



MEDCOENERGI 

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# INVESTOR UPDATE 2017 RESULTS

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**INVESTING IN THE FUTURE**

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## Business Segments Overview

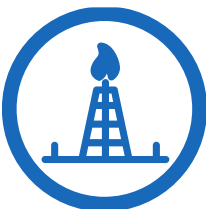
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## Appendix





- Secured long term capital structure
  - Right issue oversubscribed with ~\$195 million raised and used for debt repayment
  - Warrants 'in the money' with expected proceeds >\$200 million from July 2018
  - Issued \$400 million through Global USD bond to refinance near term maturities
  - Non core asset sales progressing, Q4 pre sale adjustments



- Strong Operational results; APAC Energy Council "Upstream Company of the Year"
  - Oil and gas production up 31.5% year-on-year to 86.8 MBOEPD; annual and 3-year average reserve replacement ratio > 100%
  - Cash costs \$9.1/boe with procurement contracts locked in for medium term
  - EBITDA above \$400 million, with margins >46%; improved commodity prices continuing into 2018
  - Aceh first gas delivery on budget, commissioning gas on time with lump sum EPCI contract



- Medco Power Indonesia
  - Completed acquisition of a controlling stake; financial consolidation from Q4 2017
  - Sarulla phase I units I and II commissioned; unit III expected complete in Q2 2018
  - Gas-to-Power synergies on track with Matang proposal in PLN 'pipeline'



- Amman Mineral
  - Senior and mezzanine debt repaid, MEI PCG released; repayment triggered non recurring expenses
  - Began Phase 7 development, and secured further new development facility
  - MEI equity being diluted through pre IPO equity injections
  - Non-cash acquisition of 44% of Macmahon; non recurring employee downsizing expenses
  - Smelter studies completed, land preparation in progress and signed MoU with Freeport
  - Elang appraisal drilling and JORC assessment in progress with increased expected resource

# Significant Player in Three Key Business Segments



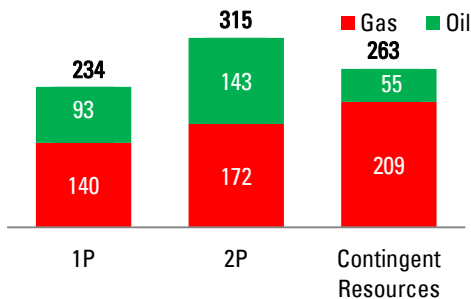
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## Oil & Gas



- 10 Operated Indonesian assets, 7 producing
- 60:40 gas to oil production mix
- Gas sold under long term TOPQ contracts, 50:50 mix of fixed; commodity linked pricing
- Operating costs below \$10/boe through 2020

### Net Reserves and Contingent Resources

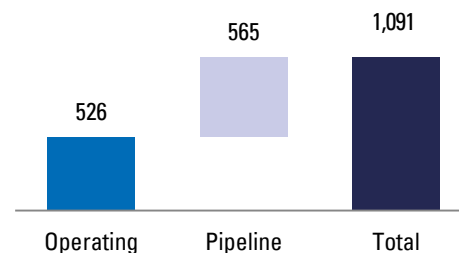


## Power



- Independent Power Producer (IPP) for 9 Operated Indonesian assets
- IPPs with PLN under long term TOPQ backed clean energy contracts
- Specialized in medium sized IPPs
- Third party O&M contracts

### IPP Gross Capacity

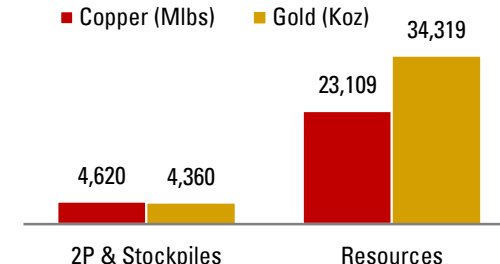


## Mining



- Batu Hijau open pit porphyry copper and gold mine, Sumbawa Indonesia
- Developing phase 7 of the existing mine site
- Exploring 6 further prospective resources including drilling of Elang
- Progressing Smelter tender selection

