



# **MURRAY & ROBERTS**

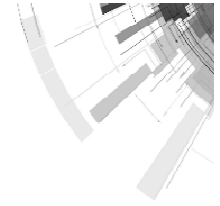
dbAccess South Africa Conference

18 & 19 June 2015

ENGINEERED EXCELLENCE



## PRESENTATION CONTENT

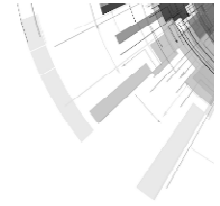


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# MURRAY & ROBERTS INVESTMENT CASE

FOCUSING ON MAXIMISING SHAREHOLDER VALUE

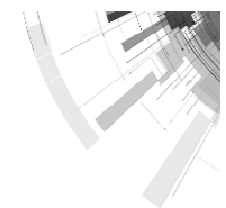


- A focused international engineering and construction group
- Strong balance sheet post implementation of Recovery & Growth plan
- Clearly defined growth strategy and business model (A New Strategic Future)
- Murray & Roberts differentiator – natural resources market sectors and international diversification
- Growth opportunity from expected medium term recovery of resources cycle, through diversification of business model and international expansion
- Robust near orders (Infrastructure & Building and Underground Mining platforms) and project pipeline (all platforms) considering challenging market conditions
- Upside cash potential from claims resolution over the next two years (Gautrain and Dubai Airport)
- Analysts forecast upside to the current Murray & Roberts' share price, higher than local peers, supporting investment case



## GROUP EXECUTIVE

### EXPERIENCED MANAGEMENT TEAM



**HENRY LAAS**  
BEng (Mining) MBA  
31 years in sector

#### GROUP CHIEF EXECUTIVE

Henry joined in 2001 and was appointed to the Board and as **Group chief executive** in July 2011.

**COBUS BESTER**  
BCom (Acc) Hons CA(SA)  
26 years in sector

#### GROUP FINANCIAL DIRECTOR

Cobus joined in 2006 and appointed to the Board as **Group financial director** in July 2011.

**KEVIN GALLAGHER**  
BEng (Mechanical) Hons,  
FIEAust  
25 years in the sector

#### OPERATIONS EXECUTIVE

Kevin joined the Group in 2011 and appointed to the executive committee on 11 December 2013. He is responsible for **the Oil & Gas operating platform**.

**ORRIE FENN**  
BSc (Hons) Eng MPhil Eng  
Deng  
33 years in the sector

#### OPERATIONS EXECUTIVE

Orrie joined and was appointed to the executive committee in 2009. He is responsible for **the Underground Mining operating platform**.

**JEROME GOVENDER**  
BSc (QS) MSc MBA  
21 years in the sector

#### OPERATIONS EXECUTIVE

Jerome joined in 2002 and was appointed to the executive committee on 1 August 2012. He is responsible for **the Infrastructure & Building operating platform**.

**ANDREW SKUDDER**  
BSc PDM MBA  
14 years in the sector

#### SUSTAINABILITY EXECUTIVE

**IAN HENSTOCK**  
BCompt (Hons) CA(SA) HDip Tax Law MBA  
7 years in the sector

#### COMMERCIAL EXECUTIVE

**THOKOZANI MDLULI**  
BSc PBL MBL  
20 years in the sector

#### HEALTH, SAFETY & ENVIRONMENT EXECUTIVE



COBUS BESTER

ORRIE FENN

KEVIN GALLAGHER

JEROME GOVENDER

IAN HENSTOCK



HENRY LAAS

THOKOZANI MDLULI

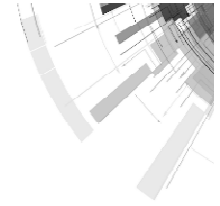
ANDREW SKUDDER

"Sector" is defined as the Engineering, Construction and Mining sectors.





