
# *Australian Mining: Advancing Australia's Energy, Economic and Environmental Goals*

***George Schuller***
***Chief Operating Officer – Australia***
***Peabody Energy***

Peabody ENERGY

# Key Discussion Themes

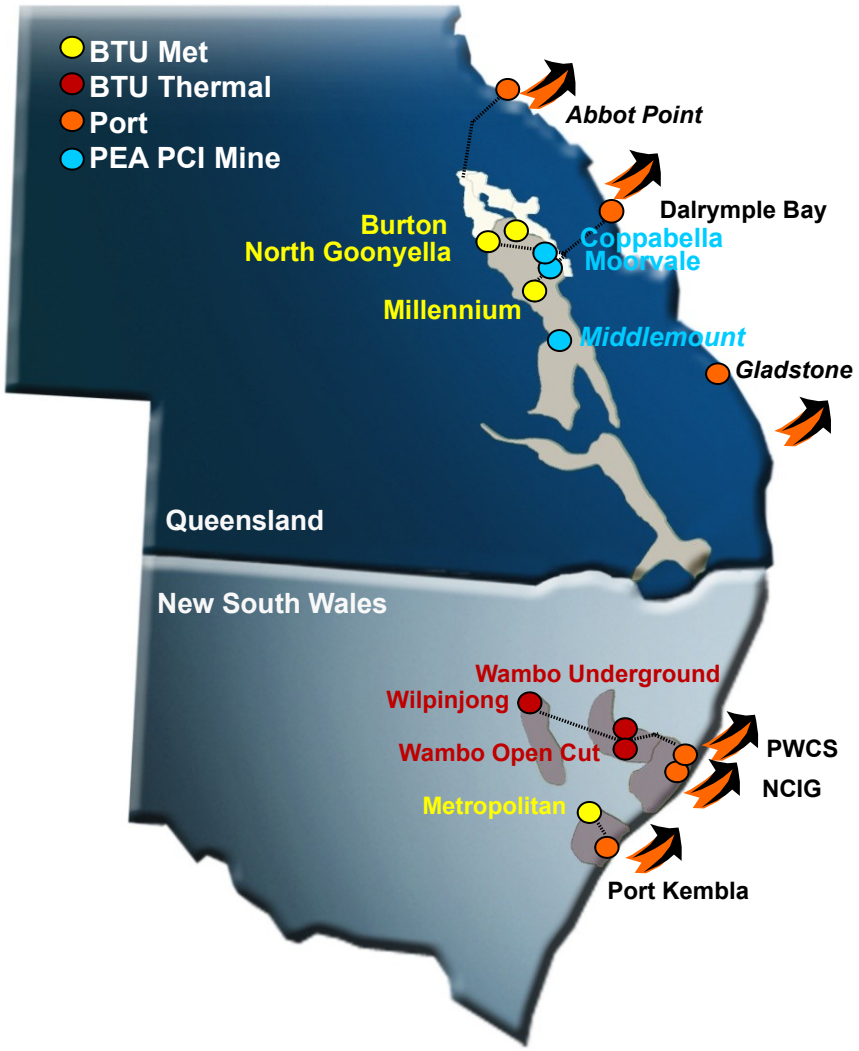
- Coal delivers vital economic benefits for Australia
- State of the industry and how Peabody is ‘controlling the controllable’
- Technologies that offer a path to advancing Australia’s energy, economic and environmental goals.

# About Peabody Energy

- Global private-sector coal company
  - 249.8 million tons sold in 2014 from operations, trading and brokerage
  - $6.79 billion in revenues
  - 7.55 billion tons of proven and probable reserves
- Customers on six continents
- 26 mines across U.S. and Australia
  - 19 surface mines (Australia: eight surface mines)
  - Seven underground mines (Australia: three underground mines)
- Around 3,800 employees across Queensland and New South Wales