### Copper and Gold Gross Reserves and Resources



# Energy & Natural Resources Company Focused in Indonesia



Block A



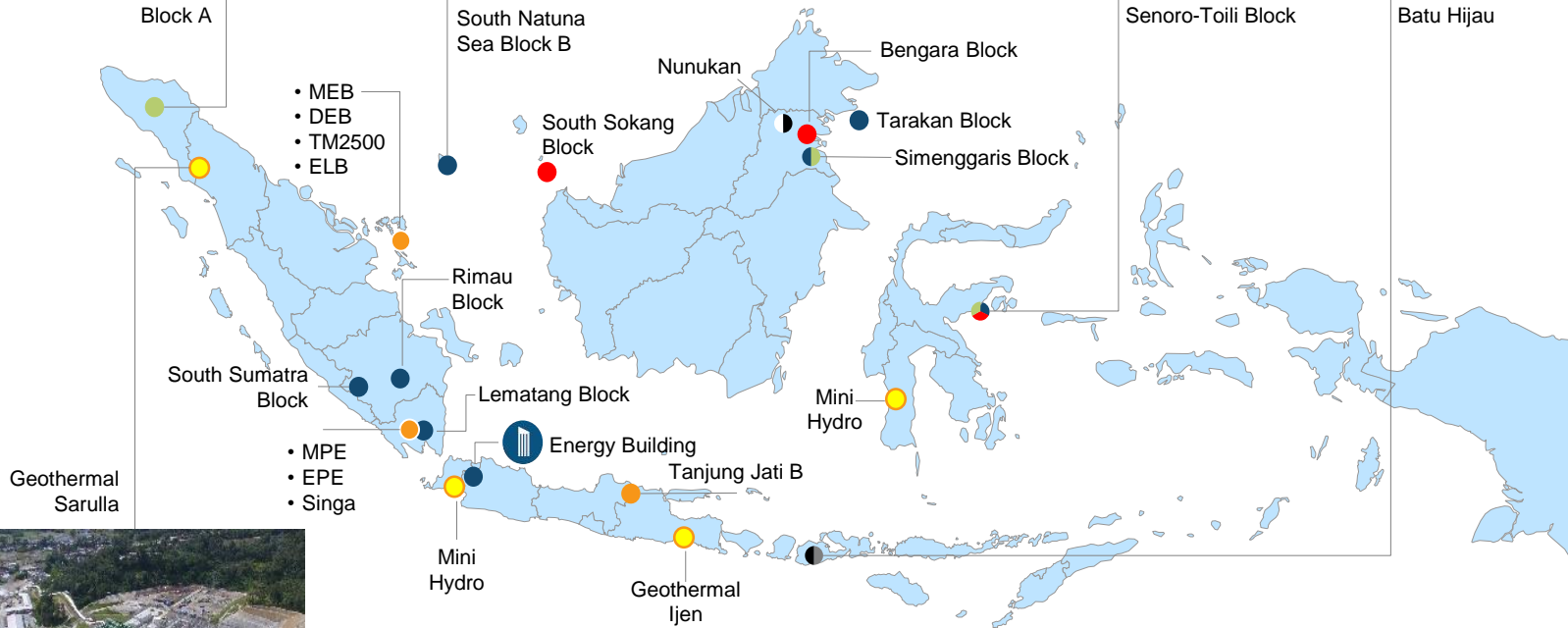
South Natuna Sea Block B



Senoro-Toili Block



Batu Hijau



Production  
Development  
Exploration

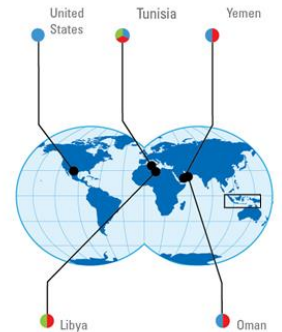


Mining Production  
Mining Development  
Mining Exploration



Power Installed  
Power Development

## International Assets

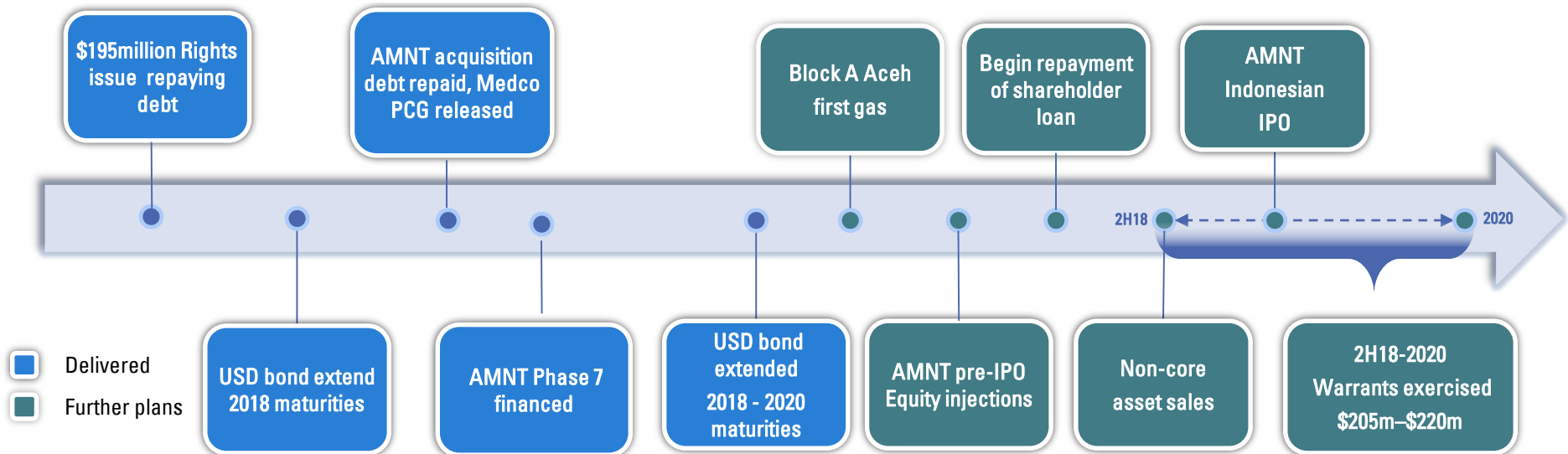
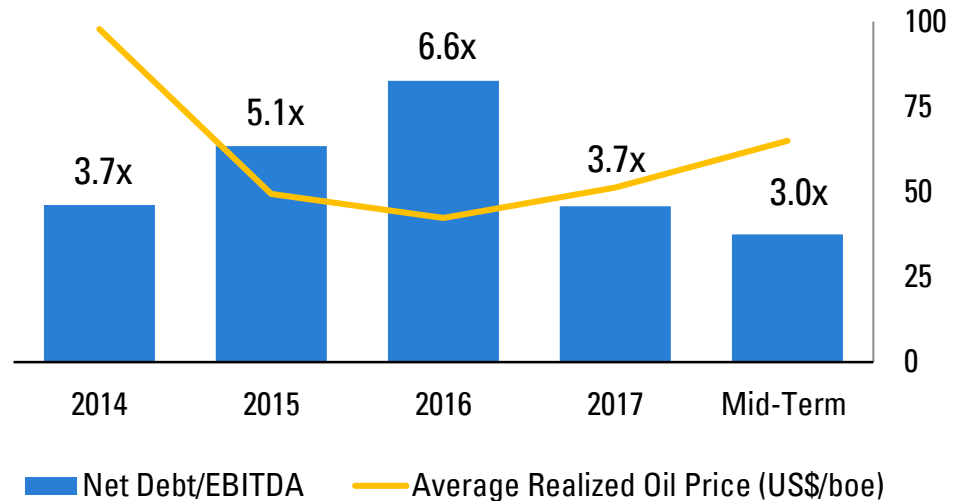


# Delivering On Our Commitments

- Production +31%, cash cost maintained <\$10/boe. Revenue and EBITDA were up by +53% and +73% YoY.
- Sarulla Units I and II delivered on schedule. Aceh gas development on schedule, on budget with first gas and commissioning beginning in March 2018.
- Completed oversubscribed US\$195 million rights issue, issued further >US\$200 million warrants. Rights used for debt repayment in January 2018
- Acquired controlling interest in MedcoPower
- AMNT acquisition debt repaid, phase 7 development financed. Elang appraisal drilling and reserves assessment ongoing.

## Net Debt to EBITDA°

° Consolidate Base excluding MPI

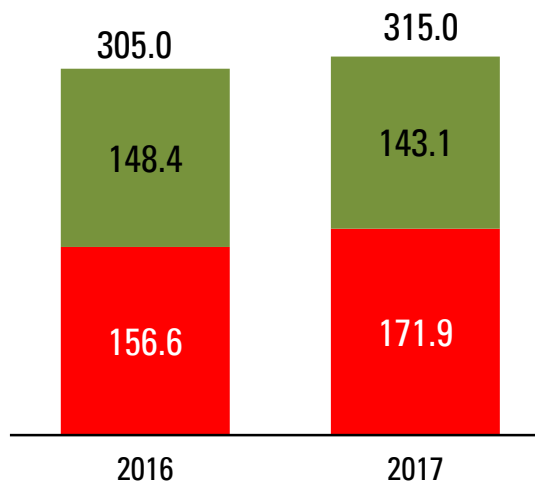




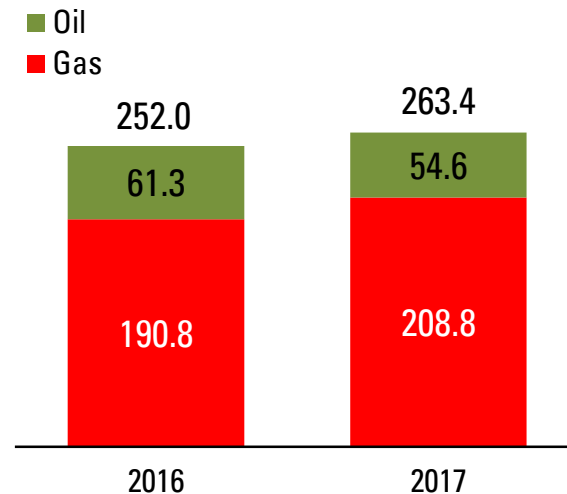
Metrics	2016	2017	YoY Δ%
<b>Production<sup>o</sup></b>			
Oil, MBOPD	30.8	35.1	13.9
Gas, MMSCFD	205.9	278.0	35.0
<b>Lifting/Sales</b>			
Oil Lifting, MBOPD	21.5	26.2	21.9
Gas Sales, BBTUPD	212.2	273.4	28.9
Oman SC, MBOPD	8.3	8.0	(3.7)
<b>Average Realized Price*</b>			
Oil, USD/barrel	42.3	51.5	21.8
Gas, USD/MMBTU	4.4	5.5	25.7

<sup>o</sup>Includes Oman Service Contract

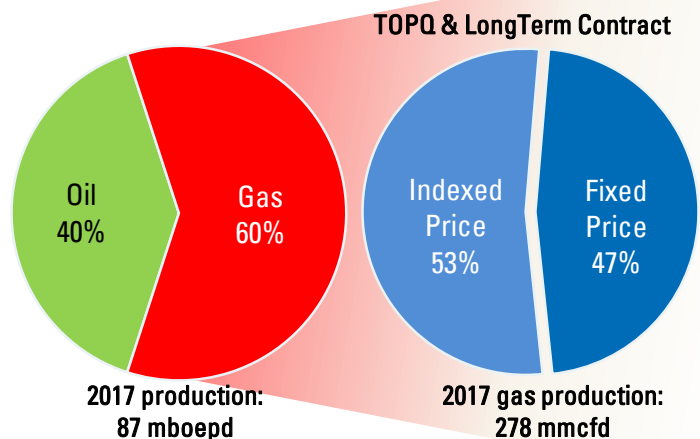
Net 2P Reserves, MMBOE  
Life Index: 11 Years



