



adaro 



*years*  
AN EVOLVING  
STORY

# ENERGY FOR CHANGE

October 2018

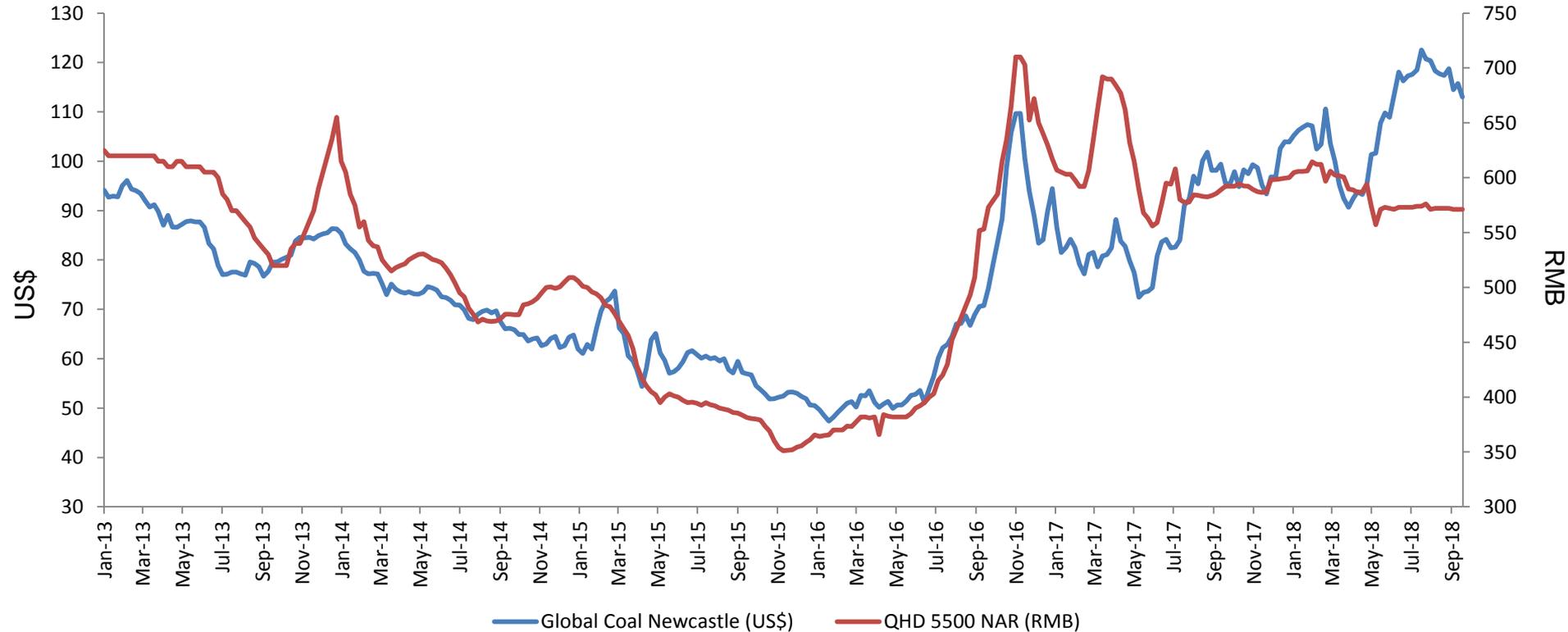


Key questions:

- Why has coal price remain high and will it stay high for longer?
- What is Adaro's rationale for venturing overseas?
- Should investors expect more M&A activities?
- What is Adaro strategy to ensure a sustainable business?



# Thermal coal: robust price momentum continues



- Coal price remains resilient supported by supply tightness and firm coal demand.
- Seaborne thermal coal demand increased by 3% y-o-y in 2017 to ~919 Mt (Wood Mackenzie).
- Supply is expected to remain tight due to continued supply reform in China as well as funding and operational constraints.



# Market is relatively balanced



## Supply – lagged and structurally changing

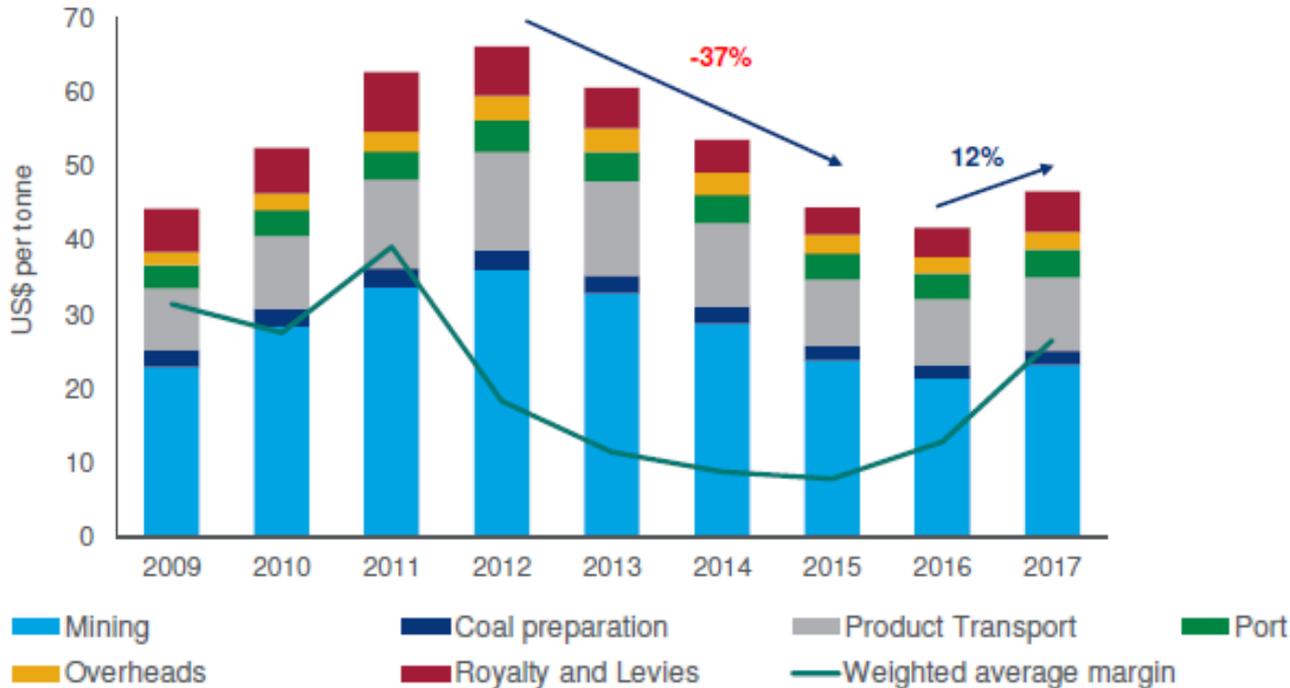
- Under-investment: expansionary capex has been minimal despite higher prices.
- Increasing production cost.
- Shortage of domestic coal in China and India.
- Weather related issues.
- Limited access to financing.
- Availability of heavy equipment.

## Demand – resilient and positive outlook supported by emerging Asia

- Improved economic activities in China and India.
- Weather related issues.
- Going forward, the growth in demand for coal will be dominated by Southeast Asia and India.
- Approximately 300 GW of new coal plants are under construction in Asia today.

# Production cost has increased

Average seaborne export thermal cash costs and margin

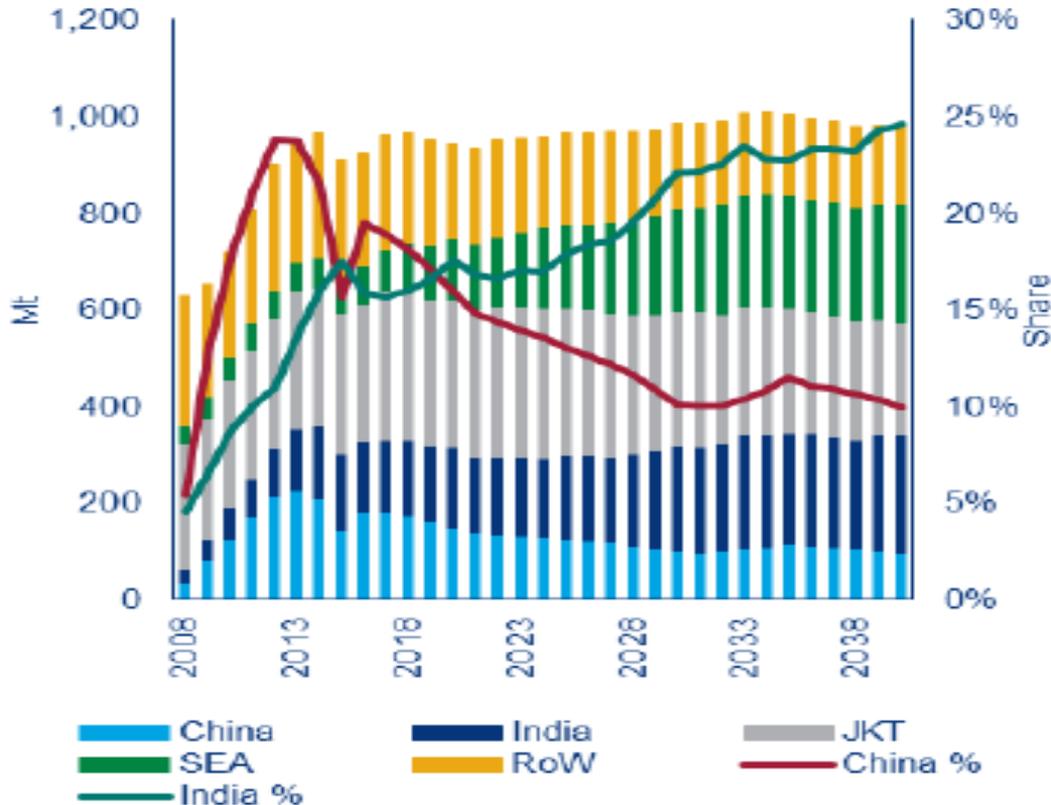


Source: Wood Mackenzie, Global thermal coal long-term outlook H1 2018: navigating through the energy transition

- The higher coal price has created greater headroom for cost.
- Increase in cost is inevitable as coal miners are trying to reverse the consequences of the prolonged industry downturn.

