketing, storage and transportation, gas transportation, drilling rigs and services, electrical power generation and coal mining.

Today, we have expanded our operation from Indonesia to Oman, Yemen, Libya, and the United States of America. In order to grow

our business and achieve our goals, we have acquired an enormous amount of knowledge and surrounded ourselves with the most talented human capital.

MedcoEnergi is committed to providing energy for society. The Company is set to double its current production rate in the near future by delivering successful major projects, growing its reserves organically and inorganically, while always complying with the highest safety, health and environmental standards.

Our aim is to maximize value for our stakeholders. We welcome your interest, involvement and support as we continue to pursue aggressively the Company's growth agenda.

Sincerely yours,

**Lukman Mahfoedz**  
President Director & CEO

# Our Belief



{ *Innovative* }



{ *Open* }



{ *Ethical* }



{ *Professional* }

## Becoming the Energy Company of Choice

Our vision is to be the energy company of choice for our investors, shareholders, partners, employees, communities and the greater public.

It is a vision that will be realized by developing energy resource potential into profitable investment portfolios.

We operate our business in adherence to the highest standards of Good Corporate Governance (GCG) and of Safety, Health and the Environment (SHE). In addition, we implement a consistent Corporate Social Responsibility (CSR) program. In all these areas MedcoEnergi has received accolades from its stakeholders.

All our work is conducted in a professional, ethical, open, and innovative way. These values are the core of our corporate culture, which drives MedcoEnergi towards sustainability.

# Journey Towards Excellence



## Obtain Highest Recognition

The Indonesia Vice President presented Gold PROPER award, the highest recognition for preserving the environment from the Indonesian Ministry of Environment, to the COO of E&P MedcoEnergi, Frila B. Yaman.



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# Corporate Milestones

**1980** Incorporated as an Indonesian drilling contractor.

**1992** Established an oil and gas subsidiary.

Acquired a Technical Assistance Contract (TAC) and Production Sharing Contract (PSC) for two oil and gas blocks in East Kalimantan from Tesoro.

**1994** Initial public offering as MedcoEnergi on the Indonesia Stock Exchange. Ticker symbol is MEDC.

**1995** Acquired 100% shares of PT Stanvac Indonesia from Exxon and Mobil which held PSCs for 3 oil and gas blocks in South Sumatra: South & Central Sumatra, Rimau, and Pasemah.

**1996** Discovered the giant oil field, Kaji and Semoga, Rimau Block, South Sumatra.

**1997** Entered into the downstream industry through a Joint Management Agreement to operate Pertamina's methanol plant at Bunyu Island.

**2000** Acquired three new working areas: Simenggaris, Western Madura and Senoro-Toili. Discovered an oil field in Soka, South Sumatra.

**2002** Acquired 25% working interest in Tuban block.

Awarded a "B+" corporate credit rating with stable outlook by Standard & Poor's on February 4, 2002, above Indonesia's credit rating.

**2003** Signed Gas Supply Agreement with PLN (state-owned power producer) for gas produced from South & Central Sumatra PSC.

**2004** Acquired 100% shares of Novus Petroleum Ltd, marking the Company's expansion into the international oil and gas arena.

Inaugurated the Company's first gas-fueled power plant in Batam Island, Panaran I.

**2005** Awarded Oil & Gas Exploration and Production Sharing Agreement of Area 47 from the Government of Libya.

Acquired Langsa block and Sembakung block in Indonesia.

Signed Tanjung Jati Operation & Maintenance Agreement with PLN.



**2006** Awarded ten-year E&P Service Agreement of Karim Fields, in Oman.

Commissioned Panaran II gasfired power plant.

Awarded 3x110 MW of geothermal power project in Sarulla, North Sumatra.

**2007** Launched exploration of Area 47 in Libya. Made six discoveries from exploration wells in 1 year.

Launched pilot project for Enhanced Oil Recovery (EOR) in Rimau Block.

Began the development of Senoro Gas Project by establishing PT Donggi-Senoro LNG (DSLNG).

**2008** Signed a Production Sharing Agreement with the Ministry of Oil and Minerals of the Republic of Yemen for Block 82 and 83.

Completed the sale of its drilling subsidiary, PT Apexindo Pratama Duta Tbk.

Signed the first Coal BedMethane (CBM) PSC in Indonesia to carry out activities in development of CBM in Musi Banyuasin Regency, South Sumatra.

**2009** Entered into the coal mining business by acquiring two companies which hold mining concession rights in Nunukan, East Kalimantan.

**2010** Secured operatorship and successfully made three discoveries from three exploration wells in Area 47 in Libya.

Obtained 20 year extensions for three PSC working areas: South & Central Sumatra, Block A, and Bawean.

Approved the Final Investment Decision for DSLNG to develop the Liquefied Natural Gas (LNG) project.

**2011** Issued the shelf-registration USD bond of up to USD 150 million.

Signed to CBM PSC of Lematang and Muralim Blocks.

Completed the sale of Medco Tunisia Anaguid Limited.

Invited PT Saratoga Power to become a shareholder of PT Medco Power Indonesia.

Secured Commerciality declaration of Area 47, Ghadames Basin, Libya.

# High SHE Standard

MedcoEnergi is committed to managing its operations safely, effectively and efficiently. MedcoEnergi always ensures that all of its assets implement Performance Integrity of MedcoEnergi (PRIME) as its SHE management system. PRIME was developed in accordance with the International Safety Rating System 7th edition (ISRS7), the audit standard that is implemented in all MedcoEnergi assets.

As a high standard of SHE system, the contents of PRIME are also in line with various international standard management systems: ISO 9001 (Quality Management System), ISO 14001 (Environmental Management Systems), OHSAS 18001 (Occupational Health and Safety Assessment Series), PAS 55-Asset Management, and GRI (Global Reporting Initiative).

PRIME is a guideline for MedcoEnergi to implement operation management system, risk management, employee competency management, facility integrity management, crisis management, and knowledge management.

MedcoEnergi has been implementing various initiatives to regularly enhance its SHE performance and to show appreciation for employees and contractors who implement our Behavior Based Safety program.

We have been conducted Health Risk Assessment programs and provided specific health program for our employees to prevent any potential occupational illness. MedcoEnergi requires all of its contractors to implement Contractor Safety Management and evaluates their SHE performance during their service to ensure that they understand and implement CSM properly and effectively.

We also realize that our operational integrity is highly dependent on our facility integrity. Therefore, we continuously enhance the integrity of our facilities by conducting risk-based facility inspections and routine inspections on our various equipment and electrical installations.

MedcoEnergi is determined to enhance the safety behavior of its employees at all times to continue delivering the best quality of operation and performance.



*MedcoEnergi uses Performance Integrity of MedcoEnergi (PIME) as its SHE management system. This system was developed in accordance with ISRS7 audit standard.*

# Preserving Environment

Currently about 6.8 billion people inhabit the Earth. Our world is faced with serious challenges, among others: poverty, environment, and health.

MedcoEnergi is continuously trying to find better ways to produce and use energy to drive the economy, industries, and transportation.