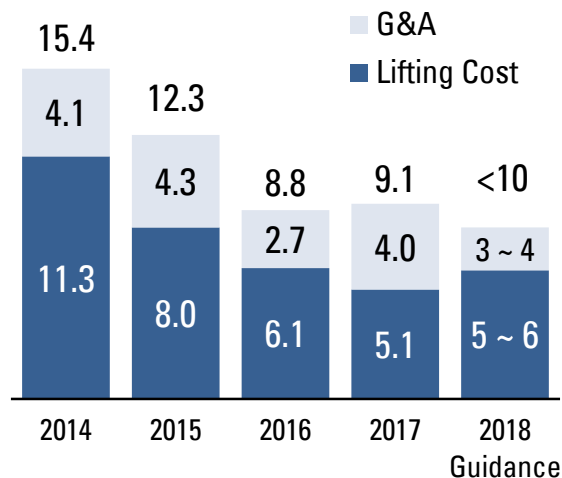
Net Contingent Resources, MMBOE



FY17 Oil & Gas Breakdown

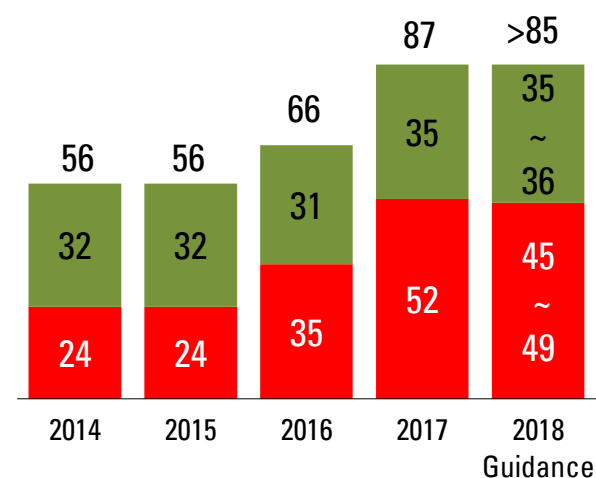


Cash Cost/Unit\*, USD/BOE



\*Excludes Oman Service Contract

Net Hydrocarbon Production<sup>o</sup>, MBOEPD



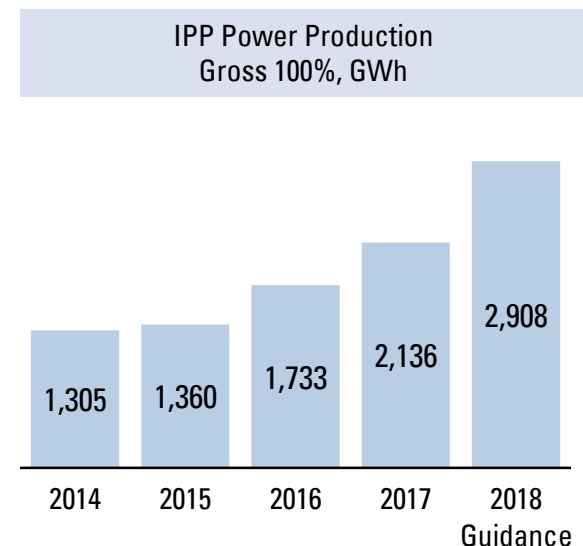
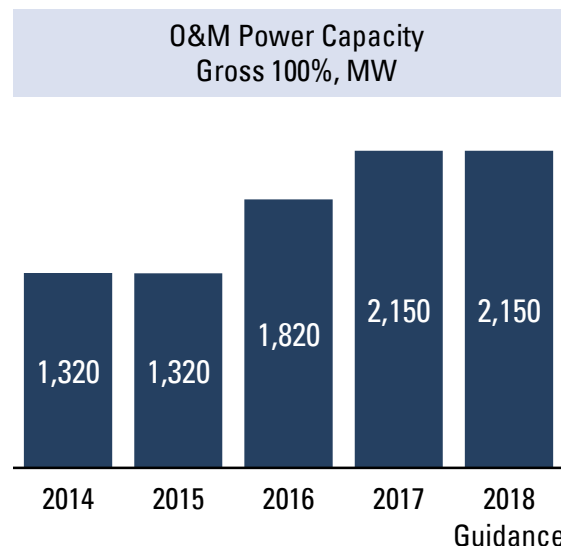
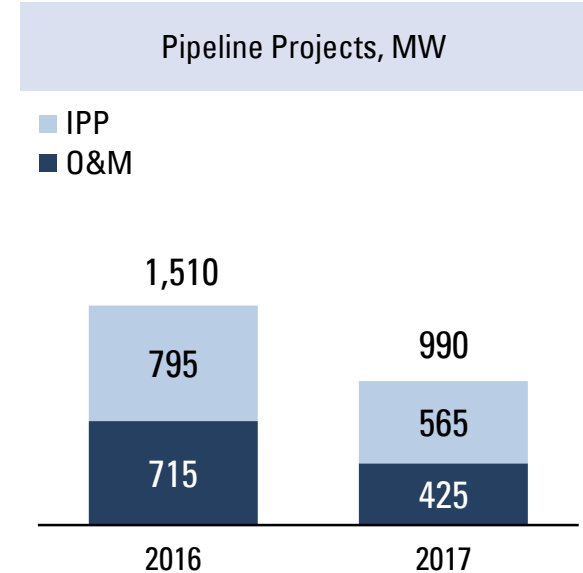
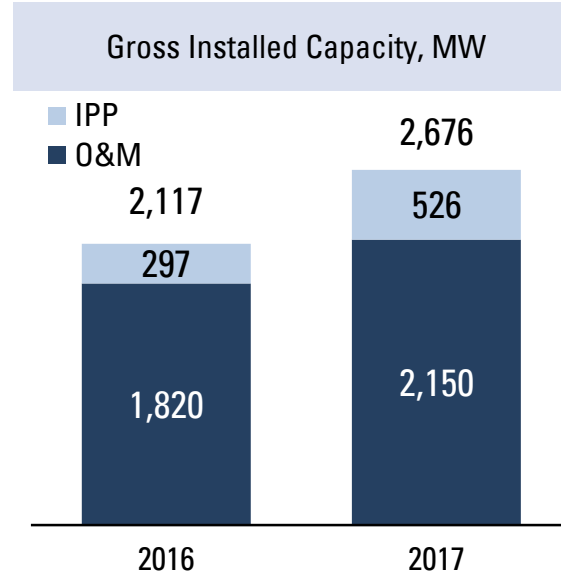
<sup>o</sup>Includes Oman Service Contract



Metrics	2016	2017	YoY Δ%
<b>Production &amp; Capacity</b>			
IPP Power Production, GWh	1,733	2,136	23.3
O&M Capacity, MW	1,820	2,150	18.1
<b>Average Realized Price*</b>			
IPP, Cent/kwh	2.87	3.98	38.8

\*Excludes Fuel Component

- Medco Power shareholders: Medco Energi ~88%, IFC ~12%
- Sarulla Geothermal Power Phase I, Unit I began commercial production in March 2017, Unit II in early October, one month ahead of schedule. Unit III commercial operation expected Q2 2018
- MedcoPower was awarded the Operation & Maintenance contract for the Sarulla Geothermal Power plants.
- MedcoPower won the tender to construct a 275MW IPP in Riau, PPA was signed in April 2017.
- Matang Gas-to-Power proposal included in PLN's Electric Power Supply Business Plan (RUPTL)





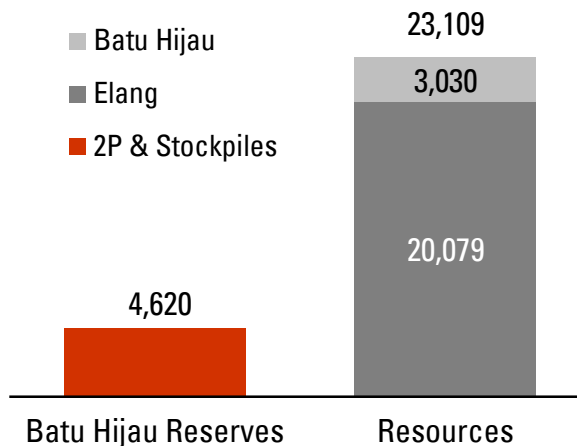


Metrics	2016	2017	YoY Δ%
<b>Production</b>			
Copper, M lbs	477.6	288.4	(39.6)
Gold, k oz	801.0	398.2	(50.3)
<b>Sales°</b>			
Copper, M lbs	442.0	330.6	(25.2)
Gold, k oz	749.5	491.9	(34.4)
<b>Average Realized Price</b>			
Copper, USD/lbs	2.05	2.71	32.2
Gold, USD/oz	1,224	1,219	(0.4)

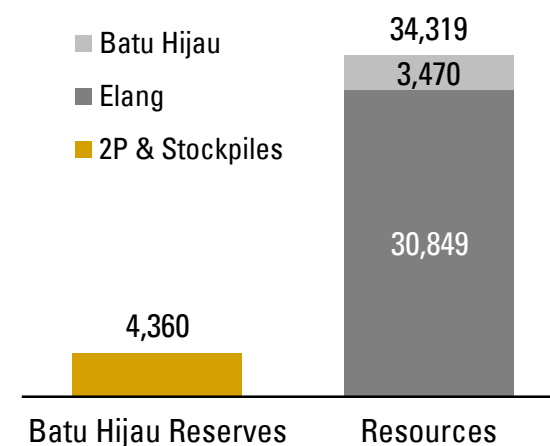
°Gross 100% interest

- Converted Contract of Work into a Special Mining Permit and extended export permit
- Copper concentrate export permit extension for 2018 for 450,826 wmt
- Acquired single largest stake in the ASX listed mining contractor Macmahon through a shares - assets transaction
- Completed Smelter feasibility studies and signed MoU with Freeport Indonesia
- Elang Joint Ore Reserves Committee (JORC) assessment in progress; resources improved >50%

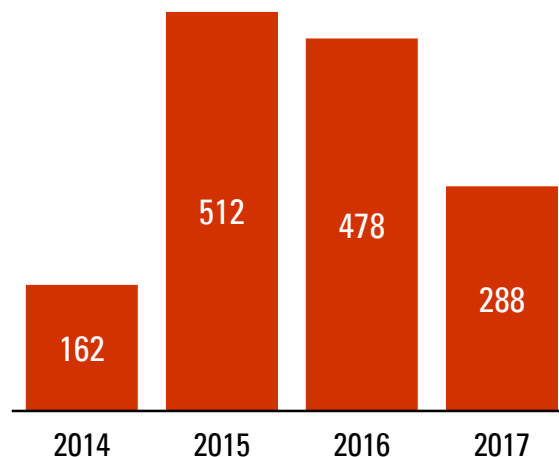
Copper Gross Reserves & Resources – 1H17 (M lbs)



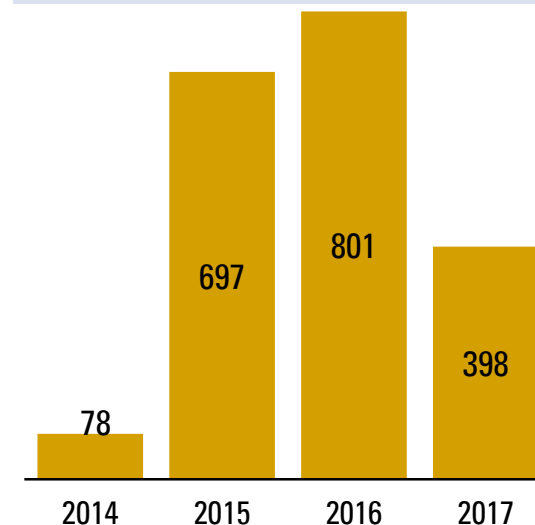
Gold Gross Reserves & Resources – 1H17 (k oz)