# Positive demand outlook for thermal coal

Seaborne thermal coal demand by region (Mt)



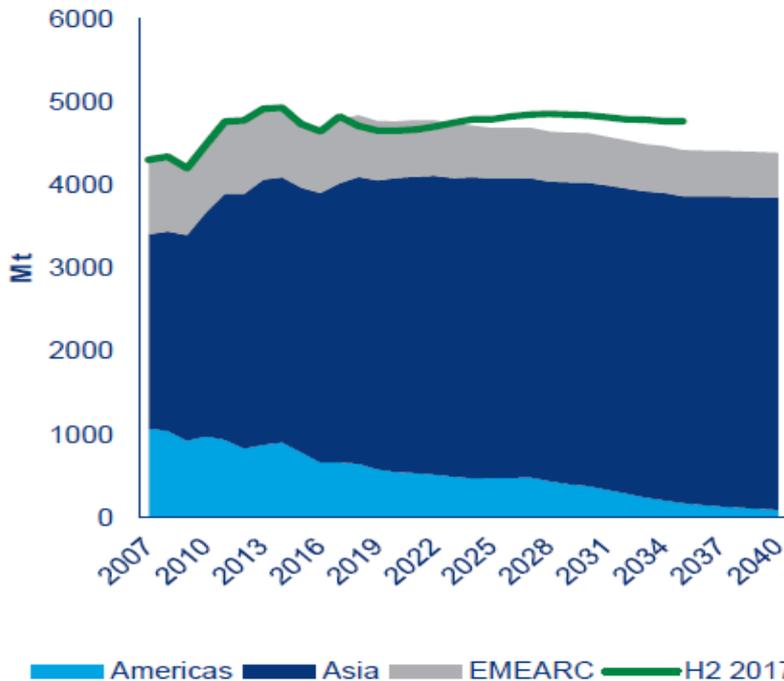
- As China's dominant role in the seaborne market gradually cedes, Southeast Asia and India will become the key drivers.
- It is estimated that global seaborne thermal coal demand will grow modestly to reach 1.1 Bt by 2035.

Note: JKT (Japan, Korea, Taiwan); SEA (Southeast Asia); RoW (rest of the world)

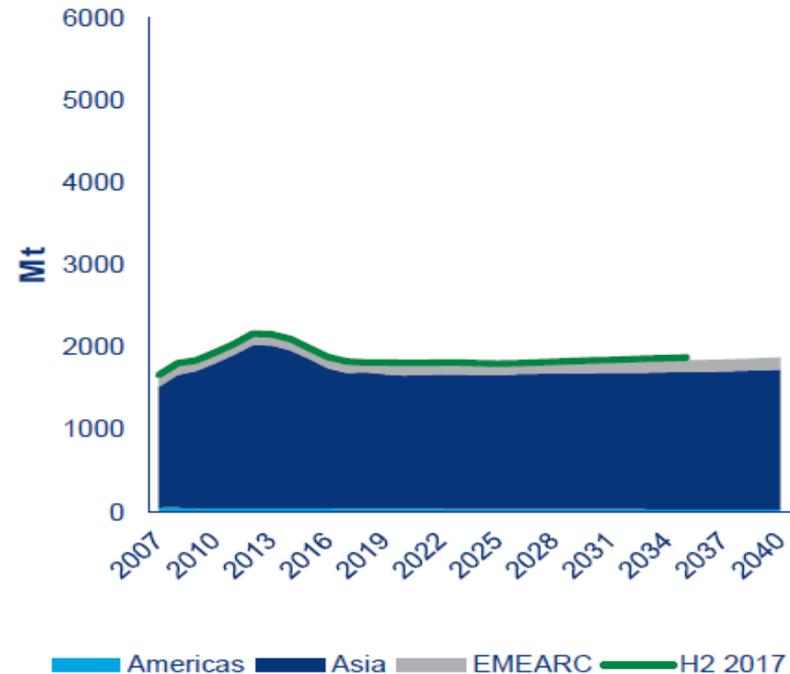
Source: Wood Mackenzie, Global thermal coal long-term outlook H1 2018: navigating through the energy transition

# ... from both power and non-power

Global thermal coal demand for power (Mt)



Global thermal coal demand for non-power (Mt)



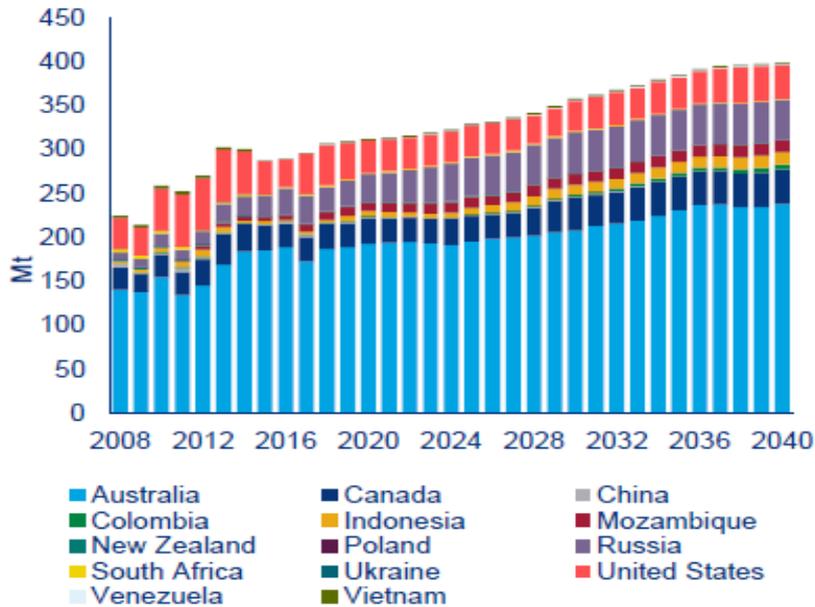
Source: Wood Mackenzie, Global thermal coal long-term outlook H1 2018: navigating through the energy transition

- Electrification in the developing world continues to drive coal demand.
- Approximately 300 GW of new coal plants are under construction in Asia today, and between 2018-2020 there will be ~13GW of coal fired capacity commissioning in SEA.
- Non-power demand is dominated by the demand for cement manufacturing and liquid fuel production.