Wilpinjong Mine, NSW

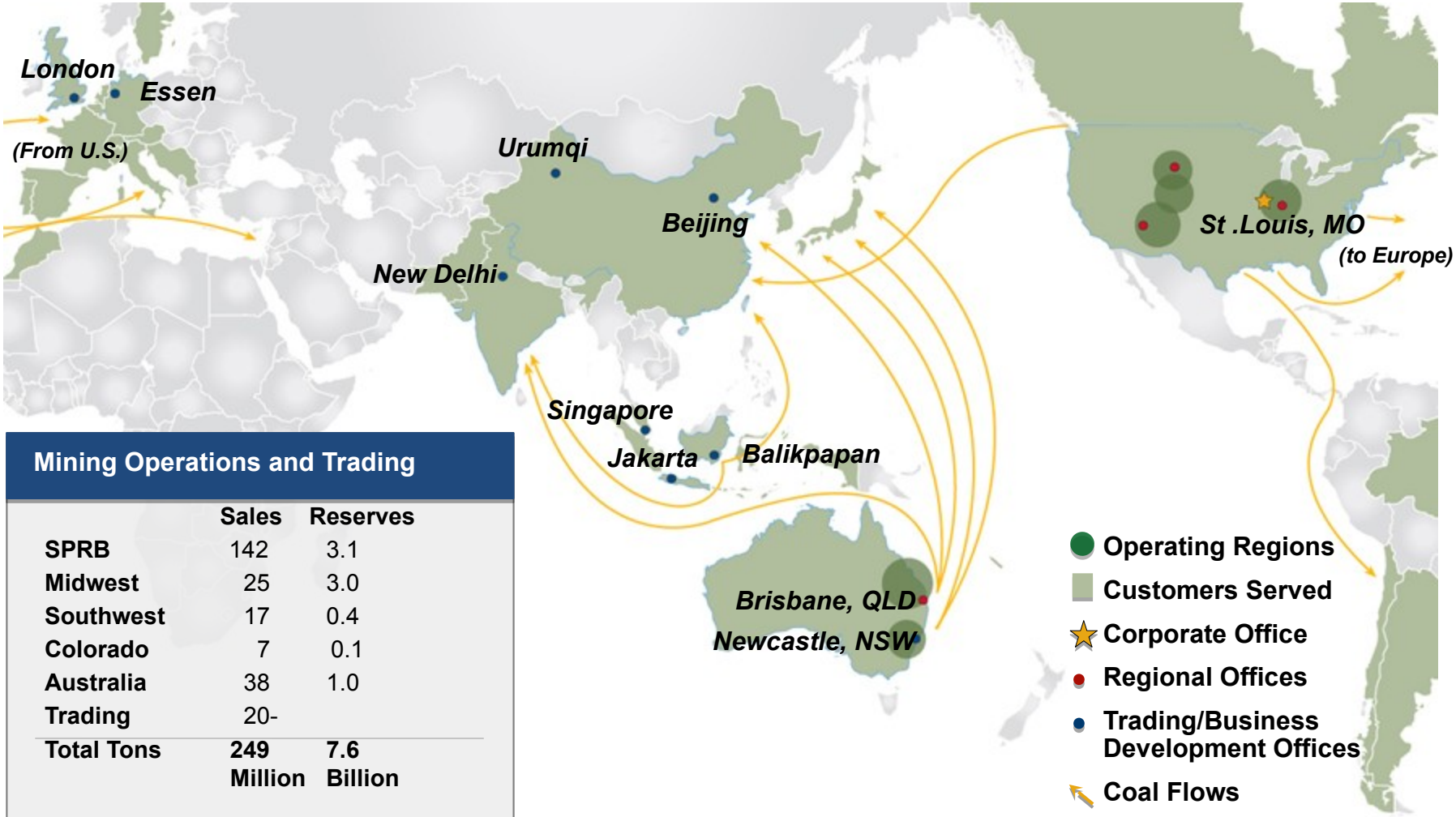
# Peabody Expanded Australian Export Platform Via Joint Ventures, Acquisitions




- The Australia platform has grown rapidly since 2002
- Acquired Macarthur Coal, largest purchase in 132-year history
- Diverse mix of met/thermal coal
- Competitive advantage with mines close to ports; ports near high-growth regions
- Ideally located to meet Asian demand
- Largest seaborne low-vol PCI supplier