Copper (M lbs) Production Gross 100%



Gold (k oz) Production Gross 100%



Profit & Loss (US\$ mn)	FY16	FY17	FY17*)
Revenue	590.0	925.6	855.1
- Oil and gas	583.0	855.1	852.1
- Power	-	67.5	-
- Others	7.0	3.0	3.0
DDA	114.9	164.9	163.7
Gross Profit	249.3	420.7	394.0
S, G & A	96.5	151.4	143.4
Operating Income	152.8	269.3	250.6
EBITDA	267.7	434.2	414.3
<b>Net Income</b>	<b>184.8</b>	<b>127.1</b>	<b>120.0</b>

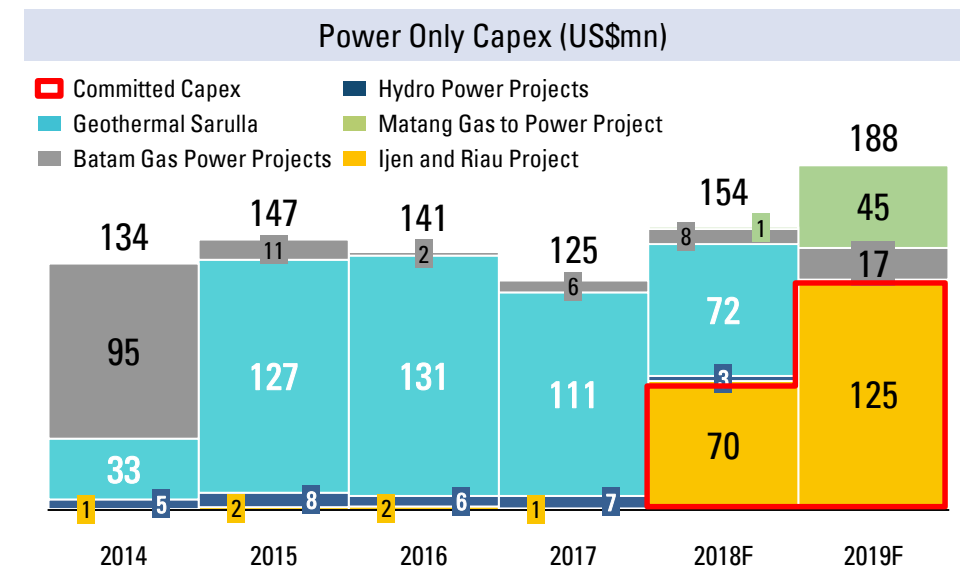
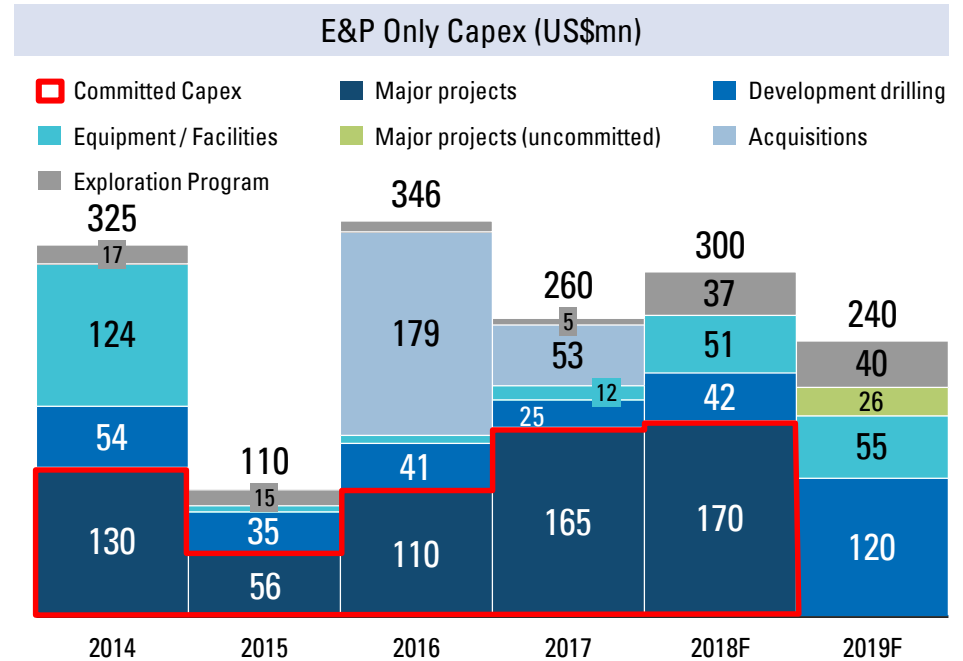
Profitability Ratios (%)	FY16	FY17	FY17*)
Gross Margin	42.3%	45.5%	46.1%
Operating Margin	25.9%	29.1%	29.3%
EBITDA Margin	45.4%	46.9%	48.5%
Net Income Margin	31.3%	13.7%	14.0%

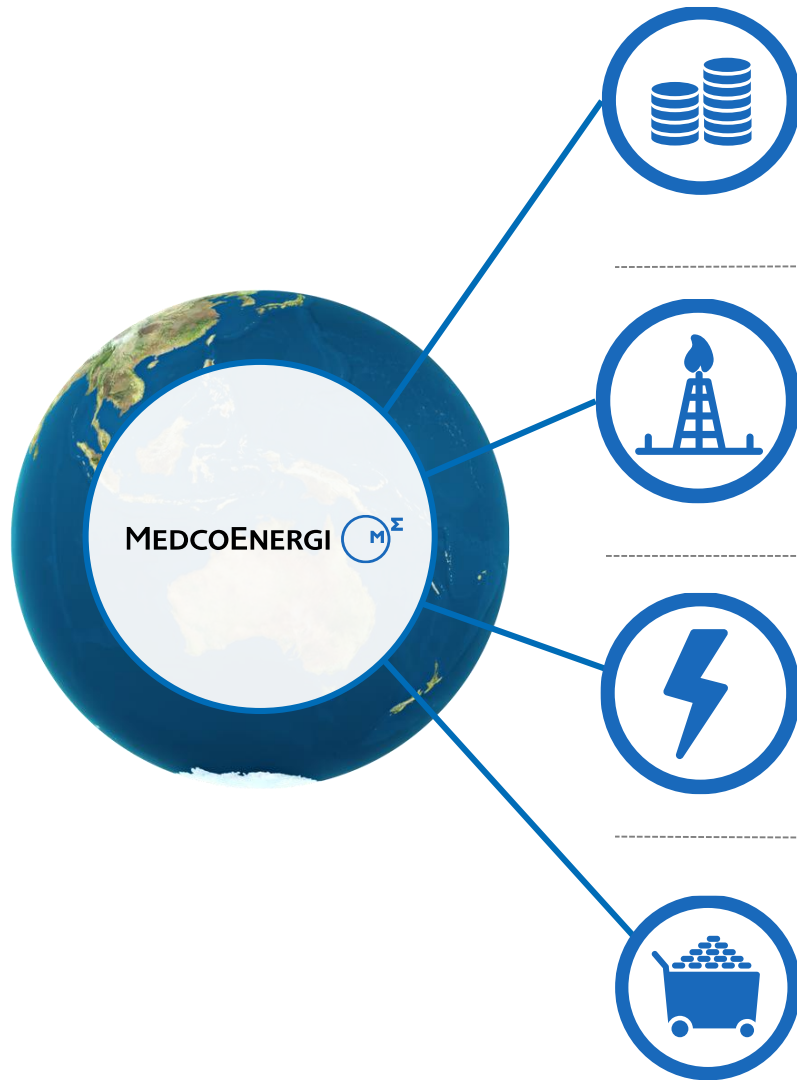
Balance Sheet (US\$ mn)	FY16	FY17	FY17*)
Cash and cash equivalents	164.6	489.0	434.6
Investments	1,014.0	913.7	887.3
Fixed Assets	1,348.1	1,279.5	1,223.6
Total Assets	3,597.1	5,160.8	4,142.7
Total Liabilities	2,706.6	3,758.1	3,085.3
• Loans	1,254.0	1,599.1	1,067.1
• Capital Market Debts	679.3	990.0	989.8
• Other Liabilities	773.3	1,169.0	1,028.4
<b>Equity</b>	<b>890.5</b>	<b>1,402.7</b>	<b>1,057.4</b>

Financial Ratios (x)	FY16	FY17	FY17*)
Current Ratio	1.32	1.53	1.50
Debt to Equity	2.17	1.85	1.95
EBITDA to Interest	2.69	3.09	3.14
Net Debt to EBITDA	6.61	4.59	3.65
Net Leverage ratio	6.36	4.53	3.59

\*)FY17 excluding MPI

- Capex guidance unchanged; 2018 committed capex to complete the Block A Aceh gas development
- Senoro phase II development expected to begin Q4 2018/Q1 2019
- Exploration program will be limited to ~\$40M per year
- Medco Power will be self funding prior to IPO in 2021-2022
- Medco Power capital focussed on Sarulla, Ijen and Riau; incremental clean energy growth
- No Medco funding support required for AMNT





- Continued deleveraging and delivery on commitments
- Warrants exercised, seeking approval for limited private equity placement
- Disciplined capital investment and project appraisal
- Complete Amman equity investments and advance IPO
- Further Portfolio upgrades

- Deliver Aceh gas development
- Continue to monetise domestic gas discoveries; complete Senoro phase 2 FEED and begin project execution
- Extending reserve life with economic near field exploration
- Maintain operating costs < \$10/boe

- Complete Sarulla geothermal phase I development
- Gas and IPP synergies with new developments
- Tender and win new medium-sized clean energy IPPs
- Expand third party O&M services