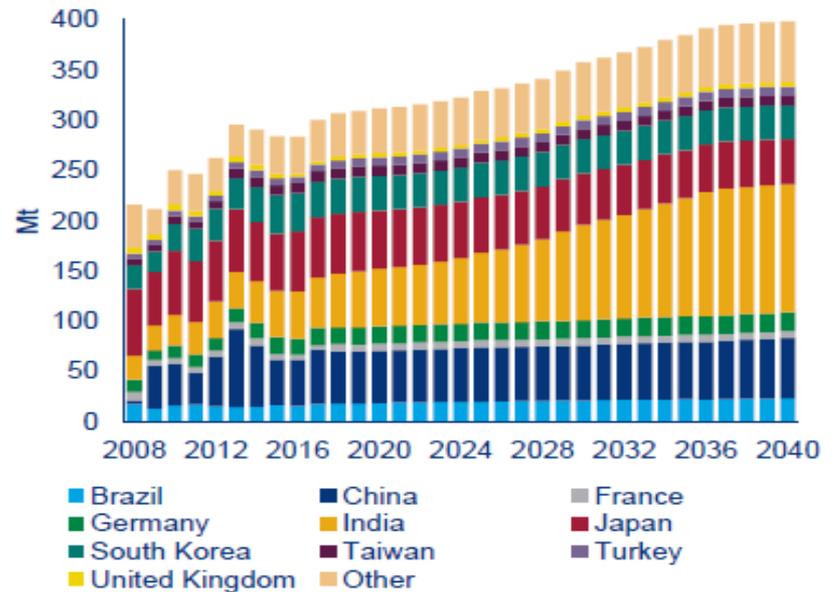


# Resilient outlook for metallurgical coal

### Supply: Seaborne traded metallurgical coal (Mt)



### Demand: Global metallurgical coal imports (Mt)



Source: Wood Mackenzie Coal Market Service

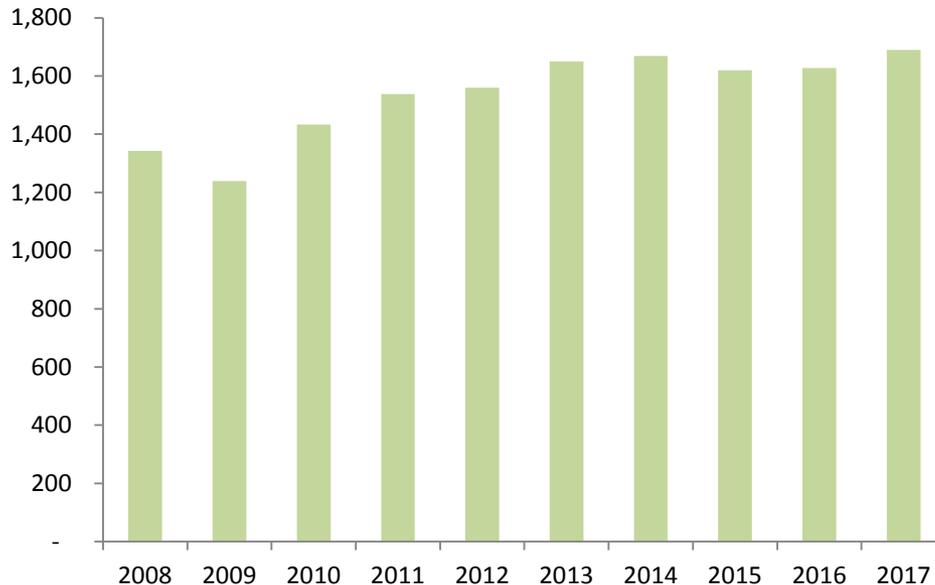
Source: Wood Mackenzie Coal Market Service

Source: Wood Mackenzie, Global thermal coal long-term outlook H1 2018: navigating through the energy transition

- As steel production and consumption continue to grow, so does the demand for metallurgical coal.
- It is expected that global seaborne demand for metallurgical coal will rise from 307 Mt in 2018 to 398 Mt in 2040.
- Australia dominates the supply of metallurgical coal, supplying more than 60% of seaborne requirement, while demand is dominated by China, India, Japan and South Korea.

# ...driven by firm steel demand

World crude steel production 2008-2017 (Mt)



Source: World Steel in Figures 2018, World Steel Association

- Steel production is expected to continue its modest growth due to improvement in global economic growth, developing economies' unceasing focus on building infrastructure and increasing urbanization.
- Metallurgical coal is a major non-substitutable component in steel-making, and it is expected that the demand for met coal will follow the modest growth in steel demand.



# Solid operational and financial results

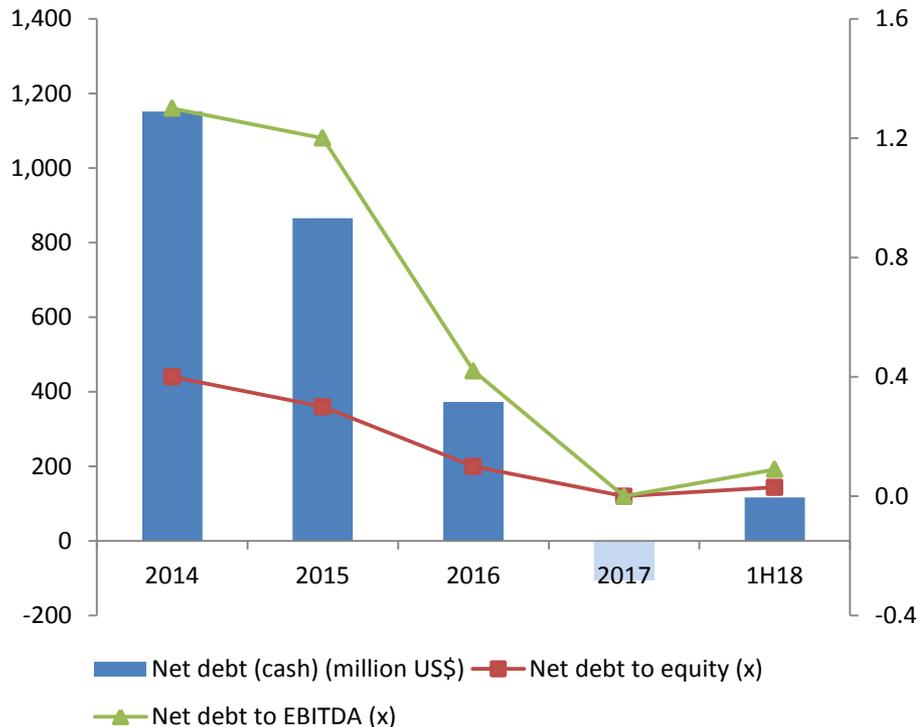


<b>OPERATIONAL</b>	<b>1H18</b>	<b>1H17</b>	<b>% Change</b>
Production (Mt)	24.06	25.13	-4%
Sales (Mt)	23.81	25.27	-6%
OB removal (Mbcm)	123.01	111.78	10%
<b>FINANCIAL (US\$ millions, unless indicated)</b>	<b>1H18</b>	<b>1H17</b>	<b>% Change</b>
Net Revenue	1,610	1,549	4%
Core Earnings	269	299	-10%
Operational EBITDA	593	626	-5%
Cash	1,058	1,236	-14%
Net Debt	117	157	-25%
Net Debt to Equity (x)	0.03	0.04	-
Net Debt to Last 12 months Operational EBITDA (x)	0.09	0.14	-
Free Cash Flow	284	405	-30%
Cash from Operations to Capex (x)	3.57	15.78	-

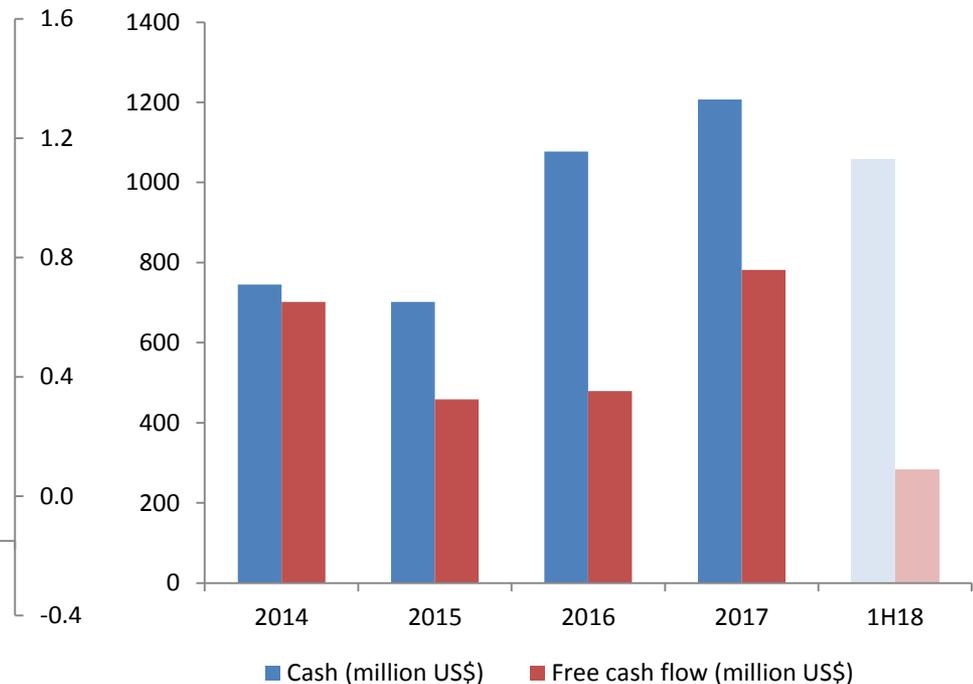
# Solid balance sheet and strong cash generation



## Reduced debt and improved financial position



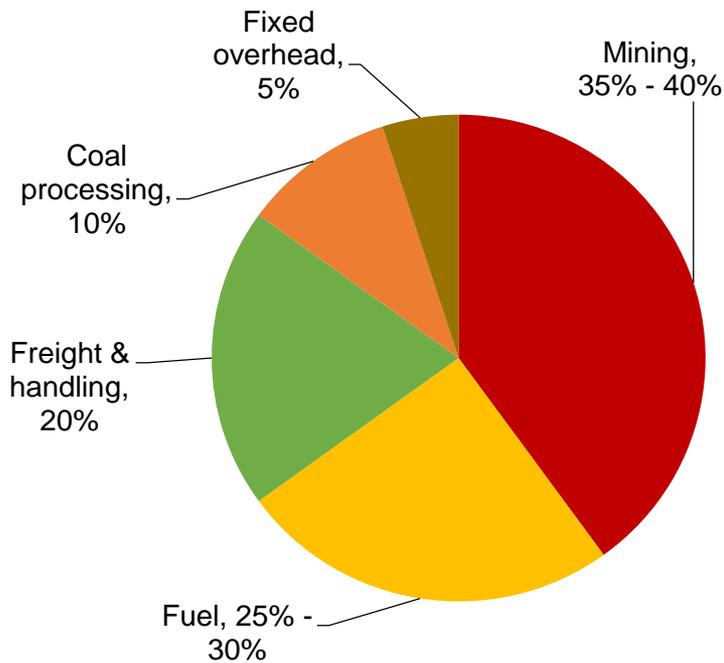
## Strong cash balance and free cash flow generation