# Peabody's Global Platform Serves Customers on Six Continents

## *Peabody Operates 26 Mines Across Australia and the United States*




**Mining Operations and Trading**

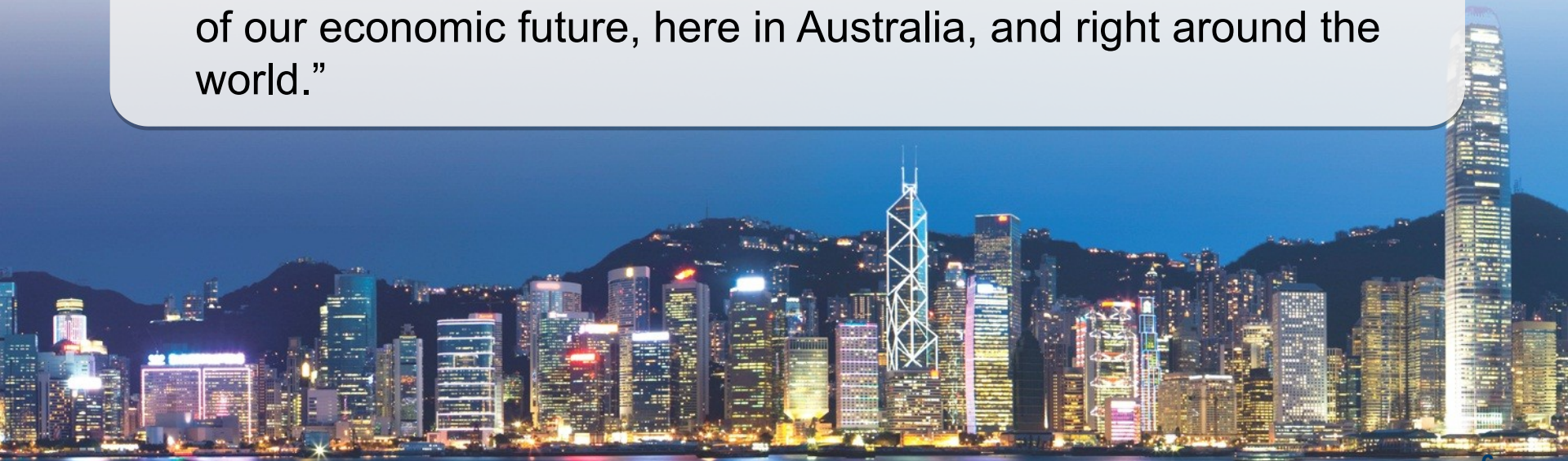
| | Sales | Reserves |
|---|---|---|
| SPRB | 142 | 3.1 |
| Midwest | 25 | 3.0 |
| Southwest | 17 | 0.4 |
| Colorado | 7 | 0.1 |
| Australia | 38 | 1.0 |
| Trading | 20- | |
| **Total Tons** | **249 Million** | **7.6 Billion** |

Reported 2014 sales volumes. Reserves based on 2014 10-K filing. Total sales and reserves variances are based on rounding calculations. Green shading indicates countries served by Peabody.

# Coal Integral to Australia's Economic Development

## *Australia holds world's fourth-largest share of proven coal reserves*

- Over the last five years, coal exports have added, on average, $44 billion a year to Australia's national income
- Coal benefits all Australians by providing affordable energy and through contribution to exports, wages, investment and tax and royalties revenue
- Australian Prime Minister Hon. Tony Abbott MP: "Coal is good for humanity, coal is good for prosperity, coal is an essential part of our economic future, here in Australia, and right around the world."



Sources: Minerals Council of Australia, *The Sydney Morning Herald and ABC News The Prime Minister's official opening of BMA's Caval Ridge*

# Challenges Facing the Industry in Australia

- Slowing global GDP
- Weaker import demands
- Until recently, abundant supply growth
- Longer lower trough than expected
- Lengthy permitting and environmental delays
- Labour agreements
- Port and rail
- Growing activism