MedcoEnergi has undertaken several initiatives to restore the ecological balance that is affected by its operations, including management of water and air pollution, and hazardous solid waste materials.

We always strive for our operations to comply with the environmental law and regulation wherever we operate. We regularly produce a feasibility study on the environment for every activity, such as analysis of environmental impact and efforts on environmental management and ecological monitoring.

In preserving the environment, we are committed to implementing various initiatives, including: green house gas emission reduction, water conservation, waste management, utilization of resources, and biodiversity conservation.

These initiatives have enabled us to enhance our performance in preserving the environment. We are the first E&P Company to receive the highest recognition from the Indonesian Ministry of Environment by obtaining Gold PROPER (Corporate Performance Rating Program) rating in 2011 for our major oil producing block, Rimau, in South Sumatra. We also obtained Green PROPER ratings for our other oil and gas producing blocks in South Sumatra and East Kalimantan.

We are endlessly pursuing better, more environmentally friendly operations to produce and use energy to reduce greenhouse gas emissions and global warming.



*MedcoEnergi actively restores the ecological balance affected by its operations.*

# Empowering Local Communities

Growing an energy business in a pluralistic society such as Indonesia carries the responsibility of empowering the local communities and interacting respectfully with the environment. Close cooperation with the government at national and local levels is a key to ensuring the sustainability of economic and social growth in addition to conservation of the environment..

MedcoEnergi has contributed in a unique way. Our community development activity in operation areas has provided energy to local communities through small gas-fired and hydro-power plants in several villages in South Sumatra. The Company provides financial support, such as micro financing to local small-scale entrepreneurs (e.g. carpenters, fishermen, cracker producers, etc). We also support the local community to plant organic paddy fields. Briefly, we develop small-scale energy-related and community-based projects using locally available resources. In this way, we also preserve the environment.

Our Company has demonstrated a strong commitment to local education particularly in our operation areas. We continue providing scholarships and improving school facilities. We believe that a better education will improve the quality of life of the community.

MedcoEnergi has introduced various initiatives to empower women in the community, such as a community development program for organic System of Rice Intensification (SRI). Indeed, the United Nations has recognized MedcoEnergi with its Millenium Development Goals award in the category of "Promoting Gender Equality and Empowerment of Women."



*Children are our future. We believe that a better education will improve the quality of life of the community*



*MedcoEnergi's young petro-technical professionals are ready to face the challenges in Indonesia and abroad.*

## Our Human Capital

People are our capital and the key to our success. People competency and engagement are crucial to the Company's performance. We therefore organize, develop, and reward our employees so that they can continuously increase their competency and deliver their best performance.

We have invested in several strategic human capital initiatives to attract, motivate and retain the right talents. In developing our future leaders, we have embarked on a structured leadership development program, involving employees from staff to senior management level.

Our talent management process ensures MedcoEnergi has a sustainable supply of talent to fill various key positions within the organization.

Today, MedcoEnergi employs more than 2,200 people worldwide, including over 500 petrotechnical professionals. Our human capital is made up of people from various nations who all embrace the MedcoEnergi culture and spirit.





*MedcoEnergi guarantees the right of every individual to report any indication of violation in any forms.*

## Highest GCG Principles

MedcoEnergi is recognized by the Indonesian capital market community as a pioneer in adhering to the highest standards of GCG principles and business ethics.

We have received several GCG awards since 2005 and are always striving to achieve an even better performance.

MedcoEnergi has implemented a policy whereby all employees are required to declare that they will comply with the GCG principles and business ethics. In addition, the Company has introduced a 'whistle-blowing' system to support the policy, which has been utilized by the Directors to monitor the implementation of corporate values by all members of MedcoEnergi.

Fraud, dishonesty, harassment, unethical behaviour and workplace safety hazards have a negative effect on our workplace. By reporting misconduct, our stakeholders can help us to ensure that our people are safe and secure in their work environment and also that fraud and dishonesty can be eliminated, thus saving the company financial losses.

Type of wrongdoings that are covered in our system include; Fraud, Corruption, Bribery, Conflict of Interest, Misconduct Behaviours, Financial Statement Fraud, Breaches of Policy, and Other Unethical Behaviour.

Our stakeholders' active involvement will make MedcoEnergi a safe, fair and honest place to work.

# Information System Excellence

MedcoEnergi relies heavily on seamless communications. We have invested extensively in Information Communication Technology (ICT). Technology is our enabler, which allows us to grow as well as to strengthen our internal control system.

Since 2001, we have used a robust infrastructure of ICT System. The system is a single integrated centralized data centre, which is protected with disaster recovery system using virtualization technology.

MedcoEnergi already has most of its business process already online, highly integrated with its Enterprise Resource Program (ERP) system. In addition, we are also one of the first companies in Indonesia to fully use online collaboration technology in our daily business system integrated with an electronic document management system. We are able to work any time anywhere with proper security and data integrity.

With such a system, we are now able to build up our internal control system and make

decisions more quickly and more effectively. At the same time, we can reduce our carbon footprint due to using less paper and fewer business trips.

We have also established a technologycentric collaborative room. MedcoEnergi has empowered its employees to perform multidisciplinary collaborative work on all of our assets. When needed, the collaborative room can transform itself into a crisis management center.

MedcoEnergi's commitment to the information system has been proven by obtaining international IT standard, the ISO/IEC 20000 in IT service management. This ensures reliability in the information system which will greatly support MedcoEnergi's growth.



*Our technology-centric collaborative room enables MedcoEnergi employees to perform multi-disciplinary collaborative work.*