- Further operational efficiencies and organization optimization
- Complete Smelter FEED, project financing and venture structure
- Continue phase 7 development and complete Elang Joint Ore Reserves Committee (JORC) and IPO





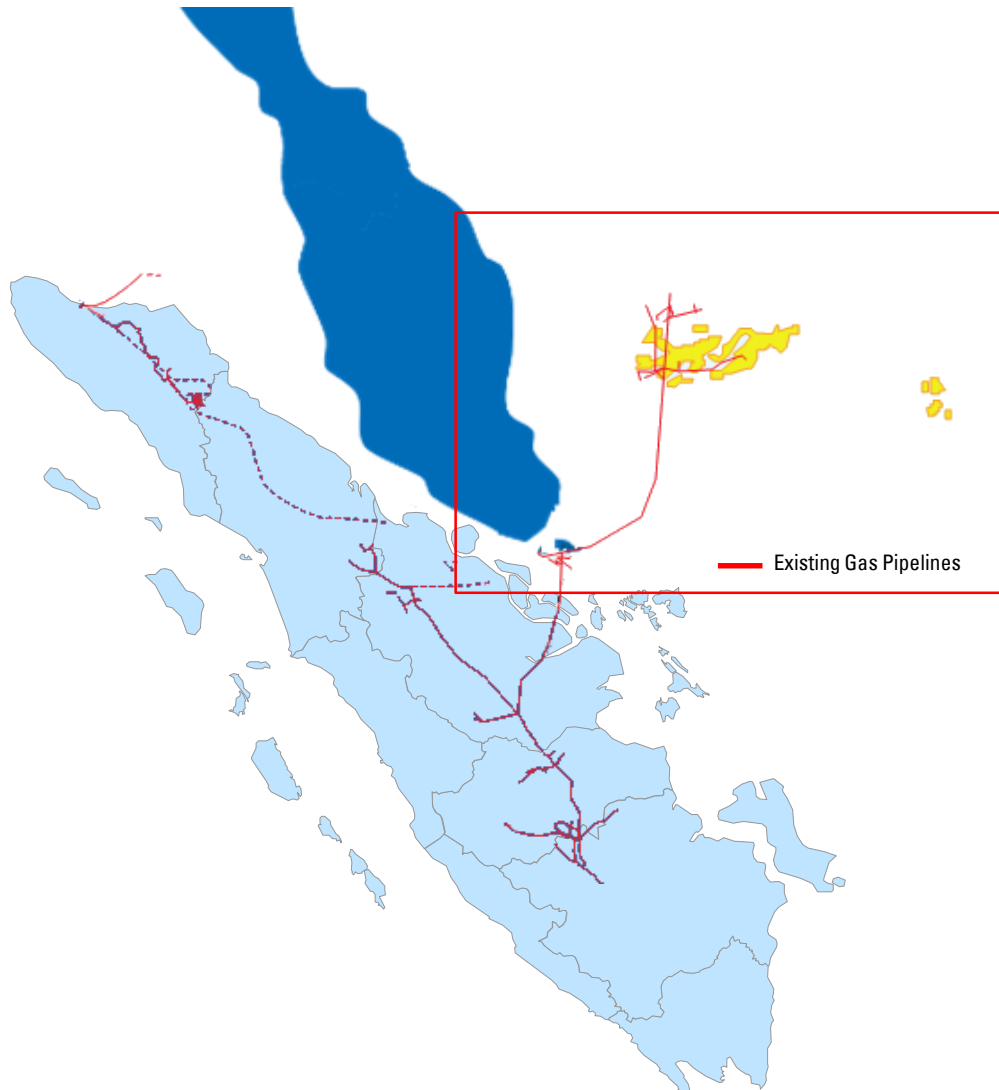
Extensive experience in managing decline and controlling costs on maturing assets



Asset	Contract Area	Participating Interest	Contract Expiry	FY17 Production (mboepd)
Rimau	1,103 km <sup>2</sup>	95%	2023	9.7
South Sumatra	4,470 km <sup>2</sup>	100%	2033	18.3
Lematang	409 km <sup>2</sup>	100%	2025	4.9



## Enhancing capabilities through the integration of world-class offshore operations



- Medco Operated (WI 40%) offshore PSC in the South Natuna Sea, world class facilities, large hydrocarbon base (gross resources > 569 mmboe)
- Medco also operates the PSC and the West Natuna Transportation System (WNTS)
- License expires in October 2028, 2017 gross production 57.5 mboepd.
- Strong net cash flow linked to commodity linked and fixed priced gas sales into Singapore and Malaysia
- Future near field exploration, subsea developments and production optimization will extend field life and mitigate asset decline rate



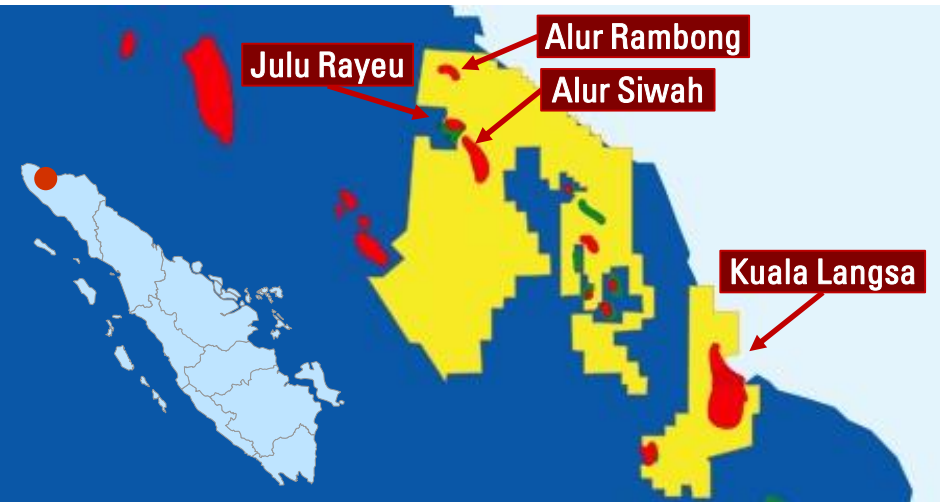
Integrated Offshore Production Systems Operated to the Highest Standard







Phase I will monetize 237 TBTU of gas and 5.17 MMBO of condensate for the domestic market



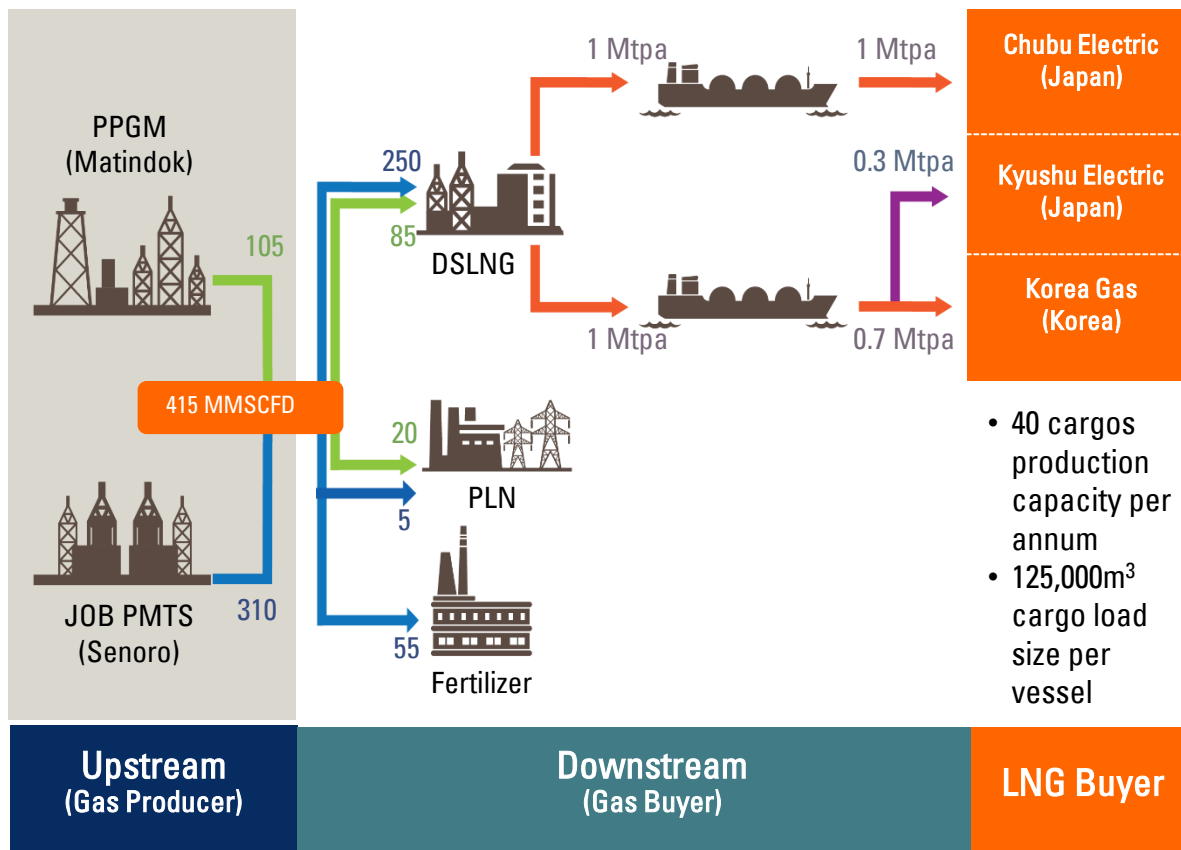
CPP area site preparation progress

- MedcoEnergi operated (WI 85%) onshore PSC First gas 2018, PSC expires in 2031.
- GSA with Pertamina, 58 BBUTD for 13 years
- Full project engineering, construction and drilling 81.7% completed as of March 2018. Positive drilling results to date.
- Project finance facility agreement with international banks. Received Asia Pacific Energy & Infrastructure Forum, "Deal of the Year" for Block A Finance
- Successful CSR engagement with local community
- Phase II and III development of gas discoveries with resources of > 5TCF, enough to generate 1.5GW to support Sumatra electricity demand growth