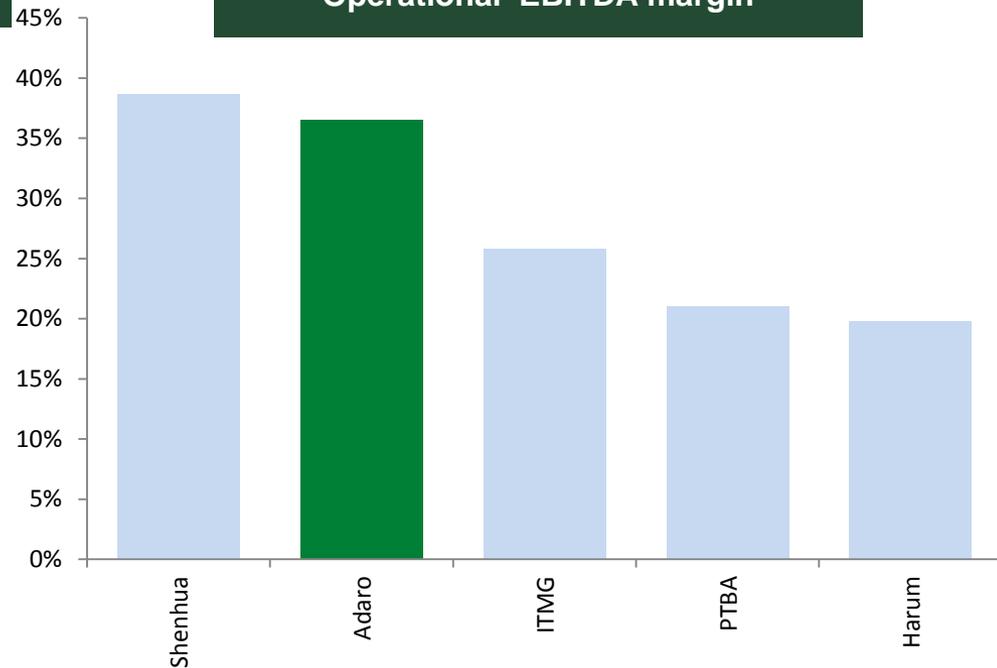


# Cost control – key in delivering strong performance

**Adaro's estimated coal cash cost breakdown (1H18)**



**Operational EBITDA margin**

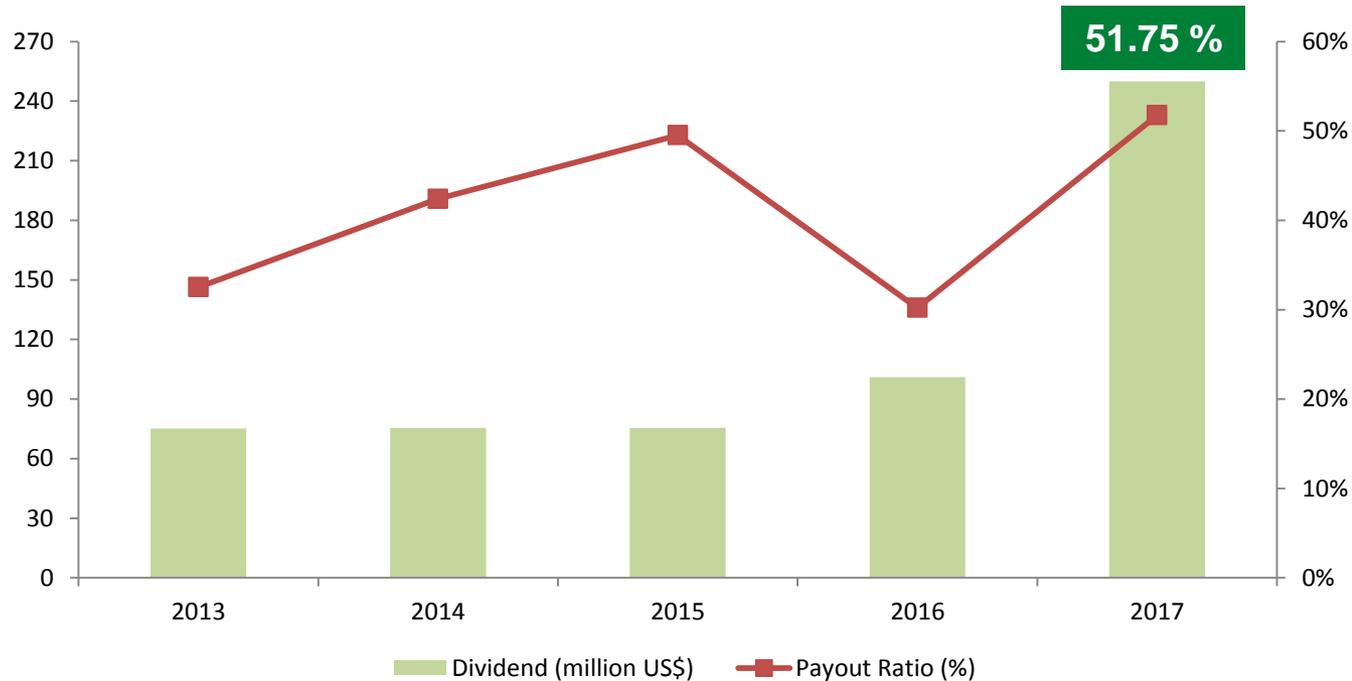


Source: Bloomberg, based on trailing 12M EBITDA

- Adaro has one of the highest operational EBITDA margin among thermal coal peers



# Delivering return to shareholder



- We are committed deliver return to our shareholder through consistent dividend payment.
- Dividend payout ratio since IPO in 2008 averages ~39% and in total we have paid US\$1.2 billion in dividend.
- Total dividend for fiscal year 2017 is US\$250 million, or 51.75% of profit.



# Business model that creates sustainable value



## PT Adaro Energy Tbk (AE)

\*Simplified Corporate Structure

Adaro Mining		Adaro Mining Services		Adaro Logistics		Power	
<b>Adaro Indonesia (AI)</b> South Kalimantan	88.5%	<b>Saptaindra Sejati (SIS)</b> Coal mining and haulir contractor	100%	<b>Maritim Barito Perkasa (MBP)</b> Barging & shiploading	100%	<b>Makmur Sejahtera Wisesa (MSW)</b> Operator of 2x30MW mine-mouth power plant in S. Kalimantan	100%
<b>Balangan Coal</b> South Kalimantan	75%	<b>Jasapower Indonesia (JPI)</b> Operator of overburden crusher and conveyor	100%	<b>Sarana Daya Mandiri (SDM)</b> Dredging & maintenance in Barito River mouth	51.2%	<b>Bhimasena Power (BPI)</b> Partner in 2x1000MW power generation project in Central Java	34%
<b>Mustika Indah Permai (MIP)</b> South Sumatra	75%	<b>Adaro Eksplorasi Indonesia (AEI)</b> Mining exploration	100%	<b>Indonesia Multi Purpose Terminal (IMPT)</b> Port management & terminal operator	100%	<b>Tanjung Power Indonesia (TPI)</b> Partner in 2x100MW power plant project in S. Kalimantan	65%
<b>Bukit Enim Energi (BEE)</b> South Sumatra	61%	<b>Adaro Mining Technologies (AMT)</b> Coal research & development	100%	<b>Indonesia Bulk Terminal (IBT)</b> Coal terminal & fuel storage	100%		
<b>Adaro MetCoal (AMC)</b> , Central & East Kalimantan	100%						
<b>Bhakti Energi Persada (BEP)</b> East Kalimantan	10.2%						
<b>Kestrel Coal Mine</b> Queensland, Australia	38.4%						