# Exploration and Production



## **Growth through Partnership**

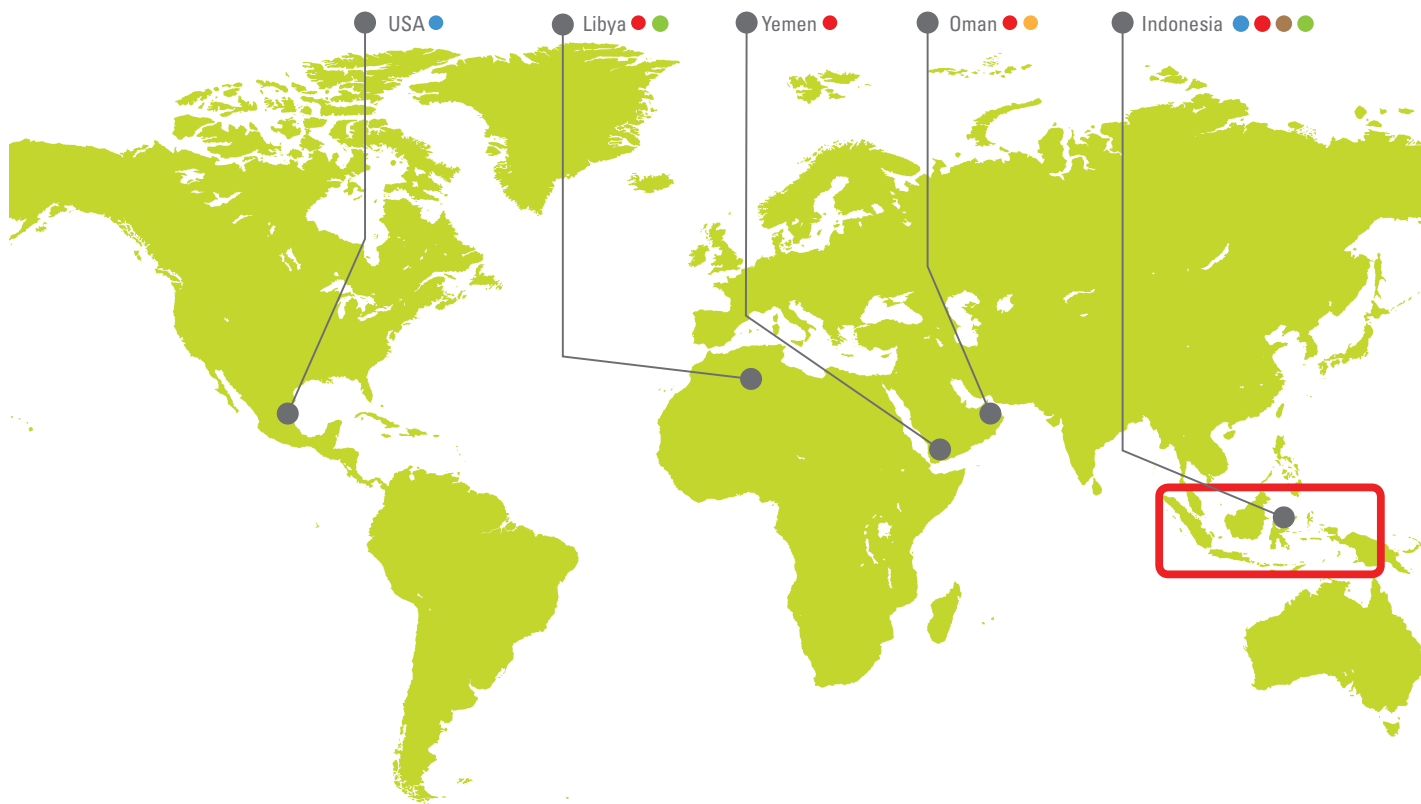
Partnership is a key success factor for MedcoEnergi, enabling it to increase production, maintain reserve growth, and obtain advance technology.



  
MEDCOENERGI  
Oil & Gas

 **bpmigas**   
MEDCOENERGI  
Oil & Gas

PT



● Exploration  
 ● Development  
 ● Production  
 ● Economic Interest Participation  
 ● Service Contract  
 ● CBM

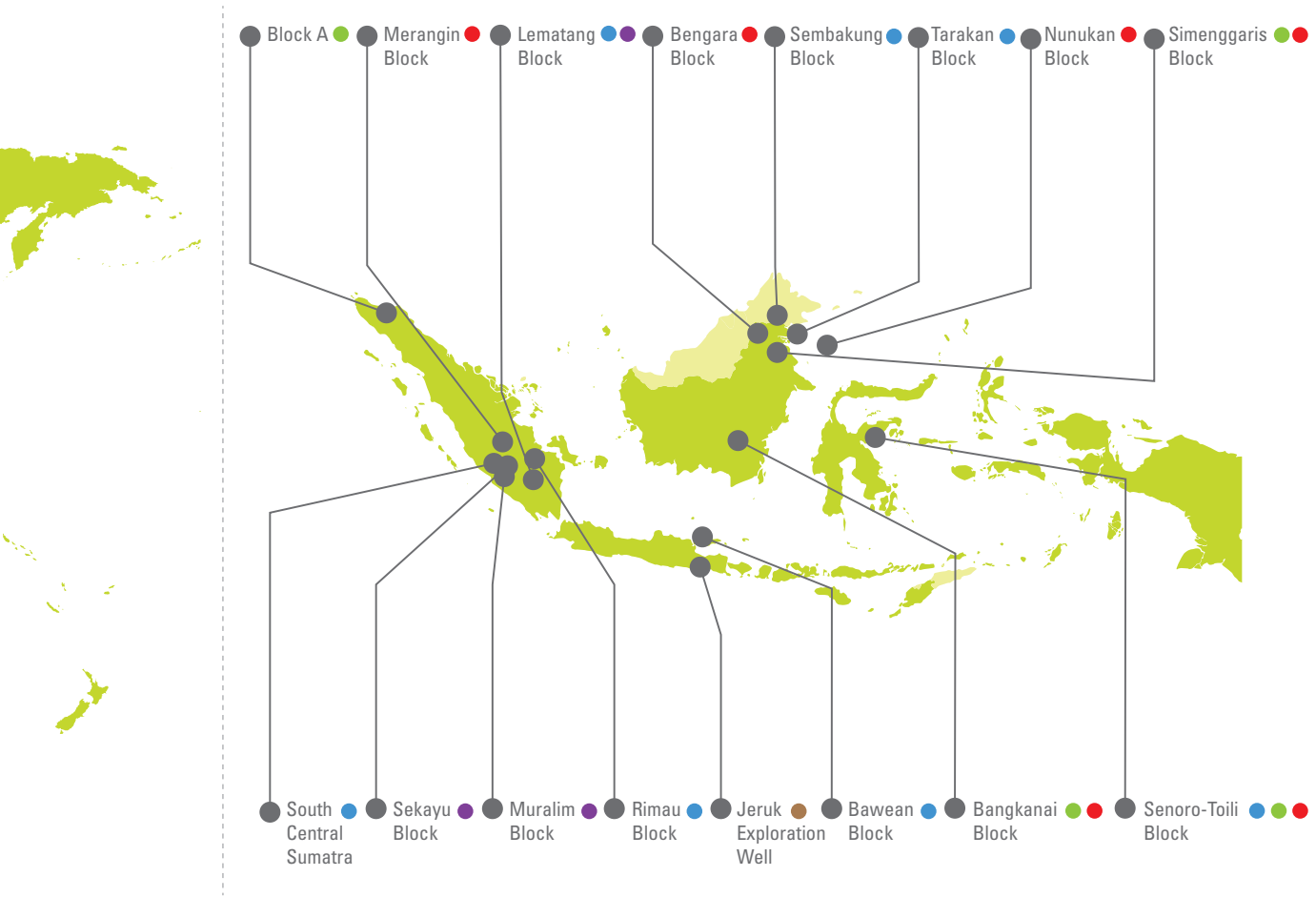
In the last two decades, MedcoEnergy has successfully grown its exploration and production business and continuously added to and replaced reserves. We have expanded our business to include five countries, i.e. Indonesia to Oman, Yemen, Libya, and USA. These operations include exploration, development and production of crude oil and natural gas, as well as oil and gas exploration and production services.

Partnership is one of the key success factors to expanding our exploration and production business. We have been working together with various exploration and production companies

worldwide to maximize the value of our assets and at the same time to grow our businesses.