## Senoro Upstream/Downstream Value Chain



- Medco Joint Operated onshore JoB, first production Q3 2015. Contract expires in 2027
- FY17 gross production > 293 mmscfd
- Gross proved reserve 1.4 TCF with additional 1 TCF third party certification
- Senoro Phase 2 will increase production above 450 mmscfd

- 40 cargos production capacity per annum
- 125,000m<sup>3</sup> cargo load size per vessel

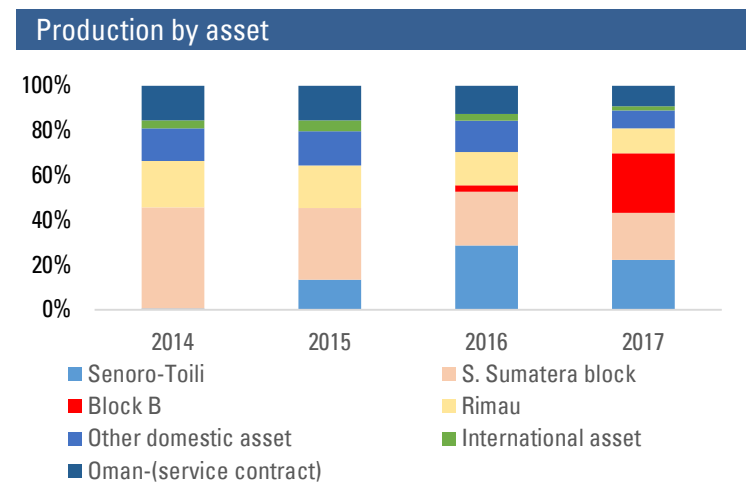
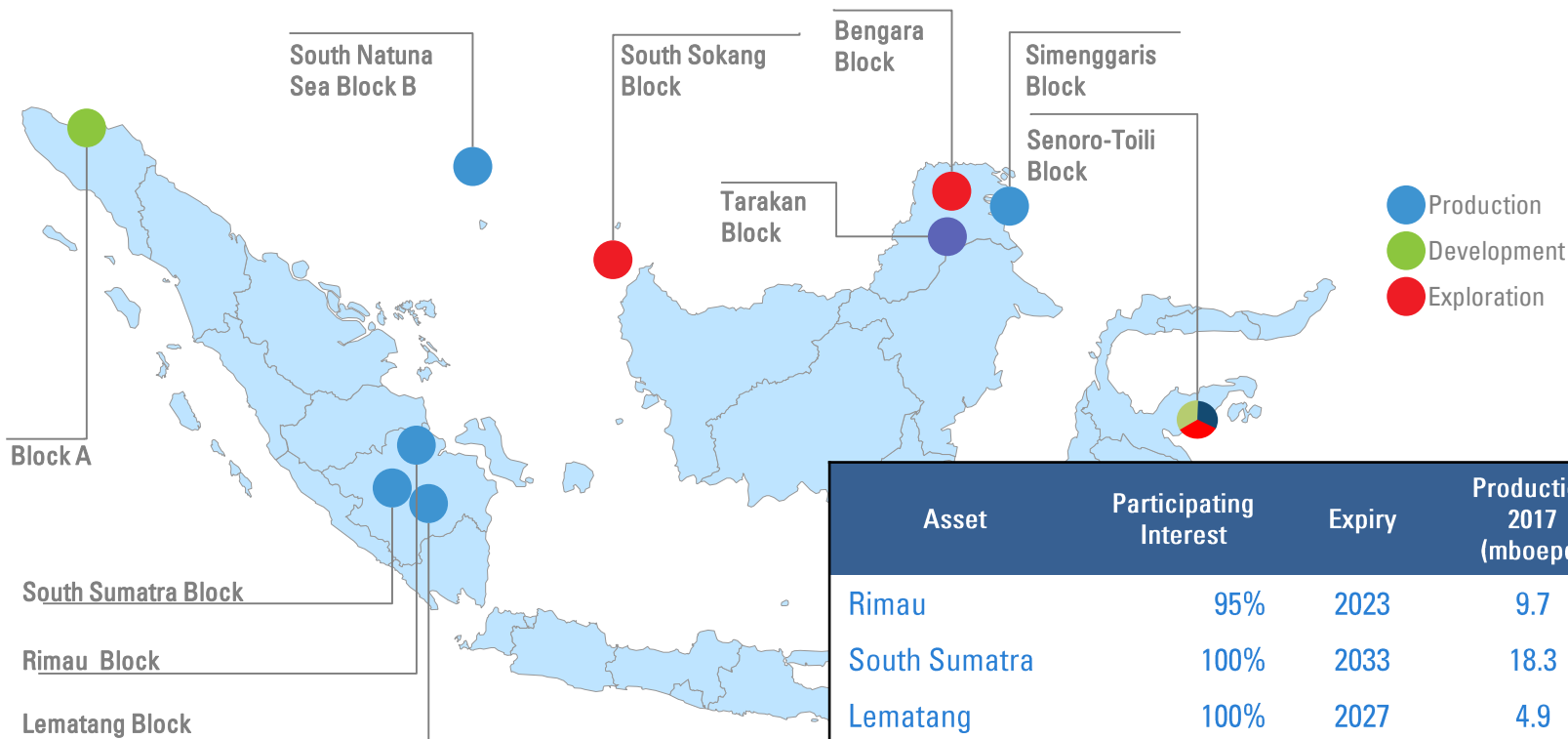


**30**  
Years  
1997 - 2027

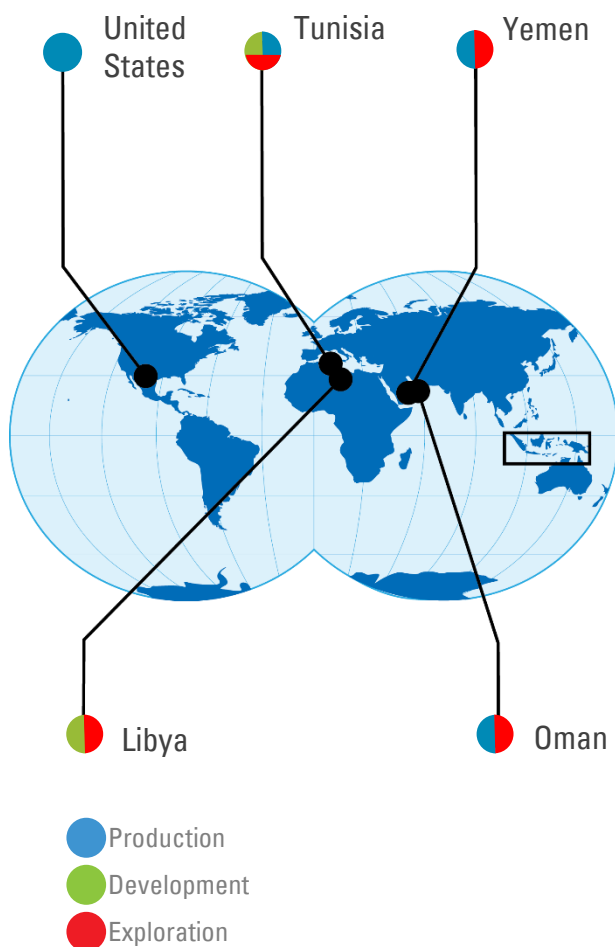
**1.9** TRILLION  
CUBIC FEET

**12**  
Wells

Structure	Upstream WI	Downstream
MedcoEnergi	30%	11.1%
Pertamina	50%	29.0%
Mitsubishi & Kogas	20%	59.9%