# Eight business pillars – diversifying beyond coal



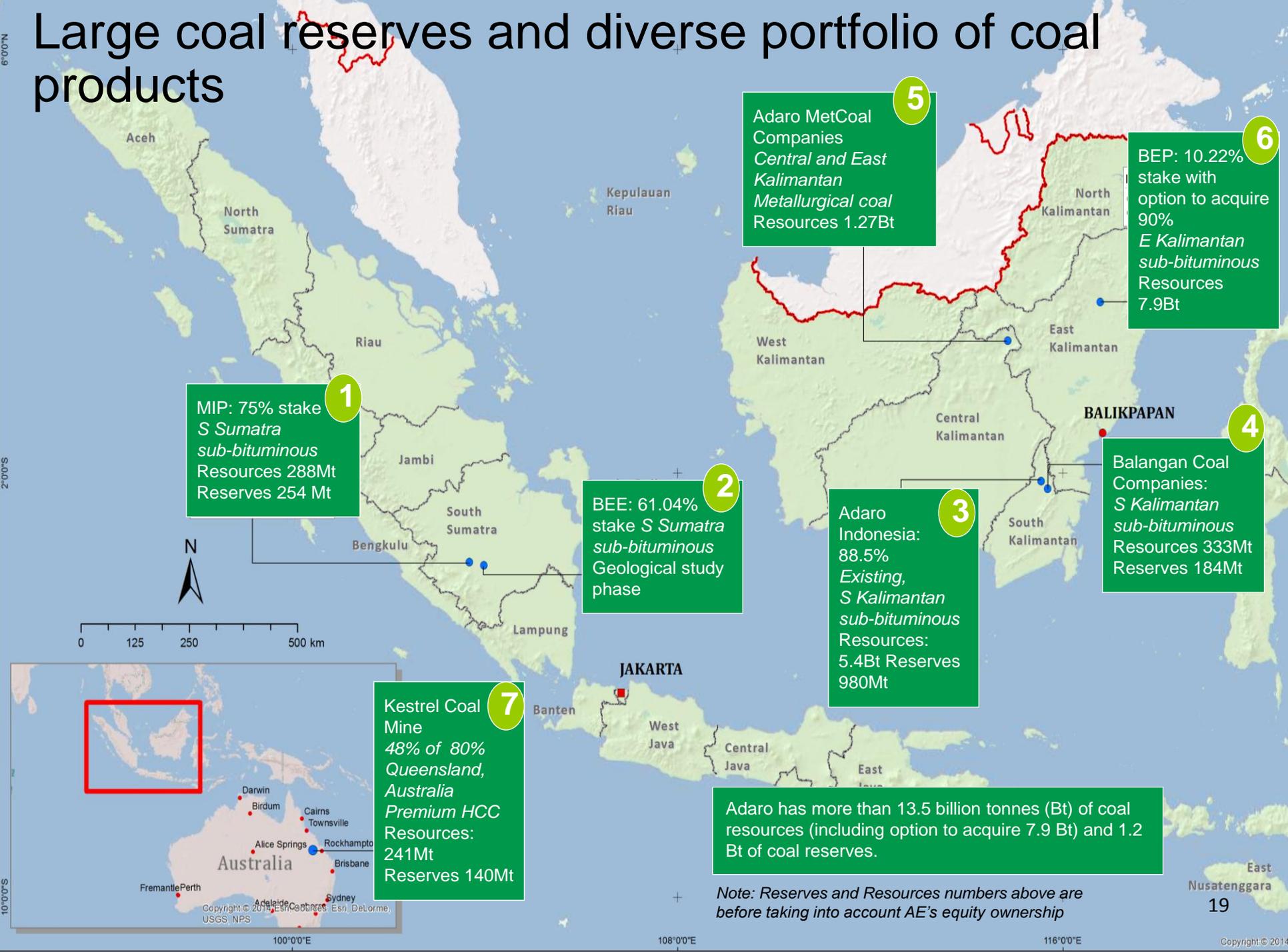
- Adaro Energy is well aware of the cyclical nature of the coal industry and its impact to our business. Therefore we are diversifying our business model beyond coal mining and currently operates under eight business pillars.
- AE has subsidiaries within each pillar that performs as independent profit centers and strive to keep expanding third-party business besides serving the Adaro Group.



# Adaro Mining

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# Large coal reserves and diverse portfolio of coal products



**1**  
MIP: 75% stake  
*S Sumatra*  
sub-bituminous  
Resources 288Mt  
Reserves 254 Mt

**2**  
BEE: 61.04%  
stake *S Sumatra*  
sub-bituminous  
Geological study  
phase

**3**  
Adaro  
Indonesia:  
88.5%  
Existing,  
*S Kalimantan*  
sub-bituminous  
Resources:  
5.4Bt Reserves  
980Mt

**4**  
Balangan Coal  
Companies:  
*S Kalimantan*  
sub-bituminous  
Resources 333Mt  
Reserves 184Mt

**5**  
Adaro MetCoal  
Companies  
*Central and East  
Kalimantan*  
Metallurgical coal  
Resources 1.27Bt

**6**  
BEP: 10.22%  
stake with  
option to acquire  
90%  
*E Kalimantan*  
sub-bituminous  
Resources  
7.9Bt

**7**  
Kestrel Coal  
Mine  
48% of 80%  
*Queensland,  
Australia*  
Premium HCC  
Resources:  
241Mt  
Reserves 140Mt

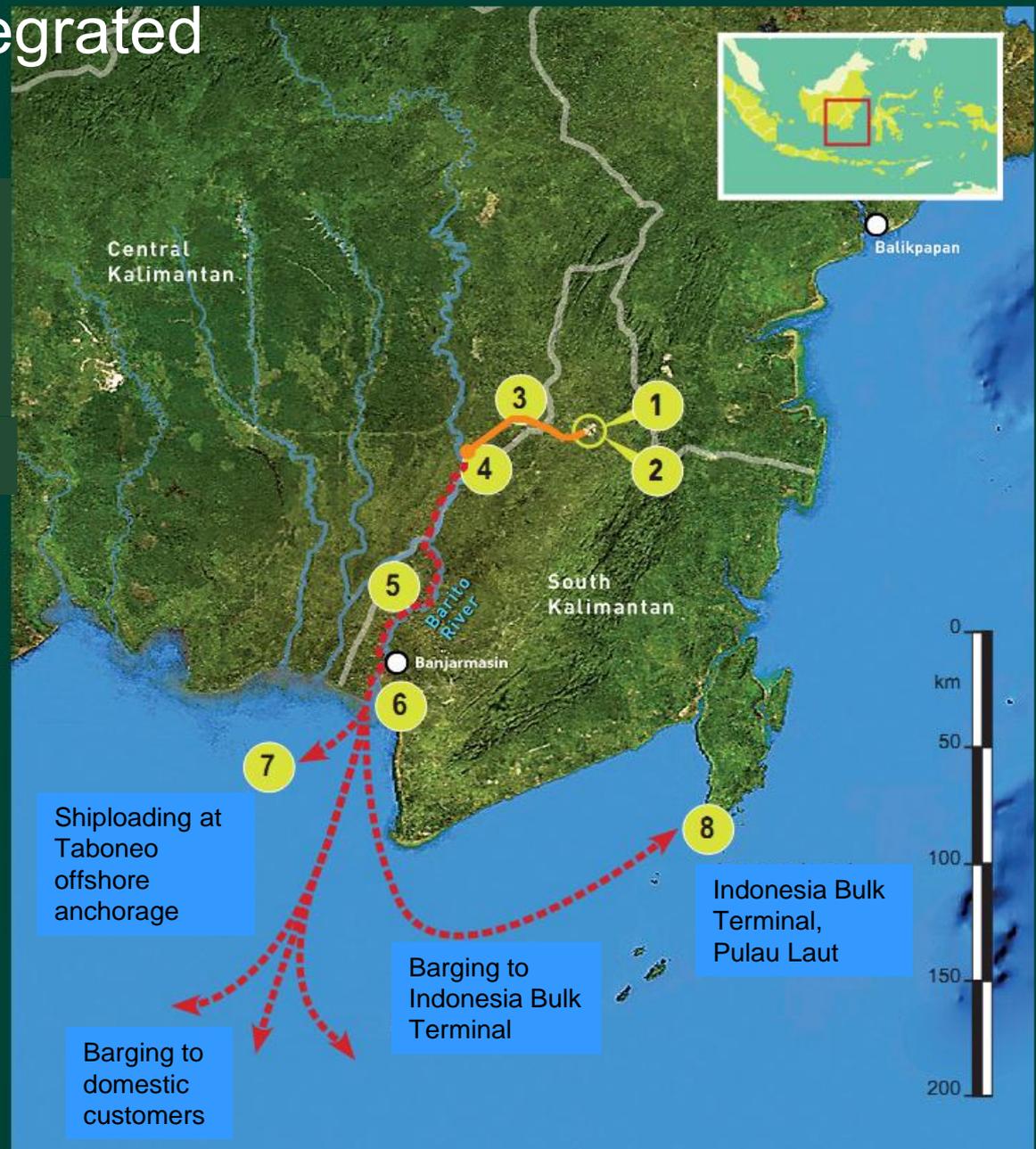
Adaro has more than 13.5 billion tonnes (Bt) of coal resources (including option to acquire 7.9 Bt) and 1.2 Bt of coal reserves.

Note: Reserves and Resources numbers above are before taking into account AE's equity ownership

# Adaro Energy's integrated coal supply chain

Adaro Energy's main thermal coal mines are located in South Kalimantan, and account for the majority of Adaro Group's coal production. Adaro Indonesia and other key subsidiaries form the main part of the coal supply chain with help from third-party contractors.