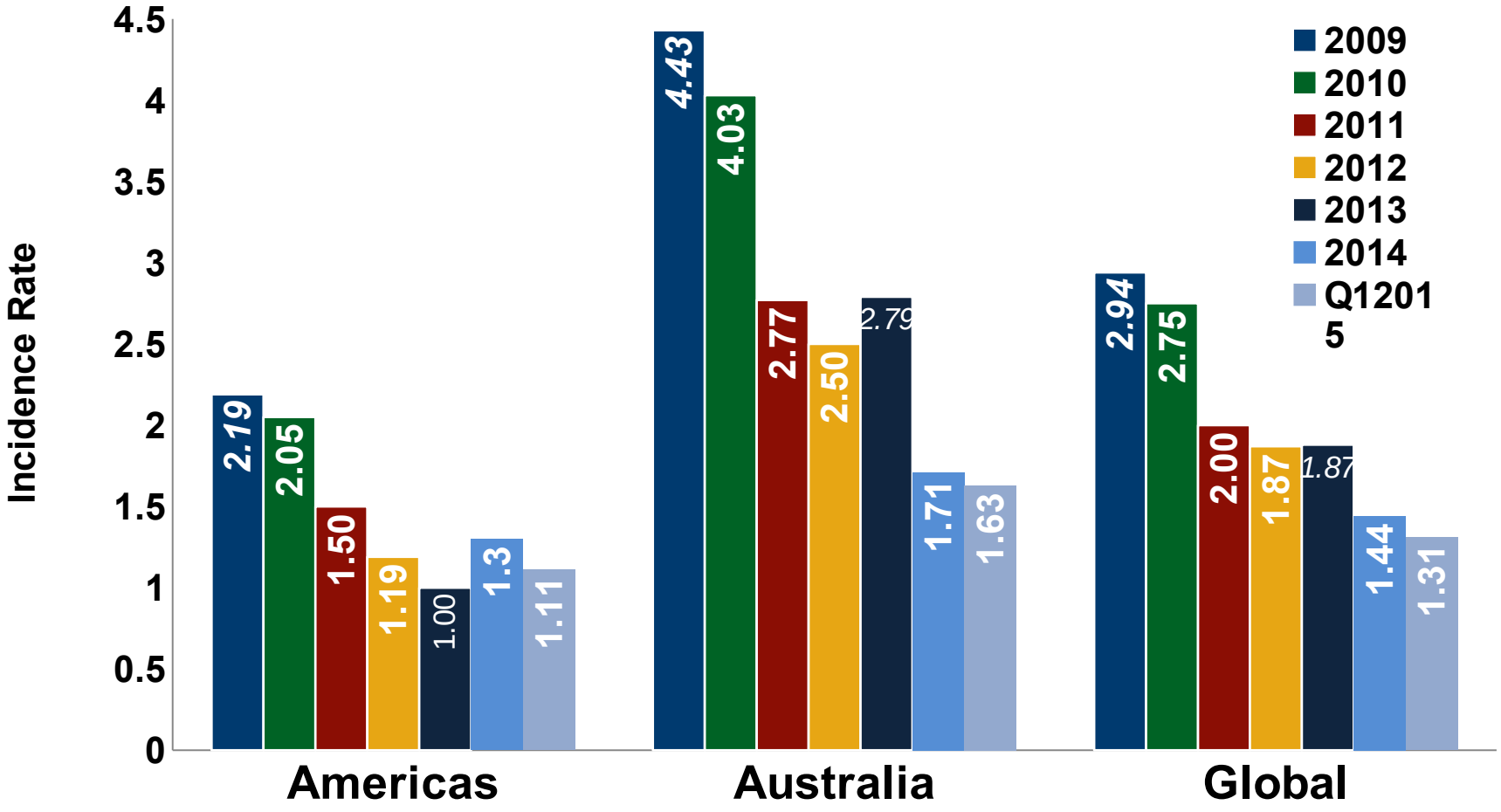
# Navigating Current Market Headwinds

***BTU is managing challenging market conditions by:***

- Driving operational excellence with continuous improvements in safety, productivity, costs and sustainable mining practices
- Exercising continued capital discipline and maintaining adequate cash and liquidity
- Building upon cost reductions and Australia's competitive advantage
- Actively managing Peabody's portfolio of assets
- Increasing global understanding of coal mining and use by advancing awareness and advocacy.

# Peabody Focused on Continuous Improvement in Safety Performance

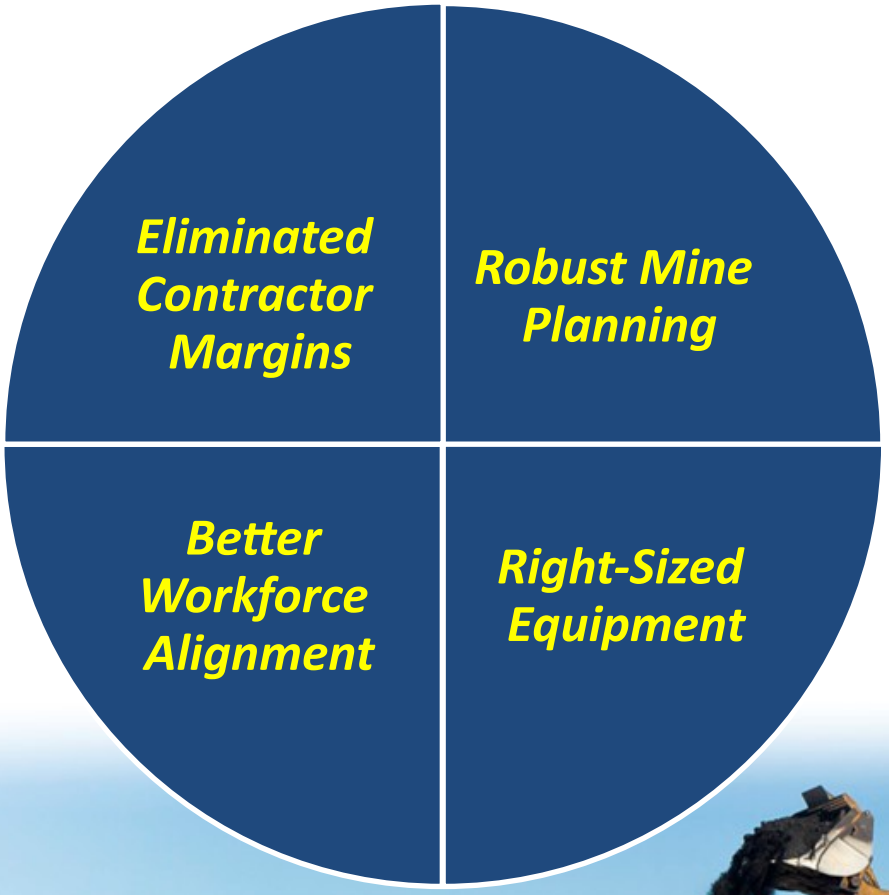
## *2015 Global Incidence Rate Q1 of 1.31*




Incidence rate per 200,000 hours worked. All values are for a calendar year basis.