## PRESENTATION CONTENT

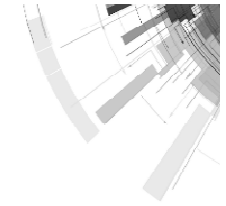


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# MURRAY & ROBERTS GROUP

A FOCUSED INTERNATIONAL ENGINEERING & CONSTRUCTION GROUP



**A Group of world class companies and brands aligned to the same purpose and vision, and guided by the same set of values with a common owner, Murray & Roberts Holdings Ltd**

**Stop.Think.Act.24/7: Safety first in everything we do**

## Operating Platforms

**Oil & Gas**

**Underground Mining**

**Power & Water**

**Infrastructure & Building**

## Murray & Roberts Values

- Integrity
- Respect
- Care
- Accountability
- Commitment

## Murray & Roberts Purpose

Delivery of infrastructure to enable economic and social development in a sustainable way.

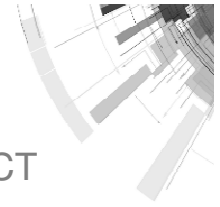
## Murray & Roberts Vision

By 2020 the Group aims to be a leading diversified project engineering, procurement and construction group in selected natural resources sectors and supporting infrastructure.

**PLATFORMS ARE NAMED AFTER PRIMARY MARKET SEGMENTS BUT ALSO UNDERTAKE WORK IN SELECTED COMPLIMENTARY MARKETS. THE PREVIOUS ENERGY & INDUSTRIAL PLATFORM HAS BEEN RENAMED TO POWER & WATER.**

## BUSINESS MODEL

ENGINEERING AND CONSTRUCTION SERVICE OFFERING ACROSS PROJECT VALUE CHAIN IN SELECTED NATURAL RESOURCES MARKET SECTORS

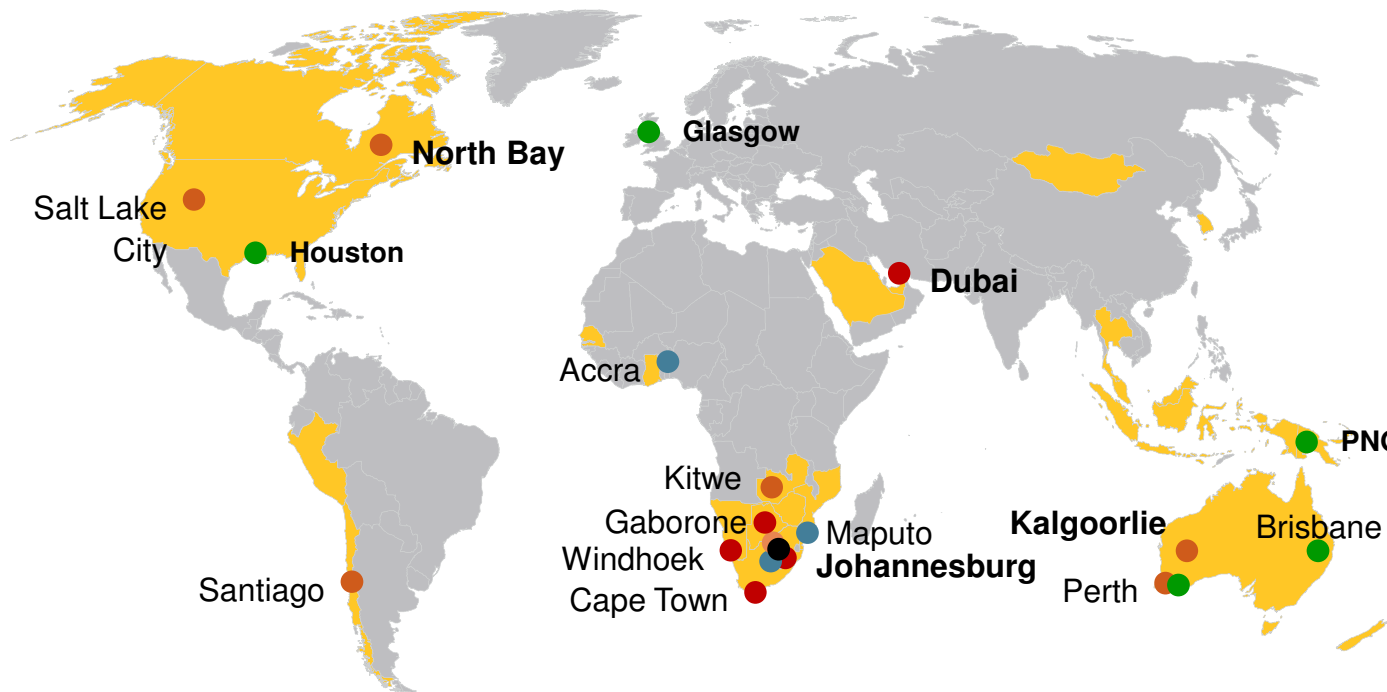
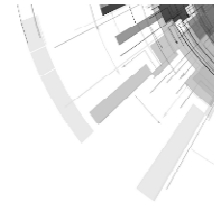