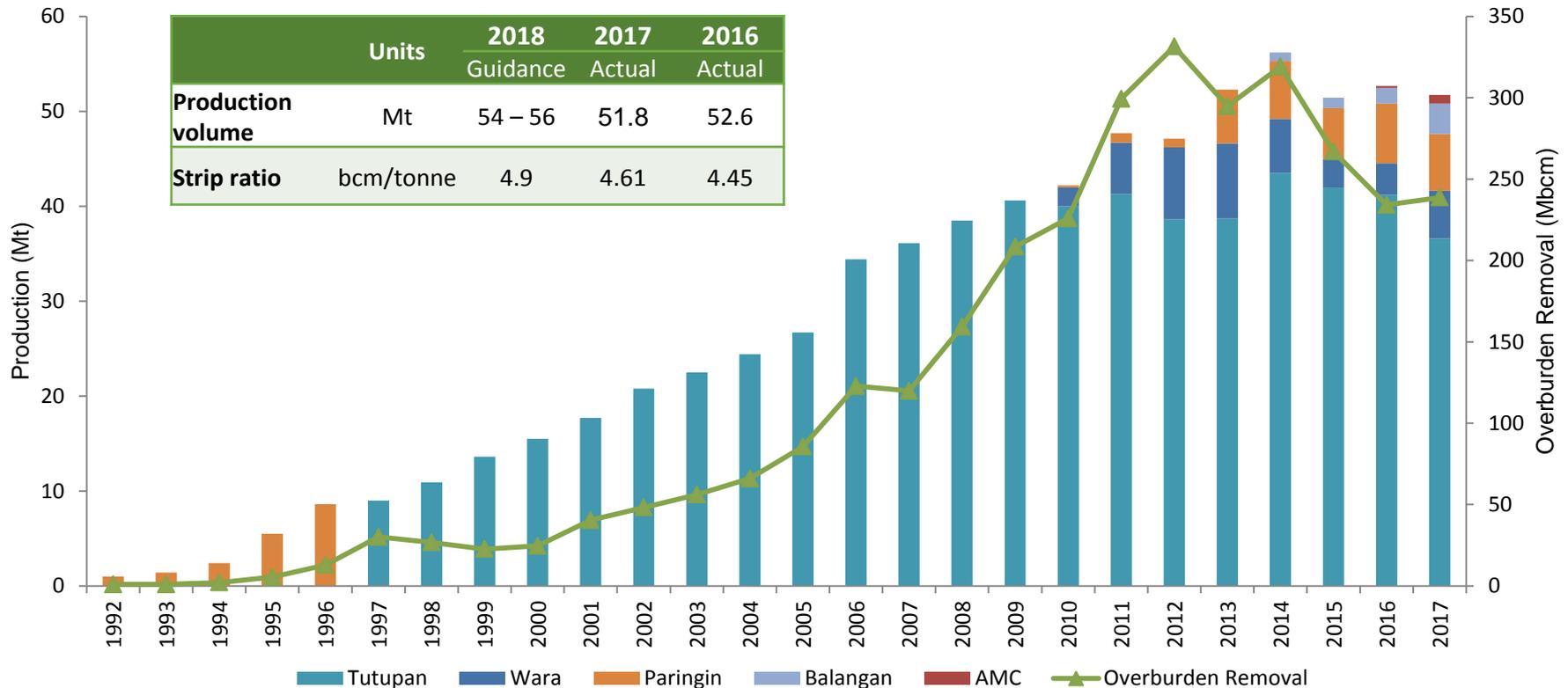
- 1 Coal Concessions of AI and Balangan Coal Companies
- 2 Contract mine operations by PT Saptaindra Sejati (SIS)
- 3 Coal hauling road owned and operated by Adaro Indonesia
- 4 Coal crushing and barge loading at Kelanis river bulk terminal by Adaro Indonesia.
- 5 Coal barging to the sea along Barito River by PT Maritim Barito Perkasa (MBP)
- 6 River channel operation and maintenance by PT Sarana Daya Mandiri (SDM)
- 7 Shiploading and sea barging by PT Maritim Barito Perkasa (MBP)
- 8 Coal terminal and fuel supply services by PT Indonesia Bulk Terminal (IBT)



# Over two decades of solid production performance



## Adaro's historical production



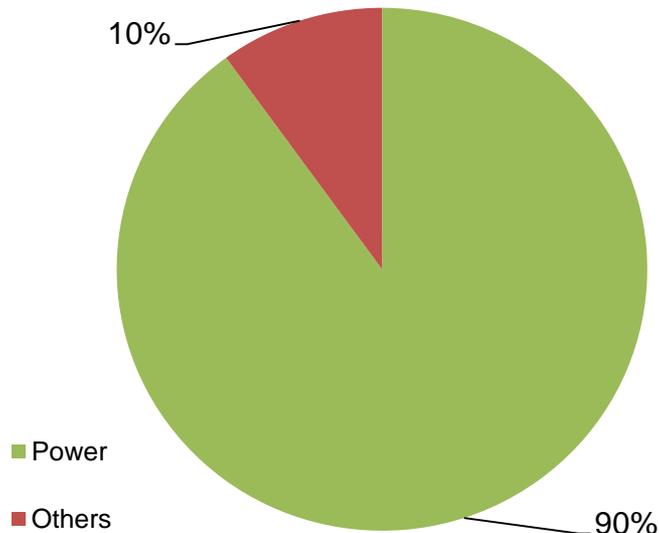
- Produce low to medium heat value coal with low pollutant content, ideal for power generation.
- Control over supply chain ensures timely delivery to customers.
- Continued focus on productivity, safety and sustainability will support value creation for shareholder.



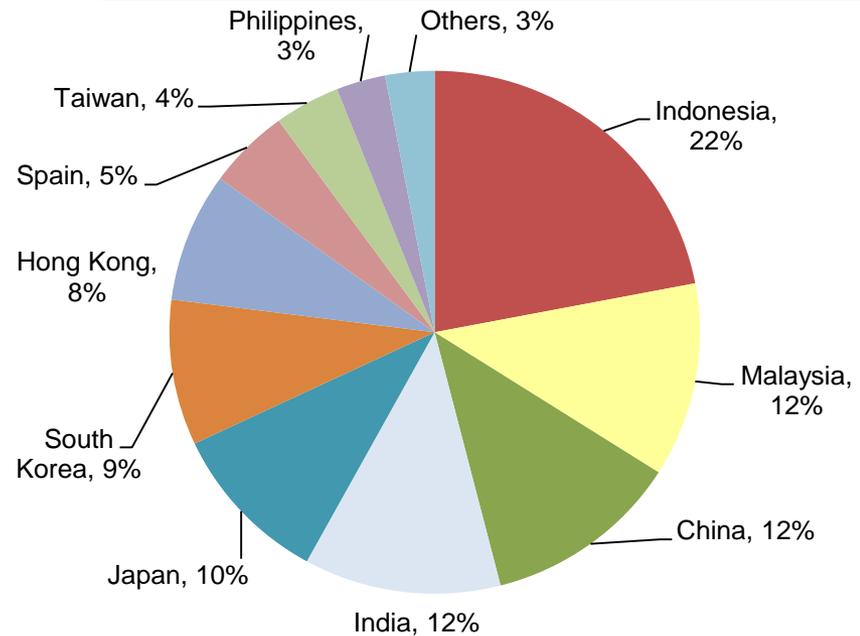
# Strong customer base with focus on Indonesia



Customer type by volume (1H18)



Geographical breakdown of customers (1H18)



\* Others include cement, pulp & paper, and industrial

\* Others include Thailand, USA, Vietnam, Singapore and The Netherlands

- Most customers are sovereign backed power companies, with over 50% have had a relationship for more than a decade
- Average length of coal supply agreement is 3 to 5 year.
- Many of our contracts are reset annually, with a combination of negotiated, fixed and index-linked pricing.
- Strong relationship with many blue-chip investment-grade clients mitigates risk