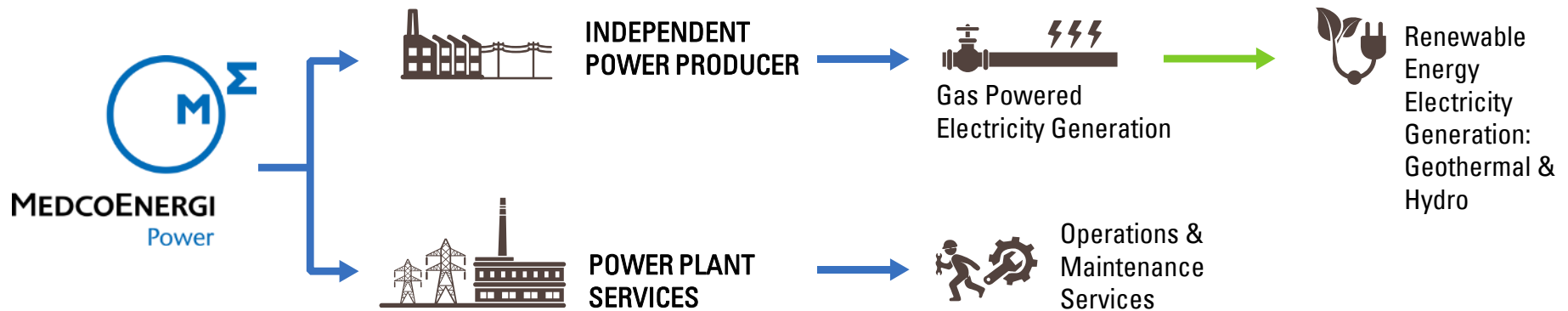
Asset	Participating Interest	Expiry	Production 2017 (mboepd)	Type of Contract
Rimau	95%	2023	9.7	PSC
South Sumatra	100%	2033	18.3	PSC
Lematang	100%	2027	4.9	PSC
South Natuna	40%	2028	23.0	PSC
Tarakan	100%	2022	2.0	PSC
Senoro-Toili	30%	2027	19.3	PSC JOB
Simenggaris	62.5%	2028	0.0	PSC JOB
Block A	85%	2031	-	PSC
Senoro Phase 2	30%	2027	-	PSC JOB
South Sokang	100%	2040	-	PSC
Bengara	100%	2029	-	PSC



- **Oman:** Service contract for the Karim Small Fields, a 51% participating interest and an exploration block (Block 56, 50% participating interest). Total production ~ 8.0 MBOEPD.
- **Libya:** One development asset (Area 47) with 25% participating interest and total gross discovered 2P reserves of 282 mmboe and gross contingent resources of 211 mmboe.
- **Tunisia:** Two producing assets (Bin Ben Tartar and Adam block) with a participating interest of 100% and 5% respectively. Total production ~ 1.5 MBOEPD. Two development assets (Cosmos and Yasmin block) with participating interest of 80% and 100% and four exploration licenses.
- **USA:** One producing asset in the Gulf of Mexico. Main Pass 64/65 (75%). Total production ~ 0.4 MBOEPD.
- **Yemen:** One producing (Block 9, 21% participating interest). Assessing options to re-establish production. Gross production capacity 5.0 MBOPD.



## Focusing on Independent Power Producer and Operation & Maintenance Businesses



**526 MW Operating Asset + 565 MW asset under construction**  
**2,150 MW O&M business + 425 MW pipeline O&M business**

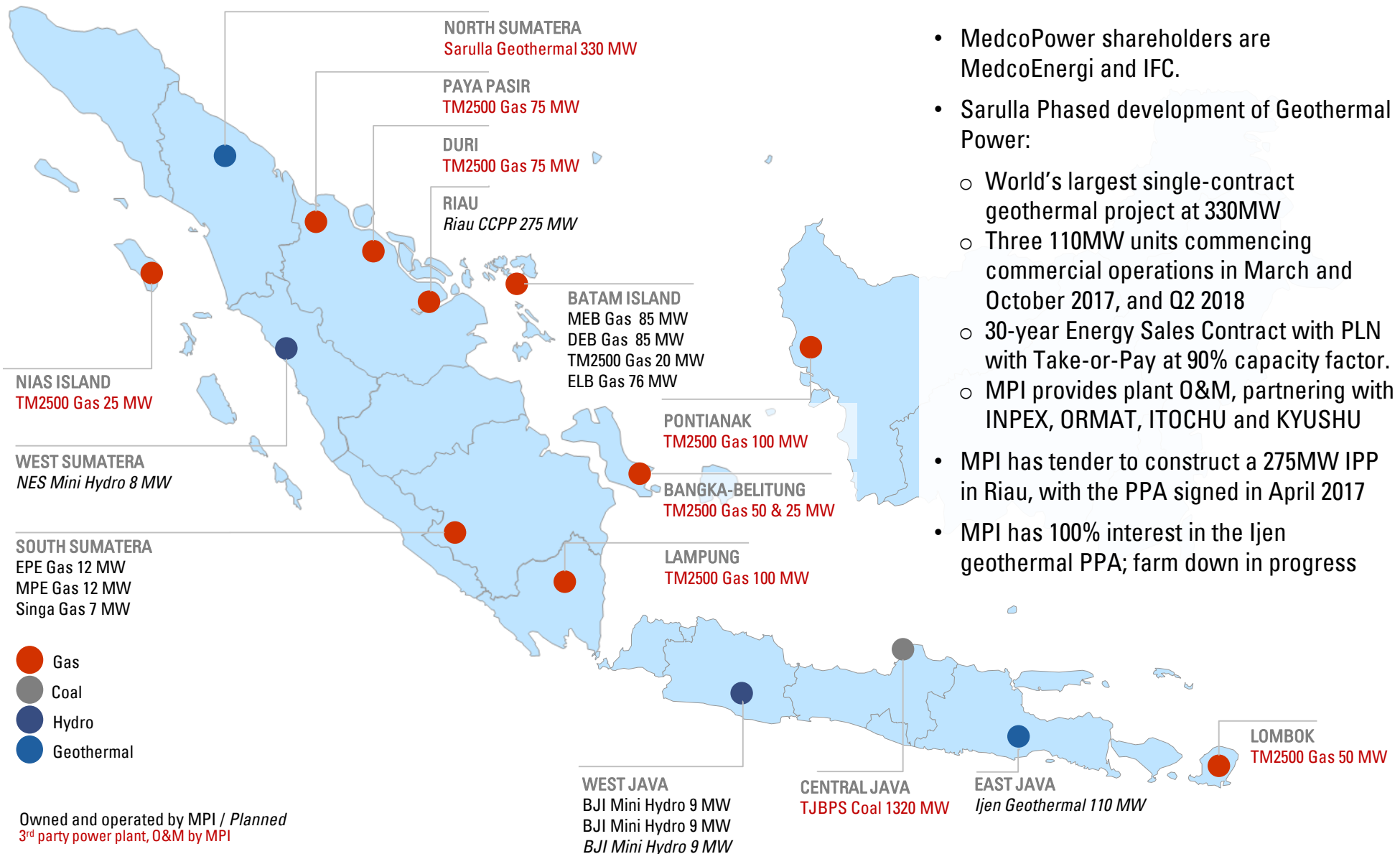
### BUSINESS STRATEGY

- Clean energy, primarily gas and geothermal assets
- Focus on Western Indonesia (access to gas and geothermal resource), also selectively looking for opportunities in Central and Eastern Indonesia
- Focus on medium sized power plants (100-300MW) and selective larger power plants
- Expand the O&M services business
- Extract greater synergies within MEI Group

### BUSINESS ENVIRONMENT

- Contracts are Long Term (20-30 years), Take-or-Pay sales to PLN. PLN is the single buyer of electricity from various IPPs. PLN also develops and operates its own power plants
- Indonesia commitments to International targets to grow clean energy electricity capacity
- Capitalize on regulations to encourage turn-key power generation from gas producers
- Regional costs of generation as a benchmark for renewable energy prices





- MedcoPower shareholders are MedcoEnergi and IFC.
- Sarulla Phased development of Geothermal Power:
  - World's largest single-contract geothermal project at 330MW
  - Three 110MW units commencing commercial operations in March and October 2017, and Q2 2018
  - 30-year Energy Sales Contract with PLN with Take-or-Pay at 90% capacity factor.
  - MPI provides plant O&M, partnering with INPEX, ORMAT, ITOCHU and KYUSHU
- MPI has tender to construct a 275MW IPP in Riau, with the PPA signed in April 2017
- MPI has 100% interest in the Ijen geothermal PPA; farm down in progress

Owned and operated by MPI / Planned  
3<sup>rd</sup> party power plant, O&M by MPI



## Portfolio Details

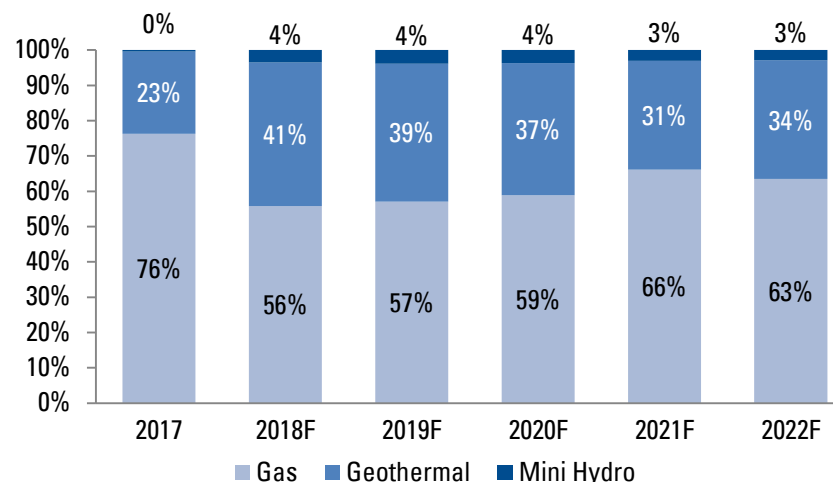
IPP

Plant	Fuel-Type	% stake	COD	Gross capacity (MW)
<b>Operating projects</b>				
MEB Comb.Cycle	Gas	64%	2004	85
DEB Comb. Cycle	Gas	80%	2006	85
ELB Simple Cycle	Gas	70%	2016	76
TM 2500	Gas	100%	2007	20
EPE	Gas	92.50%	2006	12
MPE	Gas	85%	2008	12
Singa	Gas	100%	2010	7
Sarulla (Unit I & II)	Geothermal	19%	2017	220
1 Mini Hydro	Hydro	70%	2017	9
<b>Sub-total</b>				<b>526</b>
<b>Pipeline projects</b>				
Riau CCPP	Gas	51%	2021	275
ELB comb. Cycle	Gas	70%	2020	40
Sarulla (Unit III)	Geothermal	19%	2018	110
Ijen Geothermal	Geothermal	100%	2022 – 2023	110
3 Mini hydro	Hydro	80% - 100%	2018 – 2019	30
<b>Sub-total</b>				<b>565</b>