Platform	Capabilities	Geography	Project value chain
Oil & Gas	<ul style="list-style-type: none"> <li>Detailed engineering</li> <li>Procurement</li> <li>Construction</li> <li>Commissioning and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Australasia</li> <li>Asia</li> <li>Americas</li> <li>EMEA</li> </ul>	Design and Engineering / Technical Consulting
Underground Mining	<ul style="list-style-type: none"> <li>Detailed engineering</li> <li>Procurement</li> <li>Construction</li> <li>Commissioning and maintenance</li> <li>Operations</li> </ul>	<ul style="list-style-type: none"> <li>Americas</li> <li>Africa</li> <li>Asia</li> <li>Australia</li> </ul>	Process EPC
Power & Water	<ul style="list-style-type: none"> <li>Detailed engineering</li> <li>Procurement</li> <li>Construction</li> <li>Commissioning and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Africa</li> </ul>	Infrastructure Construction General
Infrastructure & Building	<ul style="list-style-type: none"> <li>Detailed engineering</li> <li>Procurement</li> <li>Construction</li> <li>Commissioning</li> </ul>	<ul style="list-style-type: none"> <li>Africa</li> <li>Middle East</li> </ul>	Service and Operations



# GLOBAL REACH

INTERNATIONAL DIVERSIFICATION



## Offices

- Corporate
- Underground Mining
- Infrastructure & Building
- Oil & Gas
- Power & Water