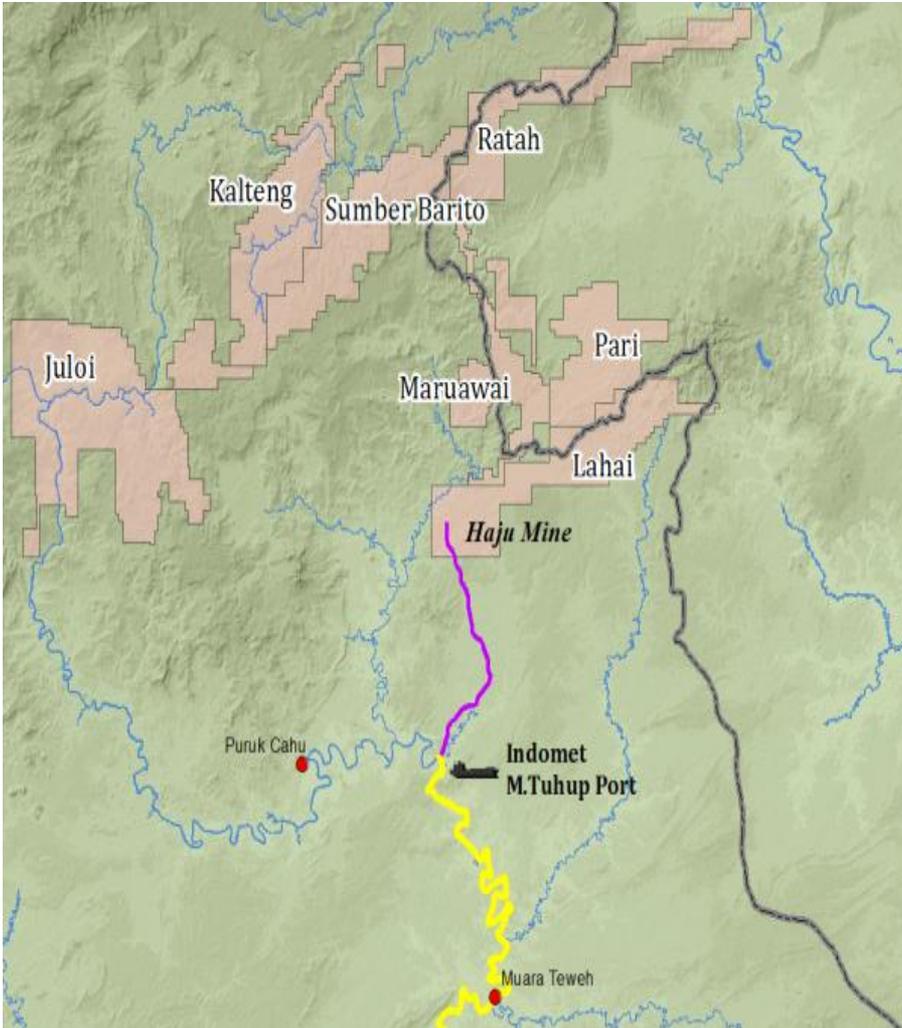
# 1H18 performance of Adaro Mining



	Units	1H18	1H17	1H18 vs. 1H17
Coal Production	Mt	24.06	25.13	-4%
Sales Volume	Mt	23.80	25.27	-6%
Overburden Removal	Mbcm	123.01	111.78	10%
Strip Ratio	x	5.11	4.45	15%

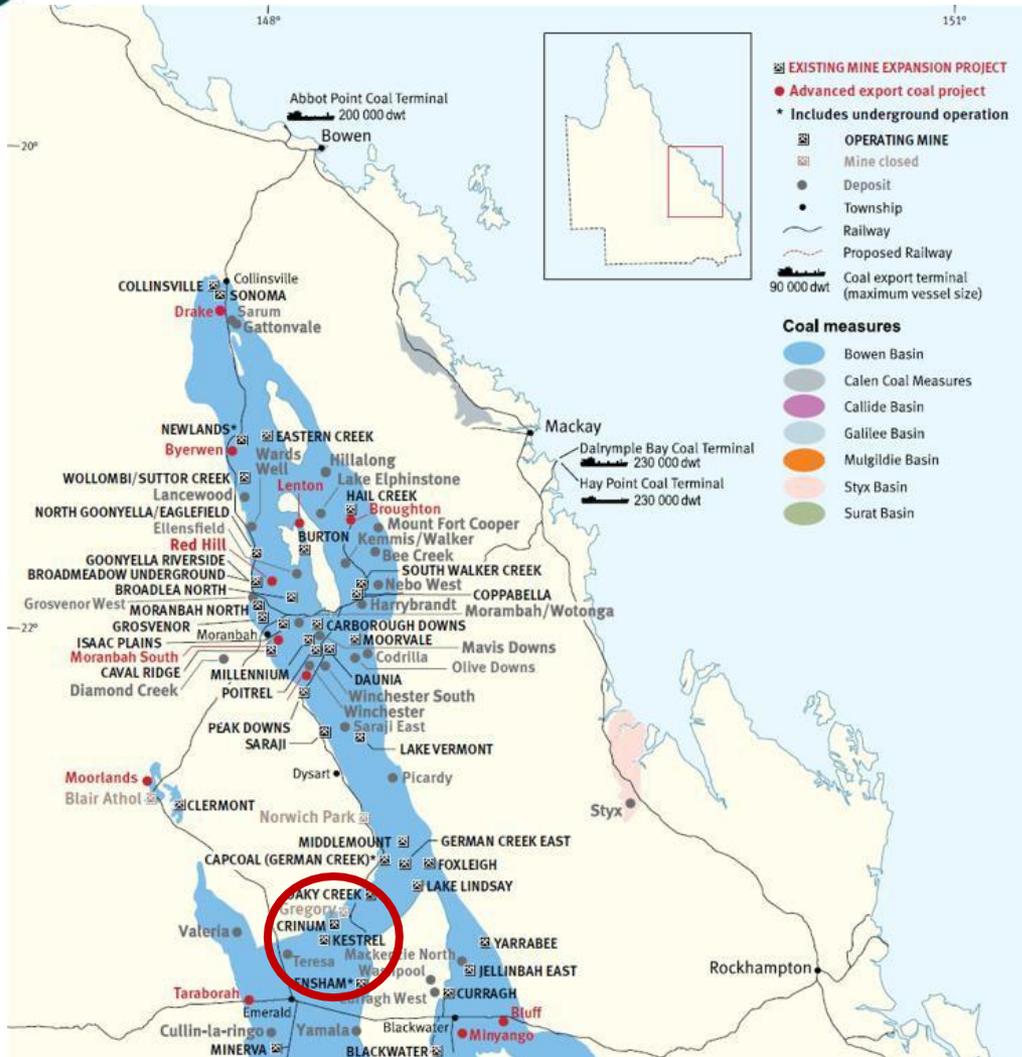
- As weather condition improved in the second quarter, our coal mining subsidiaries were able to deliver higher overburden removal and production volume.
- We have secured a large portion of coal sales volume for the rest of the year and we continue to actively build market understanding and acceptance for our E4700 and E4200 product.
- We are on the right track to achieve our 2018 coal production guidance of 54-56 Mt.

# Snapshot of Adaro MetCoal Companies (AMC)



- Adaro Energy completed the acquisition of AMC from BHP Billiton for 7 CCOWs in Central and East Kalimantan.
- The transaction value was \$120 million for 75% of the properties. Adaro now owns 100% of the asset.
- First coal production has started at the Haju mine which has a production capacity of 1 million tonnes a year. Coal is mined and hauled to a barge loading site at Muara Tuhup on the Barito river.
- In 1H18, AMC produced 0.62 Mt of coal, 37% higher y-o-y.

# Snapshot of Kestrel Coal Mine



- EMR Capital and Adaro Energy completed the acquisition of Rio Tinto's 80% interest in the Kestrel Coal Mine (Kestrel) on August 1<sup>st</sup>, 2018.
- Adaro Energy's first coal mining operations overseas.
- Kestrel is located 40 km north of Emerald in the Bowen Basin coal fields in Central Queensland.
- In the year to December 2017, Kestrel produced 4.25 Mt of high-quality metallurgical coal and 0.84 Mt of high CV thermal coal.
- Kestrel has marketable reserves of 146 Mt and resources of 241 Mt.
- Kestrel produces high volatile, high fluidity coking coal sought after by customers in the seaborne market.