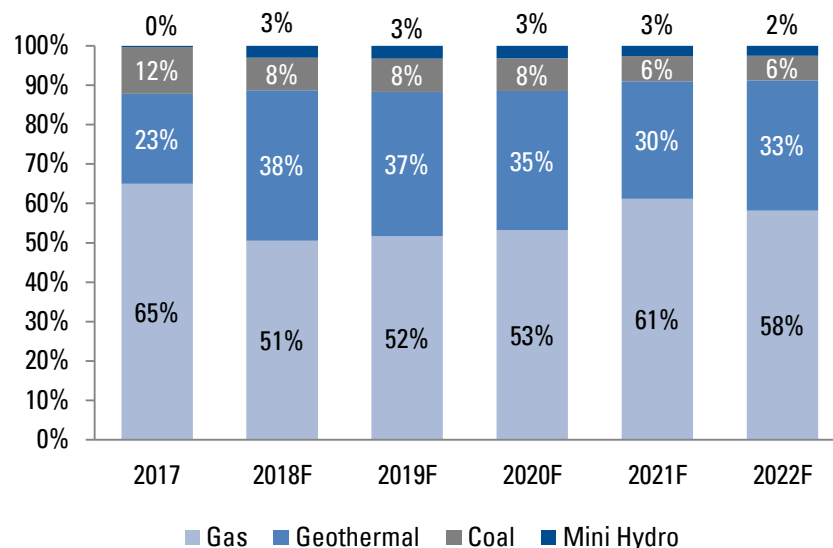
O&M

<b>Operating projects</b>				
Sarulla	Geothermal	100%	2017 – 2018	330
CFPP Tanjung Jati	Coal	80%	2006	1,320
TM2500	Gas	64%	2016	500
<b>Sub-total</b>				<b>2,150</b>
<b>Pipeline projects</b>				
Luwuk	Gas	64%	2019	40
Riau CCPP	Gas	51%	2021	275
Ijen Geothermal	Geothermal	100%	2022 – 2023	110
<b>Sub-total</b>				<b>425</b>

## IPP Revenue Plan by Fuel Mix



## IPP and O&M Revenue Plan by Fuel mix





Access to world-class Mining operations with long term upside



- Copper and gold mine in Sumbawa, Nusa Tenggara, established under 4th generation COW expiring in 2030, Converted into IUPK.
- Full repayment of senior and mezzanine loans in December 2017,
- Phase 7 development began in 2017 and development facility secured
- Pre IPO sales expected to be complete in Q1 2018
- Enhancing operational efficiencies and implement organizational optimization
- Developing on-site smelter. Finalized feasibility studies. To be funded through asset injection, project financing & strategic partner.
- Joint Ore Reserves Committee (JORC) appraisal for Elang development in progress
- Elang has the potential for production to exceed 300~430 M lbs copper and 350~600 K oz gold



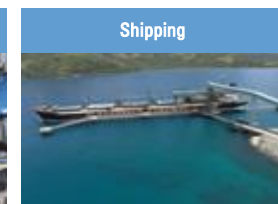
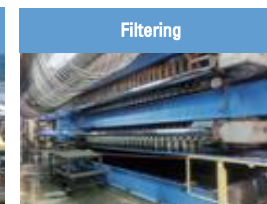
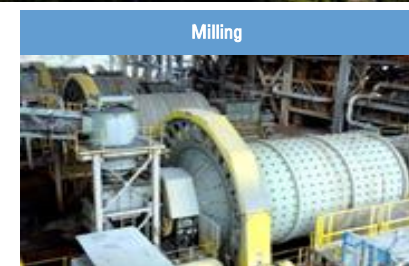
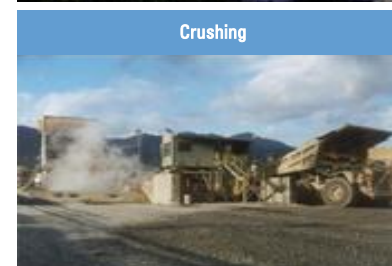


## World-class Mining operations with complete facility

### Mine Operations

- Batu Hijau mine site includes:
  - Processing facilities
  - 137.5 MW coal-fired and 50 MW diesel power plant
  - Deep-water port with ferry terminal
  - Air services and town site for housing and school
- As of September 2017 employs approximately 2,800 workers following employee restructuring
- Cash-less acquisition of 44% stake in Macmahon Holdings Limited:
  - Equity exchanged for the existing mobile mining equipment and a life-of-mine contract to provide earthmoving and mining services at the Batu Hijau mine
  - Transaction will reduce AMNT's costs and timeline for the development of phase 7 of the Batu Hijau mine as well as other resources on the concession

### Facilities







**President Director**  
Hilmi Panigoro



**Director**  
**Chief Executive Officer**  
Roberto Lorato



**Director**  
**Chief Financial Officer**  
Anthony Mathias



**Director**  
**Chief Human Capital &  
Business Support**  
Amri Siahaan



**Director**  
**Chief Operating Officer**  
Ronald Gunawan

2016 was a transformational year for MedcoEnergi in which we seized opportunities to acquire strategic producing assets. During 2017 we focused on extracting maximum value from our new and existing asset portfolio.

Our strategy is building a leading company across three key business segments, competitive in a low price environment, with a solid platform of producing assets and excellent growth prospects.

Our new, more diversified asset portfolio, together with the progress we have made on cost efficiency and capital discipline, positions MedcoEnergi as a very attractive and dependable investment proposition for the long term.

We aim to deliver long-term value and optimize returns to our investors, lenders and other stakeholders through selective investments and continuous improvements in operational and financial performance.



1980

Established as **Meta Epsi Pribumi** Drilling Company

1994-1996

**Initial Public Offering** in Indonesia

Acquired **100% shares of Stanvac Indonesia** from Exxon/Mobil

Discovered **major onshore oil reserves** in Kaji-Semoga

2005-2010

Awarded EPSA IV PSC Contract for **Area 47 Libya**

Awarded Oman Service Contract. **Increased production by 100%** within 5-years

Discovered **352 MMBOE** hydrocarbon resources in Area 47 Libya; 90% exploration success ratio

**LNG Sales Agreement signed** with Japanese & Korean buyers, gas to be supplied from Senoro-Toili Block

Awarded **20 year extension** for 3 Indonesian PSCs (South Sumatra, Block A and Bawean)

2011-2014

**Final Investment Decision** for Senoro-Toili Gas and LNG projects

Secured **Project Financing** for Senoro-Toili

Secured **Project Financing** for DSLNG and Sarulla

2015

**Senoro-Toili** and DSLNG begin production

**25 year of extension** for Karim, Oman

Signed **GSA** for Block A Aceh

2016

Acquired a 41.1% indirect interest in **AMNT**

Acquired a 40% Operatorship in the **South Natuna Sea Block B PSC**

Awarded **10 year extension on Lematang PSC** and increased holding to 100%

2017

Conversion of AMNT's **CoW into IUPK** and acquired **44.3% shares in Macmahon**

Increased ownership in **MedcoPower** by acquiring a controlling interest

Completed **1:4 stock split** and **3:1 Rights Issue** with warrants attached

## 2017

- Upstream Company of the Year” award for 2017, from the APAC Energy Council
- Asia Pacific Energy & Infrastructure Forum, “Deal of the Year” for Block A Finance
- Received the Governments highest, Gold PROPER Environmental Stewardship Award for Rimau Block, for the seventh consecutive year
- Green PROPER award, 4 years in a row for TJBPS
- Indonesia Best Electricity Award ceremony, Medco Energi Batam (a subsidiary of MedcoPower) received ‘The Best Power Plant Company (10-100MW category)’, and Sarulla Operations Ltd. received ‘The Best New Comer Power Plant Company’
- Top HR Team 2017 from Human Resources Directors Magazine Asia in the Change Management Category for Medco E&P Natuna Ltd.



Company Address :

PT Medco Energi Internasional Tbk.  
The Energy Building 53<sup>rd</sup> Floor  
SCBD Lot 11A  
Jl. Jend. Sudirman, Jakarta 12190  
Indonesia  
P. +62-21 2995 3000  
F. +62-21 2995 3001

Investor Relations:

Andhika Suryadharna  
Investor Relations Capital Market  
Email. [andhika.suryadharna@medcoenergi.com](mailto:andhika.suryadharna@medcoenergi.com)

A. Nugraha Adi  
Investor Relations Analyst  
Email. [nugraha.adi@medcoenergi.com](mailto:nugraha.adi@medcoenergi.com)

Website : [www.medcoenergi.com](http://www.medcoenergi.com)