# Lower Cost: Owner Operator Conversion Drives Costs Down, Performance Up

## *Safety, Productivity & Cost Improvements Evident And Sustained*




***Q2 2012-Q1 2013 Actuals (Contractor) vs 2014 Actuals (OO):***

- Safety improved +30%
- Tons produced exceeded contractor production by +19%
- Unit costs trend 34% lower
- Changing mindsets: One Peabody approach
- Final OO transition at Moorvale completed second half of 2014


Coppabella

# Right Sized Equipment Delivers Productivity Gains

## *Investing in Productivity Improvements*




### *Metropolitan*

- New longwall installed Q2 2014 operating at 2,500 tonnes per hour
- Delivers 12% increase in annual production

### *Millennium*

- Electric Rope Shovel delivers > 20 million BCMs per year
- Key driver of a 50% increase in coal production since 2012

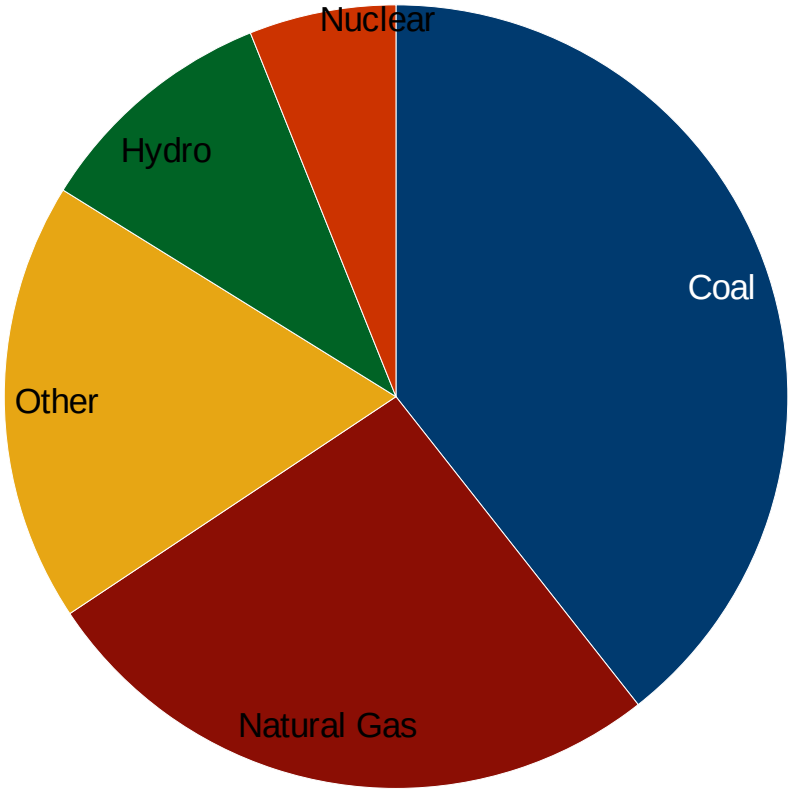
### *North Goonyella*

- Longwall Top Coal Caving (LTCC) technology installed during Q4 2013
- Increases coal recovery by ~ 500 tonne per metre compared to conventional Longwall mining

# Longwall Top Coal Caving At NGC

# Coal: The World's Fastest Growing Major Fuel

***Expected Electricity Growth (2012 – 2040)***

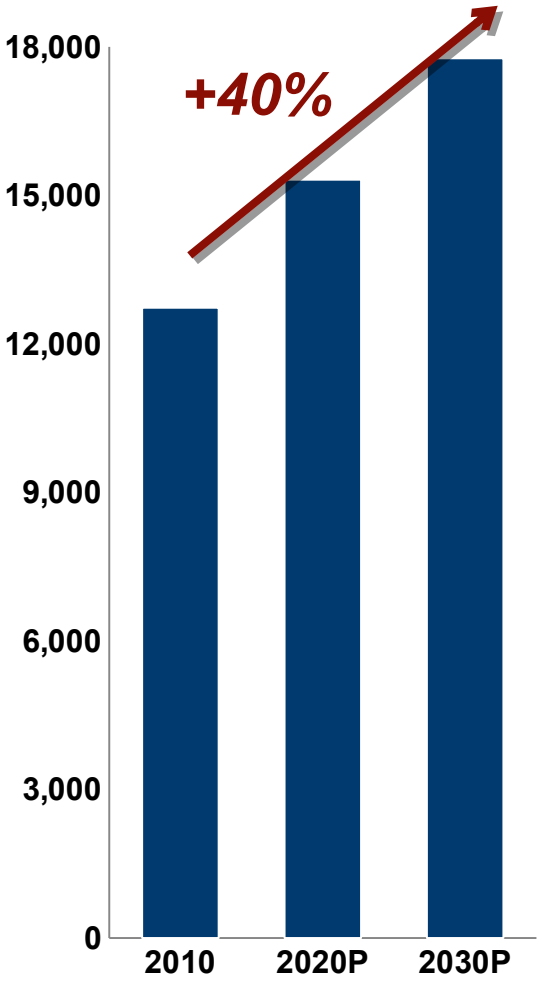



- Coal is the world's fastest growing major fuel this century
- More than 75 million people to be added to cities each year through 2020 driving greater energy and infrastructure needs
- Coal least expensive and most reliable form of electricity generation to meet rising demand