# **Adaro Services and Adaro Logistics**



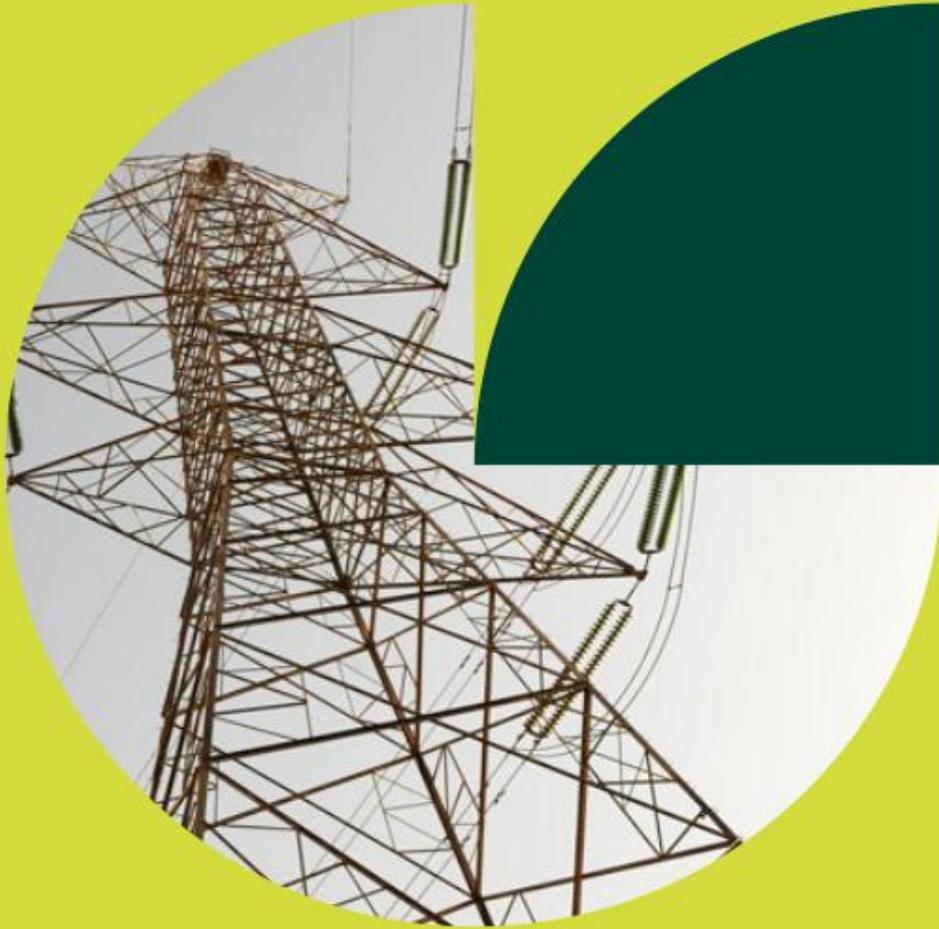
# Ensuring operational excellence

*Strengthens Adaro's Earnings Profile as Contribution to Parent Co Increases*

- Key part of our vertical integration.
- Ensures operational excellence, productivity improvement and timely reliable delivery to customers.
- Non coal mining business accounted for 20% of Adaro Energy EBITDA in 1H18. This contribution is expected to grow going forward.
- Actively pursue third-party revenue growth from these businesses.



		Units	1H18	1H17	1H18 vs. 1H17
<b>SIS</b>	Overburden Removal	Mbcm	93.73	84.53	11%
	Coal Production	Mt	20.07	16.15	24%
<b>MBP</b>	Coal barging	Mt	21.37	19.91	7%



# Adaro Power

# Building the foundation of Adaro's future



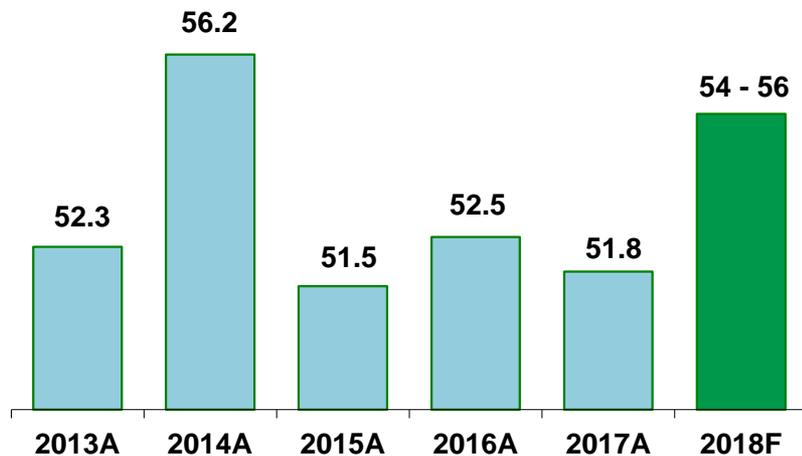
	Bhimasena Power Indonesia	Tanjung Power Indonesia
<b>Capacity</b>	2x1000 MW	2x100 MW
<b>Stake Acquired</b>	34%	65%
<b>Partner(s)</b>	J-Power (34%), Itochu (32%)	Korea EWP (35%)
<b>Location</b>	Central Java	South Kalimantan
<b>Development Progress</b>	<ul style="list-style-type: none"> <li>Signed 25 years PPA with PLN</li> <li>Total Capex: US\$4.2 billion</li> <li>Concluded financing close on June 6<sup>th</sup>, 2016.</li> <li>Expected COD: 2020</li> <li>Expected coal requirement: 7 Mtpa</li> </ul>	<ul style="list-style-type: none"> <li>Signed PPA with PLN</li> <li>Total Capex: \$545 million</li> <li>Concluded financing close in Jan 2017</li> <li>Expected COD: 2019</li> <li>Expected coal requirement: 1 Mtpa</li> </ul>
<b>Financing</b>	Non-recourse project debt financing. Combination of ECA and commercial loan	Non-recourse project debt financing. Combination of ECA and commercial loan
<b>Debt vs. Equity</b>	80:20	75:25
<b>Construction Progress (1H18)</b>	47%	94%

- Commercially and financially attractive with solid IRR and low-cost long-term project financing.
- Creates captive demand for Adaro's coal and helps meet our domestic market obligation.
- Provides a stable revenue stream and helps to lessen volatility in Adaro's business model.

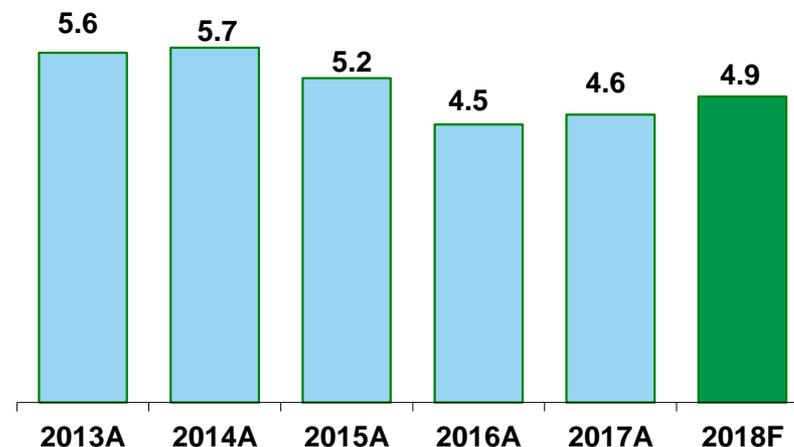
# Adaro Energy 2018 guidance



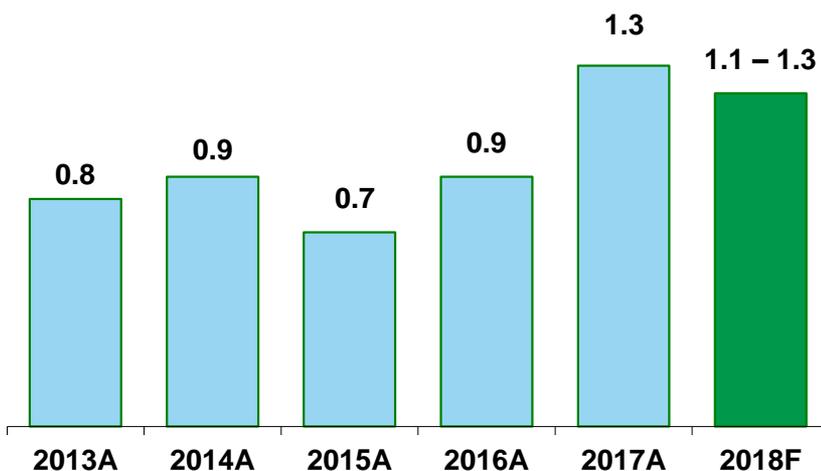
Coal production (Mt)



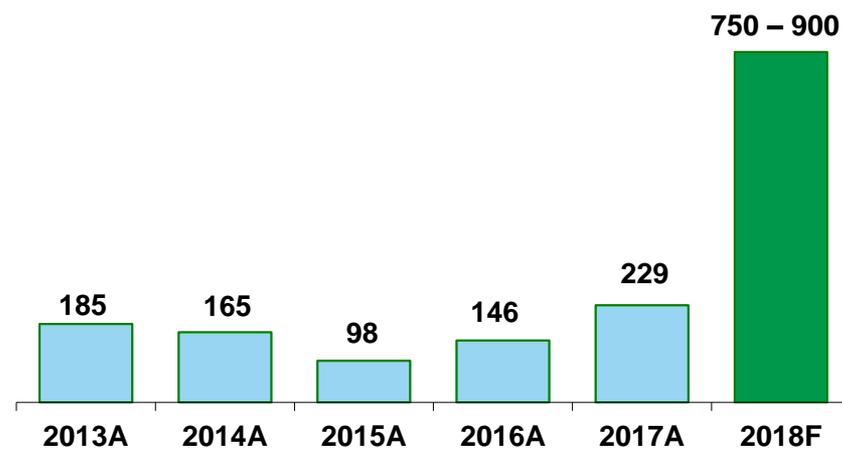
Consolidated planned strip ratio (bcm/t)



Operational EBITDA (US\$ billions)



Capital expenditure (US\$ million)



# Conclusions and takeaways



- Coal market is relatively balanced.
  - Supply discipline continues while demand in most markets are unexpectedly high
- Long term fundamental for coal remains promising.
  - Indonesia, Southeast Asia and India will be the main drivers.
- Adaro offers a complete portfolio of coal from low CV thermal coal to premium hard coking coal, providing us with flexibility in the coal market.
- Our resilient business model with eight business pillars is geared up to take the opportunity.
  - Multiple opportunities across the value chain.
  - Each engine of growth is expected to grow along with the growth of coal fired power generations in Indonesia and Southeast Asia.

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[www.adaro.com](http://www.adaro.com)

Our annual report is available for download here:



# Thank you