We have demonstrated our expertise in enhancing production of mature and marginal fields and operating the assets efficiently, both in domestic and international assets. We have been able to obtain strong support from local government and communities. We empower local communities in the surrounding areas of our operations, create jobs for them and increase their education level. It is our long-term commitment to create and deliver sustainable value to all local communities wherever we operate.

We are committed to providing energy for society's needs and set our goal to double the current production rate in the near future. We will continue to conduct exploration activities in the most potential prospects, implement Enhanced Oil Recovery (EOR) technology at our mature assets, and pursue acquisitions of new potential or producing oil and gas assets. We are also looking at the opportunity to expand our exploration and production business to CBM and to produce our heavy oil potential in one of our blocks in Indonesia.



Our major projects, exploration and development activities at challenging areas and development of new unconventional energy require high technology application and massive capital investment. The involvement of our experienced partners in those areas is a key element to materialize our objectives. We are confident that our history of successful performance combined with partnerships with reputable companies will enable MedcoEnergy to demonstrate an even better performance thus maximizing value for our stakeholders in the near future.

Country	Partners
Indonesia	Anadarko, Cue Energy, Dart Energy, JAPEX, KOGAS, Lundin, Mitsubishi Corporation, MOECO, Pertamina, Premier Oil, Salamander Energy, and SPC.
Oman	Kuwait Energy, Oman Oil Company, Petrovest, and Vision Oil.
Yemen	Indian Oil, Kuwait Energy, Oil India Ltd, and Yemen General Oil & Gas Corporation.
Libya	Libyan Investment Authority.
USA	Challenger Minerals, Leed Petroleum, Rampant Lion Energy, and Red Willow Production Company.

# Exploration

MedcoEnergi is committed to increasing its hydrocarbon reserves and production through both organic and inorganic growth.

Exploration is the key to the organic growth of our business. MedcoEnergi's experienced geoscientists have been working diligently to integrate the database of our basins with available seismic data to develop three dimensional models of the sub-surface. By referring to these models, we will be able to understand the entire hydrocarbon system, enabling us to identify and optimize high potential exploration prospects.

MedcoEnergi achieved a major success when it discovered giant oil reserves in Indonesia in 1996. This success encouraged MedcoEnergi to aggressively implement exploration programs, resulting in a very significant increase in its reserves and production in Indonesia.

An example of MedcoEnergi's expertise is demonstrated by its successful exploration program in Area 47, Libya where we discovered enormous hydrocarbon reserves in 2008. This success enabled us to achieve an exploration success ratio of 90% at the end of 2010.

As an exploration and production company, MedcoEnergi will continue to increase hydrocarbon its reserves and enhance the value of its exploration assets by implementing extensive exploration activities at prospect areas in Indonesia, Libya, and Yemen.

MedcoEnergi also strives to increase production and reserves through inorganic growth. The intuition and expertise of MedcoEnergi's management and geoscientists have enabled the Company to acquire various attractive producing, development and exploration assets with tremendous amount of reserves since 2000. These acquisitions have significantly contributed to the increase in our reserves.

We continue to search selectively for additional oil and gas resources through new ventures. We are currently considering several opportunities in Indonesia and abroad and will select the most attractive assets.

Our partners play a big role in supporting us to carry out our exploration programs and/or to execute the acquisition of assets. Their support and contribution in sharing technology, people, expertise, and capital investment have enabled us to achieve great successes in discovering and increasing hydrocarbon reserves.

MedcoEnergi is highly optimistic that by implementing further exploration programs and acquiring producing assets it will be able to achieve its target to double oil production in the near future.





*MedcoEnergi's reserves and contingent resources have grown significantly with the successful exploration in Libya.*

## Libya; Breaking the Record

The discovery of 352 MMBOE contingent resources in Area 47 on 2008 and additional resources discovered until the end of 2010 demonstrated MedcoEnergi's success in executing exploration program in Libya.

From the commencement of exploration drilling activities in September 2006 to the end of 2010, we have drilled 20 exploration wells and 6 appraisal wells, and completed a third 3D seismic program of 1225 sq. km in the eastern part of Area 47 and 2,400 km of 2D seismic in the western and southern part. We have successfully discovered resources from 18 out of the 20 exploration wells drilled in 4 years, and achieved an exploration success ratio of 90%.

Commerciality of Area 47 was obtained in late 2011. We are now working to build a production facility for 50,000 bopd which is expected to be completed in 2015.

We are also continuing our exploration program in Area 47 and are confident that the program will provide excellent results.

MedcoEnergi entered into the Exploration and Production Sharing Agreement IV (EPSA IV)

of Area 47 with a participating interest of 50% in 2005. We became the operator of Area 47 in 2010.

Among all of the holders of EPSA IV, we are the first company that obtain a declaration of commercialization from the Government of Libya. It shows our determination and ability to run our exploration program. Furthermore, this discovery also marks the acceleration in our major discovery cycle.

Libya Area 47



# Development

For the last ten years, MedcoEnergi has been striving to increase its production. It has actively pursued opportunities to monetize its abundant stranded gas reserves in remote areas in Indonesia.

MedcoEnergi has entered into the elite market to produce LNG and has obtained the support of the Indonesian government and partners in creating a market to monetize its stranded gas from Senoro field in Central Sulawesi.

Subsequently, we are now also working to develop high temperature sour gas reserves in Aceh. This gas will be processed in a facility which will supply the local fertilizer plant. A gas-processing unit using amine system will be installed at the facility to remove carbon dioxide (CO<sub>2</sub>) and Hydrogen Sulfide (H<sub>2</sub>S) in addition to a sulfur recovery unit to recover the H<sub>2</sub>S. Pupuk Iskandar Muda (PIM) and PLN, companies owned by the Indonesian government and located in Aceh, will use this gas to produce fertilizers and electricity. We are also conducting a feasibility study regarding technical and commercial aspects of the remaining gas reserves from this asset.

MedcoEnergi is committed to developing its oil discovery timely. We are now working together with our partner and the Government of Libya to develop the first phase of the oil production facility, and we plan to double oil production in the future. All development assets are managed through one chain of command. We strive to deliver project execution of our development assets in line with the highest industry standards, and are committed to implementing Medco Project Excellence Process (MPEP) to assure any capital investment made by MedcoEnergi and our partners is utilized effectively.

In the near future, our development assets will play a key role in supporting our immediate goal to double our current oil and gas production. Our partners play a significant role in sharing their technology, expertise, people, and products to help us to deliver our major projects on time and within the budget.