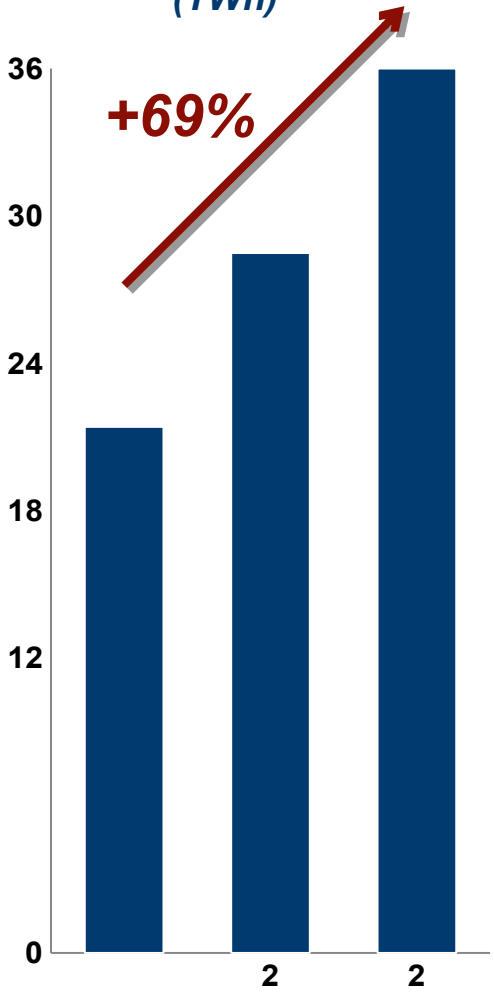
Source: Peabody Energy Analytics; BP Statistical Review of World Energy 2014; International Energy Agency (IEA), 2014 World Energy Outlook Current Policies Scenario.

# Expanding Global Energy Needs Lead to Rising Coal Demand

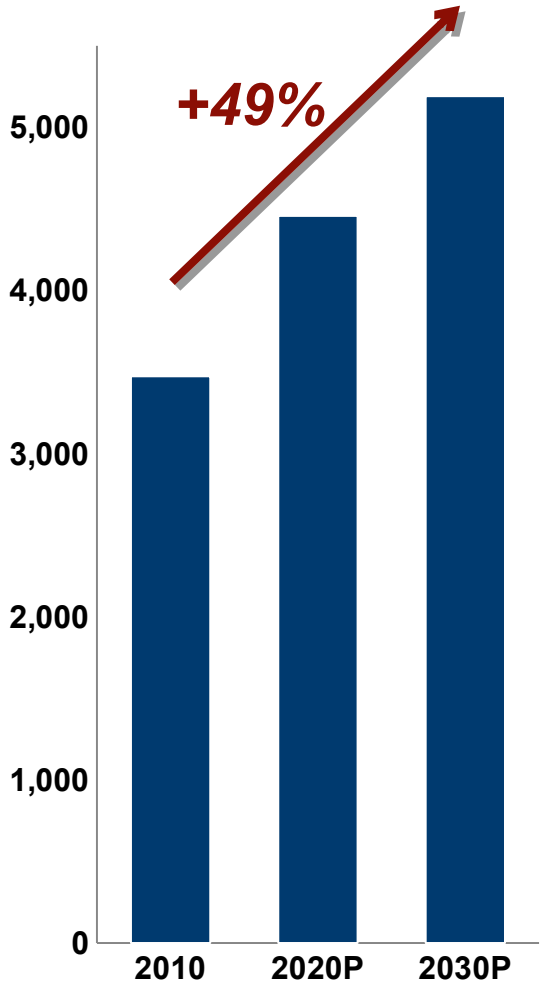
## Global Energy Demand
(MTOE)