 Murray & Roberts active projects

## International diversification approach:

➤ **Geographic positioning.**

**Permanent presence (offices) in regions with major opportunity in selected market segments**

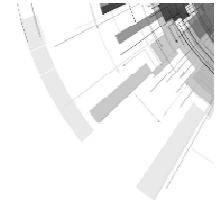
➤ **Major clients.**

**Follow major clients on project-by-project basis into other regions**

**Globally employing more than 20 000 people**



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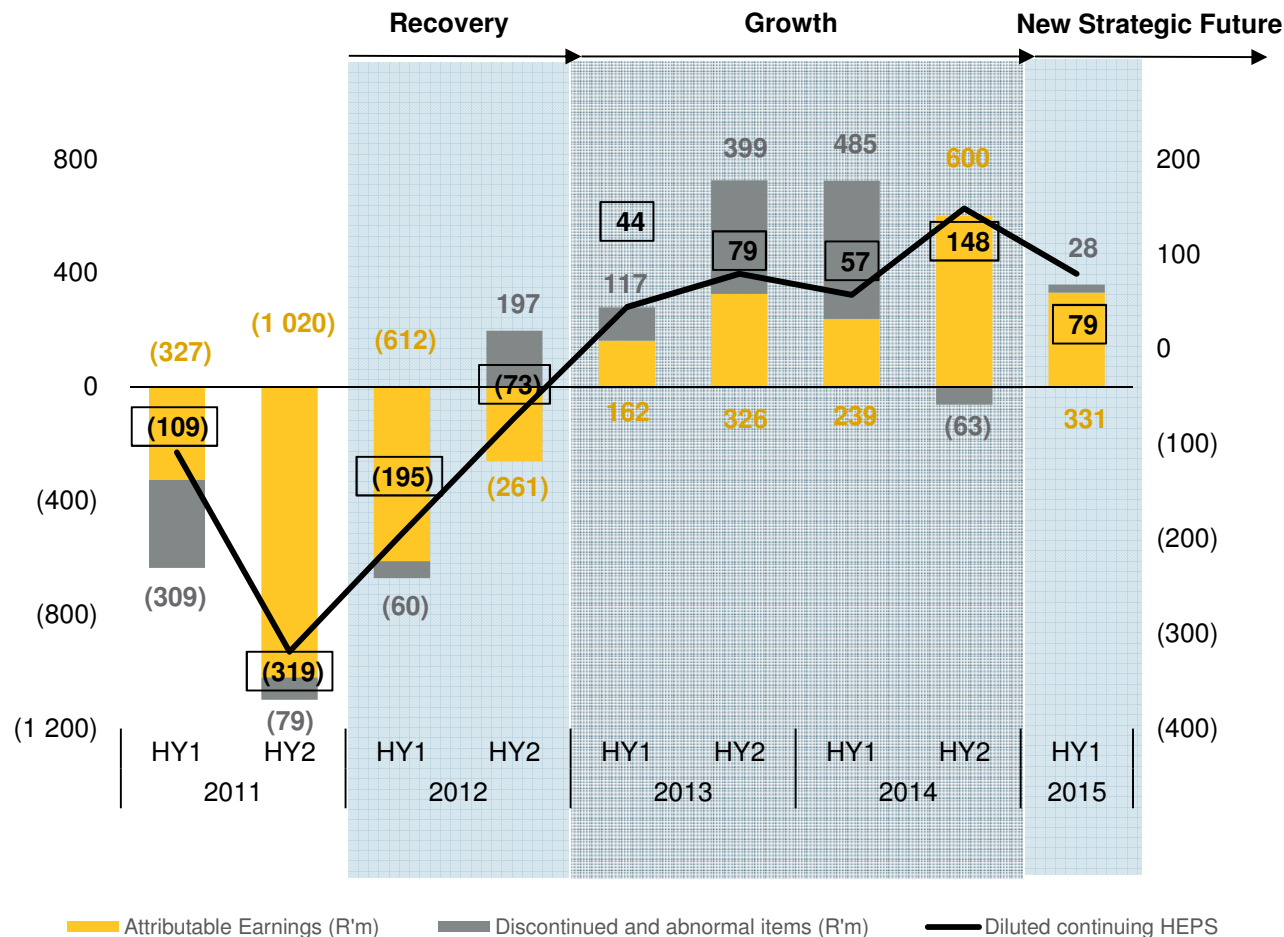
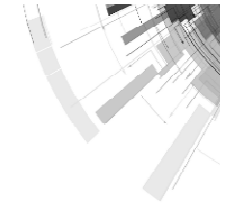


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# HISTORICAL FINANCIAL PERFORMANCE