*MedcoEnergi is committed to creating value by continuously developing oil & gas resources in many parts of the world.*

## Senoro Development; Breaking through Gas Market Barrier

MedcoEnergi is committed to monetizing and innovatively creating a market for its abundant stranded gas reserves from remote areas in Indonesia. One of the examples is Senoro gas field, which is located in a remote area in Central Sulawesi Province. The Senoro gas field contains sufficient reserves and contingent resources to supply 250 MMSCFD to a LNG plant under a long term gas supply commencing in the fourth quarter of 2014. In addition, we envisage another supply of approximately 55 MMSCFD to the domestic market

We are proud that we can enter into the elite market to produce LNG and have obtained the support of the Indonesian government and partners. The LNG plant is jointly owned by MedcoEnergi, Pertamina, Mitsubishi, and Korea Gas Corporation and operated under DSLNG. The plant will produce approximately 2 million tons of LNG per annum. Construction of the plant is currently underway and production is slated to start at the end of 2014. Commercial production is targeted to commence and deliver the first LNG cargo in 2015. This will be the fourth LNG plant in Indonesia and the first LNG project built by a national company within a downstream business scheme in Indonesia. It

is an honor for us to have the full support of the Government of Indonesia and to be monitored directly by the President's special task force to accelerate strategic projects (UKP4).

We rigorously apply the MPEP throughout the lifecycle of the projects to ensure projects can be delivered successfully.

### DSLNG Plant



# Production

MedcoEnergi's producing assets are located in Indonesia, Oman and USA. In 2011, we managed to produce almost 80 thousand barrels of oil equivalent per day, thereby maintaining our position as one of the largest oil producers in Indonesia.

Our producing assets are organized by each designated company, but managed by one chain of command, whereby we can operate and manage all assets efficiently and effectively. We have invested significantly to ensure that our assets are operated in a safe and environmentally friendly manner, and that our employees are in robust health, ready to deliver their best performance at all times.

MedcoEnergi has consistently demonstrated its expertise in maintaining and increasing production at mature and marginal fields and in operating producing assets since entering into the exploration and production business in 1992. This expertise has enabled MedcoEnergi to expand its assets in an efficient and cost effective manner. Our employees have always worked at a high level of competency to discover the resources, to develop the reserves, and to produce in a timely manner.

MedcoEnergi has also shown its ability to monetize stranded gas reserves by finding and creating markets for this gas. We will continue to pursue any available opportunity to monetize our gas reserves and develop it for production.

We aggressively pursue every opportunity to increase production from our assets. MedcoEnergi is the first Indonesian oil and gas company to research and develop CBM, an unconventional gas source, in Indonesia. In addition, we are evaluating the technology that can help us to recover our heavy oil in South Sumatra operation areas.

Our production growth is highly dependent on high technology and significant capital investment. We are actively seeking to establish new partnerships with reputable exploration and production companies to enhance our capability to increase production and therefore add more value to our stakeholders.



*MedcoEnergi maintains a proven track record of enhancing oil recovery at mature fields.*

## Rimau; Long Live the Giant

One of the milestones in our successful history was the discovery of the huge Kaji-Semoga field in South Sumatra, which played a major part in helping MedcoEnergi to position itself as one of the largest oil producers in Indonesia. The fields were discovered in 1996 and started its production in 1997. The Kaji-Semoga fields reached its peak production in 2002.

MedcoEnergi is striving to arrest the declining of production and to increase oil recovery factor by implementing secondary and tertiary recovery techniques. We have taken several key initiatives to off-set oil production declines including maintaining reservoir pressure, developing and stimulating the Telisa sands tight reservoir formation by utilizing sand fracturing techniques in the reservoir rock, developing Talang Akar reservoir by drilling infill wells, minimizing pressure drawdown by drilling horizontal wells and implementing EOR techniques using surfactant and polymer to further increase the recovery factor.

By implementing this EOR techniques, we aim to increase the recovery factor of Kaji-Semoga fields to 60% from the current recovery factor of 40%.

In late 2011, we started our EOR pilot program by implementing pre-flush injection at several wells. We expect to complete the injection by the end of 2012. Upon completion of the pre-flush injection, we will continue with EOR pilot program evaluation. EOR full scale implementation is expected to start in 2014.

MedcoEnergi is the second exploration and production company and the first national company in Indonesia to apply EOR technology. Having the experience and technological capacity, we will be able to utilize this EOR technique in our asset worldwide.

### EOR Process



# Reserves and Contingent Resources

MedcoEnergi estimates its remaining reserves at the end of each year, in accordance with the International Society of Petroleum Engineers' (SPE) Generally Accepted Engineering and Evaluation Principles.

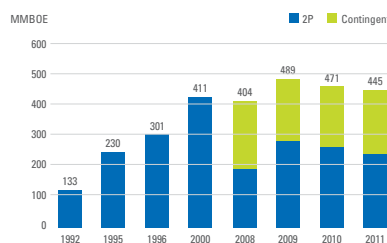
We estimate our hydrocarbon resources by interpreting volumes and values. The quantities of resources are associated with the development and implementation of projects.

Our management of hydrocarbon resources is based on guidelines from Petroleum Resources Management System (PRMS), which was initiated by the SPE, the American Association of Petroleum Geologists (AAPG), the World Petroleum Council (WPC), and the Society of Petroleum Evaluation Engineers (SPEE).

In our financial statements, we classify our resources into three categories, namely Contingent Resources, Proved and Probable (2P) Reserves, and Proved (1P) Reserves.

Starting from 2012, we expect our reserves to continue to grow for the next 3-year period. We will implement extensive exploration activities at prospective areas and selectively search for additional oil and gas resources through new ventures.

**Maintaining Reserve Life Index**





*MedcoEnergi empowers its human capital to discover new reserves, thus creating value.*