## Global Electricity Use
(TWh)




## Global Coal Demand
(MTOE)

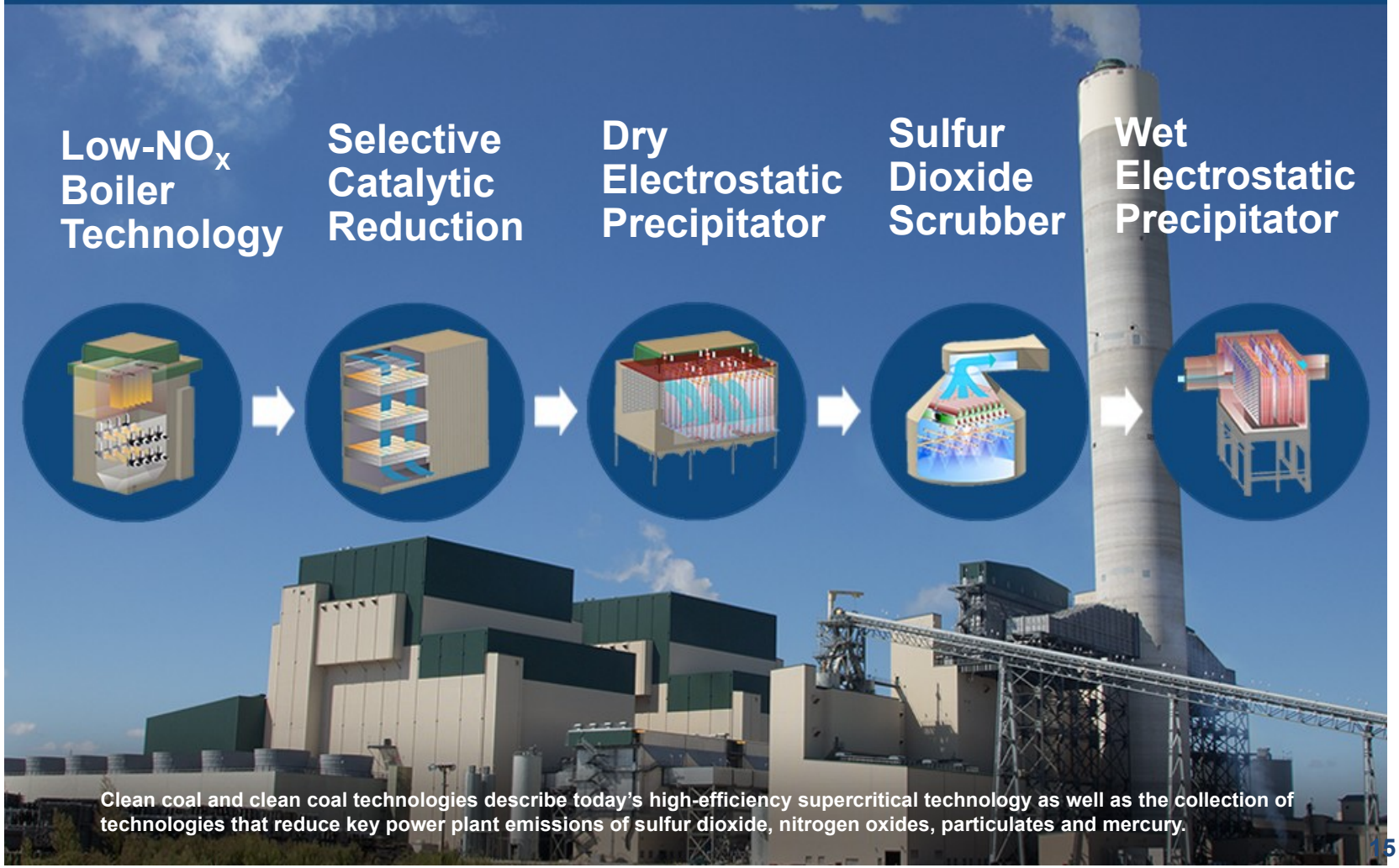



Source: International Energy Agency (IEA), 2014 World Energy Outlook (Current Policies Scenario). Energy and coal demand in Million Tonnes of Oil Equivalent (MTOE). Electricity use in terawatt-hours (TWh).

# Clean Coal Technologies In Broad Use Around the World

## *Today's Technologies Deliver Major Environmental Improvement*

### Supercritical Power with Advanced Emission Controls




Clean coal and clean coal technologies describe today's high-efficiency supercritical technology as well as the collection of technologies that reduce key power plant emissions of sulfur dioxide, nitrogen oxides, particulates and mercury.

# We Can Use More Coal And Significantly Reduce Emissions

- We could achieve $CO_2$ emissions reduction of up to 25% today if Australia's current coal fleet were replaced with ultra-supercritical technology, available
- State-of-the-art rate is 45% and 'off-the-shelf' rates are currently at 40%.
- Increasing the efficiency of coal-fuelled generation by one percentage point reduces CO2 emissions by between 2-3%.
- Large body of research into CCS and other technologies also underway in Australia but no clear policy framework to streamline efforts or incentivise clean coal technologies

Sources: Peabody Global Analytics, Coal Industry Advisory Board.