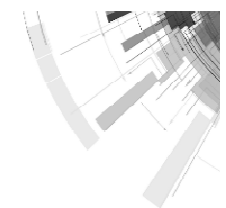
## EARNINGS AND HEPS



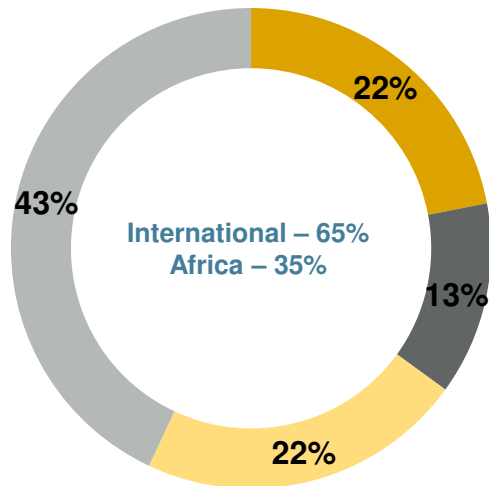
- Strong action during Recovery year restored profitability
- Historically H2's stronger than H1's
- 39% increase in continuing HEPS for FY15 H1 result
- Oil & Gas expected to return similar FY15 H2 result as in FY15 H1
- Underground Mining expected to return stronger FY15 H2 result than FY15 H1
- Power & Water restructured following disappointing results

# PLATFORM CONTRIBUTION

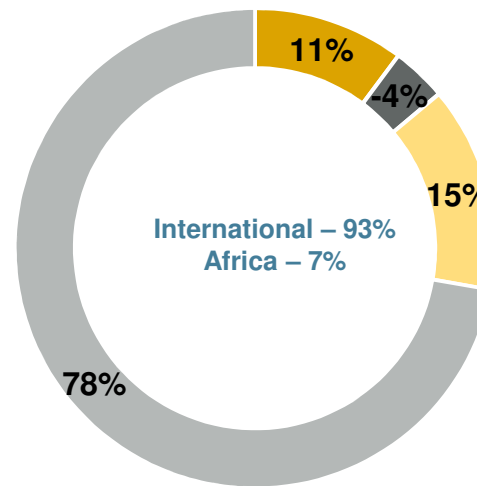
EARNINGS UNDERPINNED BY INTERNATIONAL PLATFORMS  
AS AT END-DECEMBER 14



**Revenue**



**EBIT (Before Corporate Cost)**



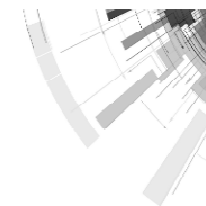
- Oil & Gas\*
- Underground Mining\*
- Power & Water
- Infrastructure & Building

- International platforms (Oil & Gas and Underground Mining) contribute 65% of revenue and 93% of EBIT (Before Corporate costs)
- Africa-focused platforms present growth potential from a low base as and when market becomes more favourable

\* International

# ORDER BOOK

GEOGRAPHY & TIME DISTRIBUTION AS AT END-DECEMBER 14



Platform	Order book Rbn		Order book % split		Order book Rbn			FY15 H1 % EBIT margin	% EBIT margin aspiration
	Dec 2014	Jun 2014	SADC	Int.	FY Time Distribution				
Oil & Gas	<div><div>12.2</div></div>	<div><div>16.8</div></div>	<div><div></div><div>100</div></div>		2015	<div><div></div></div> 5.1		7	5 - 7
					2016	<div><div></div></div> 5.9			
					>2017	<div><div></div></div> 1.2			
Underground Mining	<div><div>13.8</div></div>	<div><div>9.9</div></div>	<div><div>60</div><div>40</div></div>		2015	<div><div></div></div> 5.6		2	5 - 7
					2016	<div><div></div></div> 3.9			
					>2017	<div><div></div></div> 4.3			
Power & Water	<div><div>5.4</div></div>	<div><div>6.2</div></div>	<div><div>100</div></div>		2015	<div><div></div></div> 2.1		-1	5 - 7
					2016	<div><div></div></div> 1.8			
					>2017	<div><div></div></div> 1.5			
Infrastructure & Building	<div><div>6.4</div></div>	<div><div>8.0</div></div>	<div><div>68</div><div>32</div></div>		2015	<div><div></div></div> 3.4		2	< 3
					2016	<div><div></div></div> 2.8			
					>2017	<div><div></div></div> 0.2			
	37.8	40.9	48%	52%	2015	2016	>2017		
					R16.2bn	R14.4bn	R7.2bn		