# Other Energy Related Business



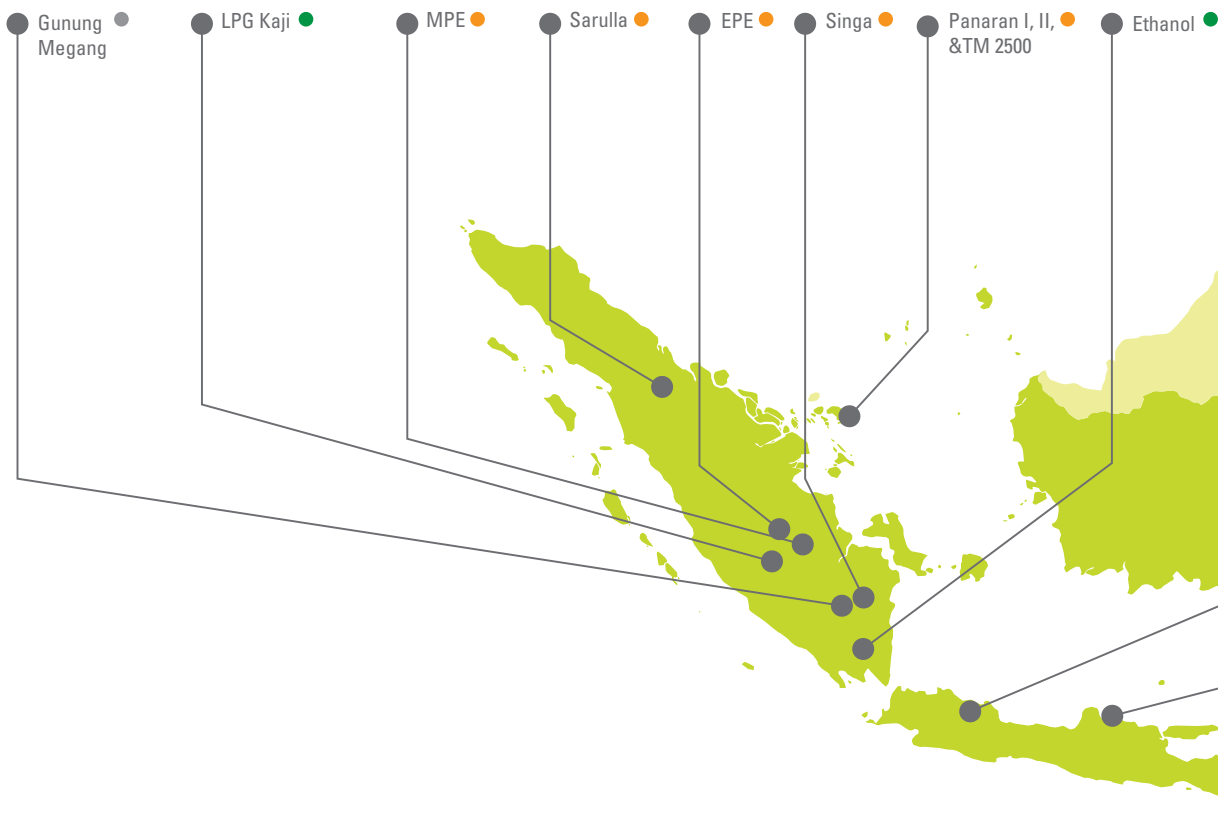
## CNG conversion

The use of Compressed Natural Gas (CNG) in our operational cars can save up to around USD 100 thousand per year and reduce emissions by 380 tonnes of CO<sub>2</sub> equivalent per year, i.e. 25% lower than when using conventional fuel-oil based cars.









● Power    
 ● Downstream    
 ● Mining    
 ● Gas

MedcoEnergi is committed to providing energy for society. Our expertise and ability to grow the exploration and production business have strengthened our commitment to expand the business into other energy-related businesses. The year 1997 marked the beginning of MedcoEnergi's effort to become an integrated energy company.

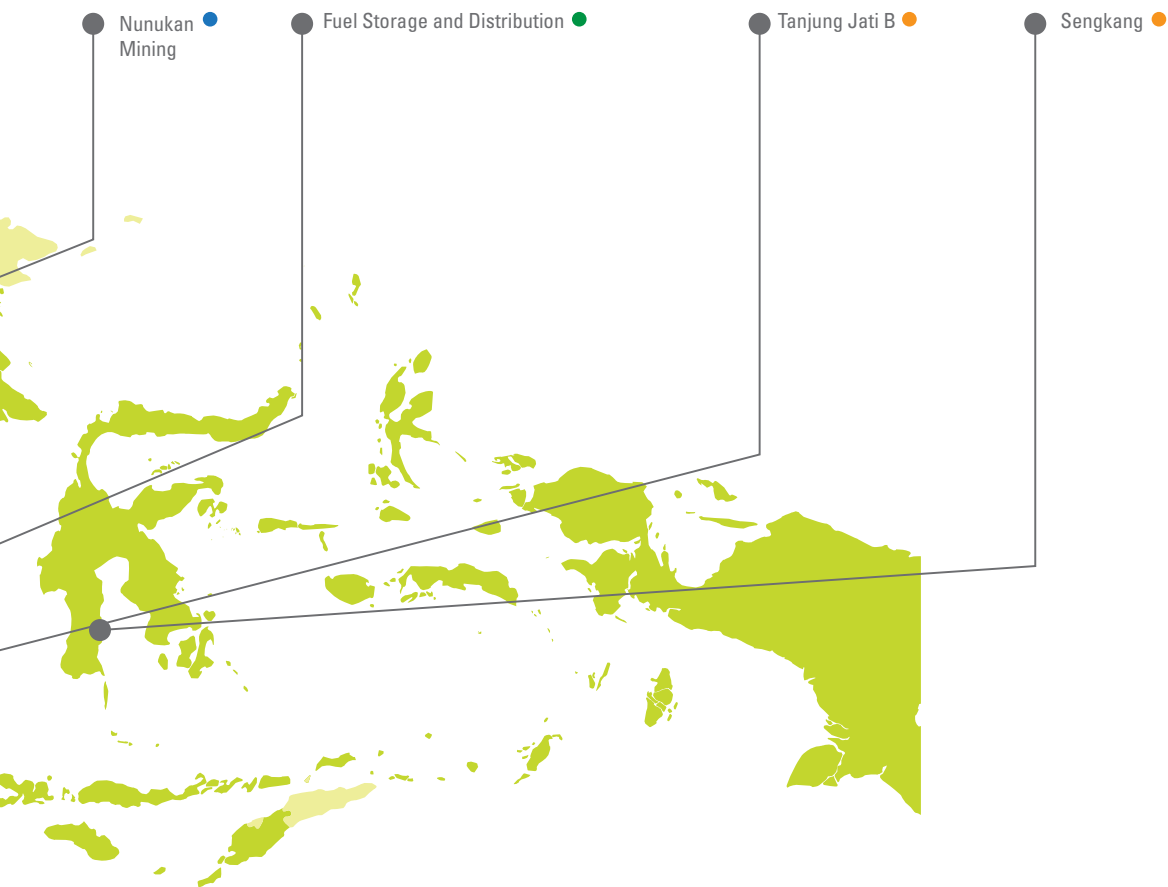
Since then, MedcoEnergi has significantly grown its other related energy businesses, and is engaged in LPG processing; high speed diesel marketing, storage and transportation; gas transportation; drilling rigs and

services; electrical power generation and coal mining. Subsequently, MedcoEnergi is now working on a pilot project to develop renewable energy business and begin producing bio ethanol from cassava and molasses.

We developed our LPG processing and gas distribution businesses as an integration of our exploration and production business. Meanwhile, the establishment of drilling rigs and services, electrical power generation and coal mining businesses were driven by the increasing demand for such products.

MedcoEnergi is always searching for any available opportunity to grow its energy business. The global issue in reducing green house gas emission has attracted MedcoEnergi to diversify its energy business to renewable energy. We realize that renewable energy demands will continue to grow in the future and MedcoEnergi is in a strong position to develop renewable energy in the near future.

We believe that our other related energy businesses have great future in Indonesia.



We are endeavoring to grow those businesses and integrate them with our exploration and production business.

However, we realize that to accomplish this growth will require more advanced technology, competent people and significant capital. We are confident that the involvement of prominent strategic partners with expertise in each area of our energy-related businesses will enable us to grow these businesses and add more value to our stakeholders.