# Coal: Least Expensive and Most Reliable Form of Electricity Generation

| | Coal | Oil | Natural Gas | Nuclear | Solar/ Wind |
|---|---|---|---|---|---|
| Low Cost | ● | ○ | ◑ | ◔ | ○ |
| Baseload Capacity | ● | ○ | ◑ | ● | ○ |
| Safe to Transport | ● | ◑ | ◑ | ○ | ● |
| Energy Dense | ● | ◑ | ◑ | ● | ○ |
| Widely Available | ● | ◕ | ◕ | ○ | ◔ |
| Technology Based | ● | ● | ● | ● | ● |

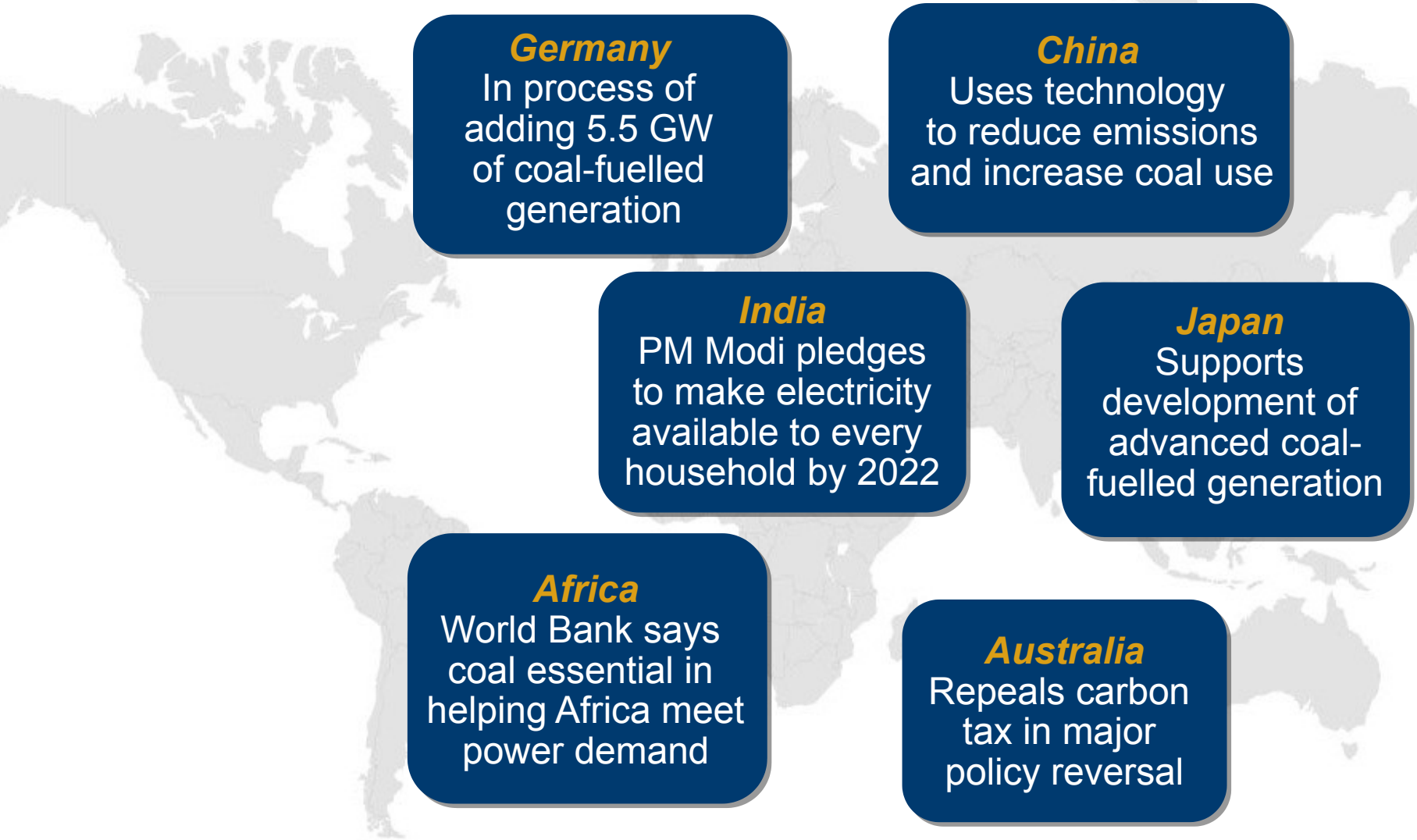
***Coal:***

- Only a fraction of other fuels' costs
- Provides baseload power
- Easily transported
- Energy-dense, abundant and increasingly uses advanced technologies

Source: Peabody Energy Analytics.

# Global Leaders Turn to Coal for Security, Economics, Availability

## *Coal to Pass Oil as World's Largest Energy Source in Coming Years*




Sources: Peabody Global Analytics; News reports.

***QUESTIONS?***

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# Advanced Energy


PeabodyEnergy.com
AdvancedEnergyForLife.com