Business	Customers, Partners
Downstream	Astiku Sakti Budiarta, Acro Intertrade Pte. Ltd, Budiarta, Colliba Chemical, Citus Trading Pte.Ltd, Freeport Indonesia, Global Arta Borneo, Heartychem Corp, Indo Acidatama, Jetcon Trading Ltd, Karsavicta Satya, Medcopapua Industri Lestari, Medco E&P Rimau, Molindo Raya Industrial, Pasadena Biofuels Mandiri, Vale Indonesia (INCO).
Power	Itochu Corporation, Kyushu Electric, Ormat Technologies, PLN Pusat, PLN Batam, PLN Tanjung Jati, PLN South Sumatra.
Gas & Pipeline Distribution	Medco E&P Indonesia, Pertagas.
E&P Service	ADERA, KSO EP (Pertamina Business Unit), Benakat Bara, Medco E&P Indonesia, Medco E&P Tarakan, Medco E&P Rimau, Medco E&P Sembakung, Pertamina EP Region Jawa Cirebon, Pertamina E&P Tanjung.



*Not only does the plant integrate our upstream and downstream business, but it also reduces gas flaring.*

## LPG Processing Plant

In 2003, MedcoEnergi expanded its downstream business by constructing and operating an LPG plant near our Kaji field, in Rimau block of South Sumatra. We operate two trains with a total production capacity of 150 MT per day of LPG, 400 BOPD of condensate and 12 MMSCFD of lean gas. The entire production is sent back to the Kaji production facility.

Besides integrating our upstream and downstream business, the objective of establishing our LPG business is to meet MedcoEnergi's commitment to reduce gas flare at Kaji and Semoga fields. Naturally, reducing the associated gas flare contributes to the reduction of CO<sub>2</sub>.

Our LPG processing plant has been operating in recent years without any lost time incidents or accidents. In addition, we have acquired a Voluntary Emission Reduction (VER) certificate and received revenues from the carbon credit reduction produced from the operation of the LPG plant.



*The facility comprises five 22,700 KL tanks and distribution facilities.*

## Fuel Storage & Distribution Facility

In 2007, MedcoEnergi began to operate a fuel storage facility comprising of five storage tanks and distribution facilities in Cilincing, North Jakarta. The operation deals with High Speed Diesel trading, which has now expanded from Jakarta to several other areas in Indonesia, such as Palembang, Banjarmasin, and Sorong.

This facility services a large number of industrial customers, and is supported by a distribution fleet comprising of dedicated truck units. Commencing in 2010, MedcoEnergi has been awarded several contracts with

prominent mining companies, proving our ability to deliver a high quality product and excellent service.

Our facility is comprised of five storage tanks, with a total capacity of 22,700 KL and distribution facilities. MedcoEnergi is open to any opportunities for cooperation with strategic partners to provide more energy to industries throughout Indonesia.



*Our Bio-Ethanol plant was constructed in 2008, with a daily capacity of 190KL.*

## Bio-Ethanol Plant

Indonesia has supported the use of bio-fuel as an alternative fuel source since 2006, thus prompting MedcoEnergi to start exploring for suitable prospects. We began a bioethanol pilot project in Lampung, Sumatra at the end of 2006. The construction of the plant, with a daily capacity of 190 KL, was completed in 2008. It was specifically designed to utilize cassava and molasses as feedstock. The plant commenced production of industrial grade bio-ethanol in 2010 and will eventually reach fuel grade production quality level.

MedcoEnergi delivers ethanol in two different product grades: EGRA—Export Grade Rectified Alcohol and a side product, Technical Alcohol, which can be exported to nearby regional market.

Meanwhile, to increase the quality and diversity of feedstock from the planted land managed by MedcoEnergi, numerous collaborations with sugar mills, molasses traders and agricultural research institutions, particularly those specializing in sugar cane plantation, have been established.



*In Batam, our IPP utilizes various types of engines to ensure a continuous supply of electricity.*

## Independent Power Producer

MedcoEnergi is now operating a total of six gas-fired power plants in Batam and South Sumatra. We are also working on the development of two geothermal power plant projects, Sarulla in North Sumatra, and Ijen, in East Java. Most of the electricity produced will be delivered to local PLN.

### **Batam**

In Batam, our Independent Power Producer (IPP) utilizes various types of engines to ensure a continuous supply of electricity. At the Panaran 1 plant, we have installed a 2 x 27.5 MW simple cycle engine. The Panaran 2 plant has 3 engines: one 2 x 27 MW simple cycle, with a 7.5 MW chiller, and a 20 MW combined cycle engine. The IPP in Batam also has a 19 MW simple cycle, truck-mounted plant.

### **South Sumatra**

In South Sumatra, our IPP employs simple cycle engines in all of its three plants. The MPE and EPE plants both have a 2 x 6 MW capacity, whereas the Singa plant has a 2 x 3.5 MW capacity. The plants supply energy to gas production facilities and the surrounding communities.

### **North Sumatra**

MedcoEnergi and its partners are currently pursuing development of a 3 x 110 MW geothermal plant in Sarulla, North Sumatra.

### **East Java**

MedcoEnergi is studying the possibility of a geothermal power plant development of 2 x 55 MW in Ijen, East Java.



*MedcoEnergi operates and maintains 2x660 MW coal-fired power plant in Tanjung Jati.*

## Power Plant Operation & Maintenance

Indonesia state-owned electricity company, PLN, has recognized MedcoEnergi's commitment and capability to supply electricity. PLN awarded MedcoEnergi an operation and maintenance service contract for the 2 x 660 MW coal fired power plant in Tanjung Jati, Central Java, which commenced operation in 2006. MedcoEnergi has succeeded in operating this plant to its full capacity maintaining the highest safety, health and environment standards. We have recently been certified with ISO 9001:2008 for Quality Management System, ISO 1400:2004 for Environmental Management System on Occupational Health and Safety Standard (OHSAS), as well as ISO 18001:2007 for Occupational Health and Safety.

In 2011, our operation has been awarded the Blue PROPER Award from the Ministry of Environment, in addition to the Golden Flag Award from the Ministry of Manpower for Health & Safety Management System.

Two other prestigious awards were presented to MedcoEnergi, the Zero Accident Award from the Ministry of Manpower, and Gold Rating Award from the Indonesian Police Department.





*MedcoEnergi is geared towards to building a large gas distribution business in Indonesia.*

## Gas Pipeline & Distribution

MedcoEnergi entered into the gas pipeline and distribution business in 2008. Our first facility was the gas pipeline and booster compression station at Gunung Megang in South Sumatra.

This facility is used to transport the gas produced from MedcoEnergi's gas producing field, located in Singa Lematang block. The 17.5 kilometers of 10" pipeline was built to connect the Gunung Megang facility to the Singa Lematang facility, pushing the gas through the booster compression station at a capacity of 3 x 22.5 MMSCFD.

MedcoEnergi and its partner currently plan to construct a 50 kilometers of 10" pipeline that will connect our Simenggaris gas facility to a methanol plant in Bunyu Island, Kalimantan. In addition, MedcoEnergi also plans to

produce Natural Gas Liquid (NGL) and construct multi-user gas pipelines in Sumatra and Kalimantan.

We are geared towards building a large gas distribution business in Indonesia, encompassing trading, processing, transportation, and operating and maintaining relevant facilities.



*MedcoEnergi provides first-class E&P services at a competitive price.*

## Exploration & Production Services

MedcoEnergi provides first-class E&P services at a competitive price. MedcoEnergi's E&P Services Unit was established in 1997 with the purpose of providing a first-class competitive services.

Our expanding network of affiliations with prominent international partners has assured the continuing application of state-of-the-art technologies, thus leveraging our investments. The unit has more than seven years' experience and employs a highly-qualified workforce.

Our oil and gas E&P supporting services, which focus mainly on work-over well and well service hoist, are contracted in many locations throughout Indonesia. Currently, we operate six work-over rigs and plan to increase our

capacity and by procuring additional rigs in 2012.

MedcoEnergi has always continuously improved both the management and integration of its oil and gas E&P supporting services in order to improve client satisfaction.

We have successfully attained ISO 9001, ISO14001 and OHSAS 18001 certification and declaration of competence from TÜV-Nord Indonesia. These certificates represent a significant accomplishment and exemplify the Company's strong commitment to quality management system, environmental management system and occupational health and safety in the area of oil & gas services. It has always been our commitment to deliver the best possible result in whatever we do.



*MedcoEnergi is in the process of exploiting 15,000,000 metric ton of coal in East Kalimantan.*

## Coal Mining

In 2009 MedcoEnergi began its coal mining business by acquiring two mining companies, PT Duta Tambang Sumber Alam (DTSA) and PT Duta Tambang Rekayasa (DTR). These two companies own mining business licenses (IUP) in Nunukan, East Kalimantan. Based on DTSA and DTR geological data and the historical success rates of neighboring operators, it is estimated that Nunukan will be capable of producing high-caloric coal with a kCal/kg of 6,800 adb.

Our approach has always been to maintain an environmentally friendly operation with good mining practices. Moving forward, we will grow our business with a focus on small to medium size of coal and mineral miner and saleable commodity; implement joint venture

schemes with existing mining business license holders; and in the long term look for opportunities to develop low rank coal prospects using coal utilization process.

MedcoEnergi's production target is 540,000 metric tons per year with initial production starting in February 2012. In 2012, we plan to add our coal reserves of 500,000 metric tons from an existing coal reserve discovery of 5,700,000 metric tons. In the coming years, we believe that we will be able to discover more coal prospects as well as enter the new venture of gold mining as operator and developer.

# Awards

2011



- Gold PROPER for Rimau Block in South Sumatra and Green PROPER for South Sumatra Extension Block (South Sumatra), Tarakan Block (East Kalimantan), and Kampar Block (Riau)
- GCG award - The Best Non-Financial from Indonesian Institute for Corporate Directorship
- Asia's Best Corporate Social Responsibility from Finance Asia Magazine
- Attained 4 awards for four different categories in CSR Award 2011 from *CFCD for Rimau Block*

2010



- GCG award -The Best Equitable Treatment of Shareholders from Indonesian Institute for Corporate Directorship
- Green PROPER for Rimau Block, South Sumatra Extension and Kampar from the Ministry of Environment of Indonesia
- Millennium Development Goals award from Metro TV for category of Environmental of Sustainability

2009



- GCG award - Best GCG Overall 2009 from Indonesian Institute for Corporate Directorship
- Annual Report Award 2008 as first runner-up in the category of private non-financial public and listed company
- Millennium Development Goals award from Metro TV in the category of Improvement in Gender Equality and Women Empowerment through its community development program of Organic SRI

2008



- Green Corporate award in the category of Environment for Medco Methanol Bunyu from the Association of Indonesian Engineers
- Environmental Management & Monitoring award for Medco Power Indonesia from the Ministry of Environment of Indonesia
- Zero Accident award for PT Medco LPG Kaji from the Ministry of Manpower RI

2007



- "No Lost Time Accident" awards from the Government for several assets including Tarakan and Rimau Blocks
- Social Empowerment award from the Coordinating Ministry of Peoples Welfare (Menko Kesra) in 2007.
- One of Indonesia's Most Admired Knowledge Enterprises (MAKE) 2007

2006



- The best Annual Report in the Annual Report Award 2005
- The best of top 10 Companies at GCG Perception Index by IICG and SWA Magazine

2005



- The best Annual Report in the Annual Report Award 2004
- Zero Accident award for PT Medco LPG Kaji from the Ministry of Manpower RI

# Approximate Conversion Factors

Crude oil*	To	tons (metric)	kilolitres	barrels	US gallons	tons/year
<b>From</b>		Multiply by				
Tons (metric)		1	1.165	7.33	307.86	-
Kilolitres		0.8581	1	6.2898	264.17	-
Barrels		0.1364	0.159	1	42	-
US gallons		0.00325	0.0038	0.0238	1	-
Barrels/day		-	-	-	-	49.8

\*Based on worldwide average gravity

Products	To convert	barrels to tons	tons to barrels	kilolitres to gallons	tons to kilolitres
		Multiply by			
LPG		0.086	11.6	0.542	1.844
Gasoline		0.118	8.5	0.740	1.351
Kerosene		0.128	7.8	0.806	1.240
Gas oil/diesel		0.133	7.5	0.830	1.192
Fuel oil		0.149	6.7	0.939	1.065

Natural gas and LNG	To convert	billion cube metres NG	billion cube feet NG	million tons oil equivalent	million tons LNG	trillion British thermal units	million barrels oil equivalent
<b>From</b>		Multiply by					
1 billion cubic metres NG		1	35.3	0.90	0.73	36	6.29
1 billion cubic feet NG		0.028	1	0.026	0.021	1.03	0.18
1 million tons oil equivalent		1.111	39.2	1	0.805	40.4	7.33
1 million tons LNG		1.38	48.7	1.23	1	52.0	8.68
1 trillion British thermal units		0.028	0.98	0.025	0.02	1	0.17
1 million barrels oil equivalent		0.16	5.61	0.14	0.12	5.8	1

## Units

1 metric ton = 2204.62 lb. = 1.1023 short tons  
 1 kilolitre = 6.2898 barrels  
 1 kilolitre = 1 cubic metre  
 1 kilocalorie (kcal) = 4.187 kJ = 3.968 Btu  
 1 kilojoule (kJ) = 0.239 kcal = 0.948 Btu  
 1 British thermal unit (Btu) = 0.252 kcal = 1.055 kJ  
 1 kilowatt-hour (kWh) = 860 kcal = 3600 kJ = 3412 Btu

## Calorific equivalents

One ton of oil equivalent equals approximately:

Heat units      10 million kilocalories  
                          42 gigajoules  
                          40 million Btu

Solid fuels      1.5 tons of hard coal  
                          3 tons of lignite

Gaseous fuels      See natural gas and LNG table

Electricity      12 megawatt-hours

One million tons of oil produces about 4500 gigawatt-hours  
 (= 4.5 terawatt-hours) of electricity in a modern power station.



*Medco's State-of-the art office building accommodates all energy-related business units of Medco Group.*





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