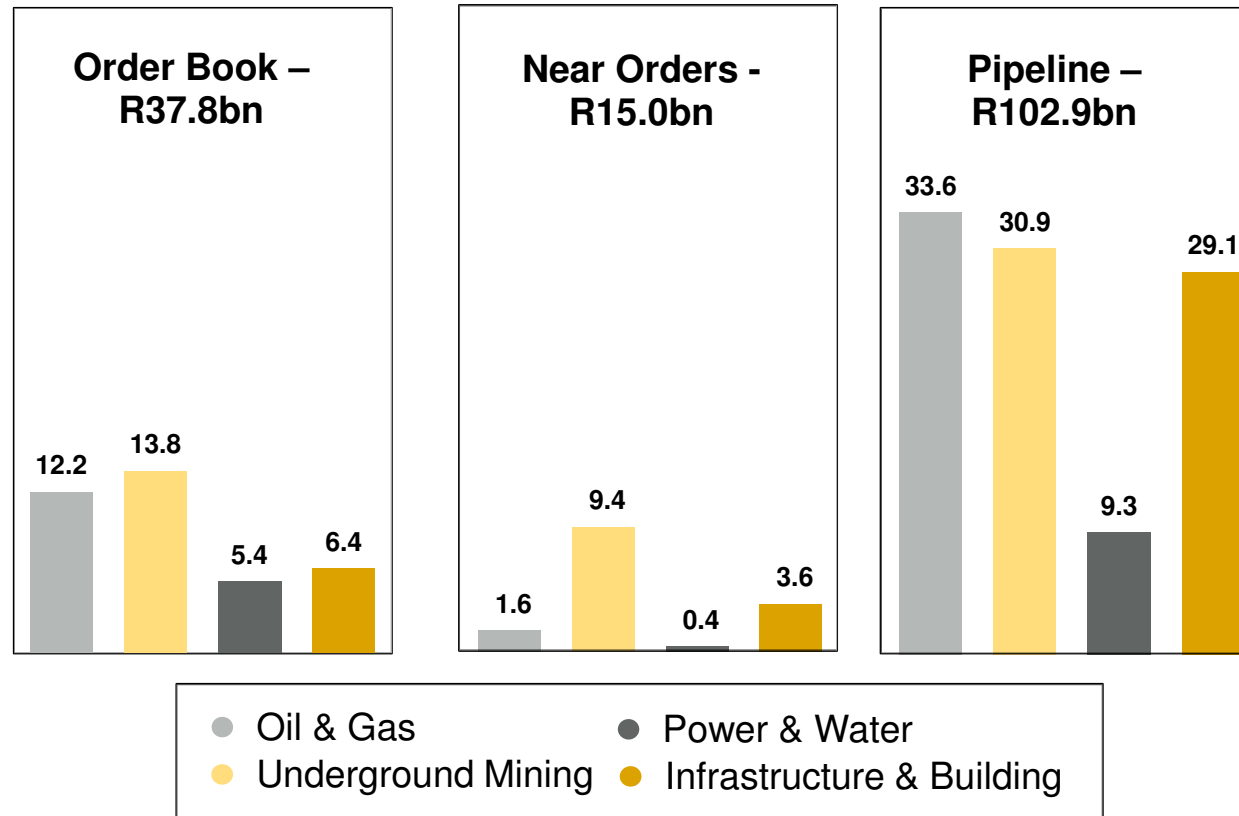
Underground Mining platform expected to achieve better margins for FY15 H2



# ORDER BOOK, NEAR ORDERS & PIPELINE

ROBUST NEAR ORDERS AND PROJECT PIPELINE

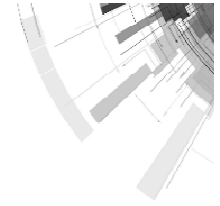
AS AT END-DECEMBER 14



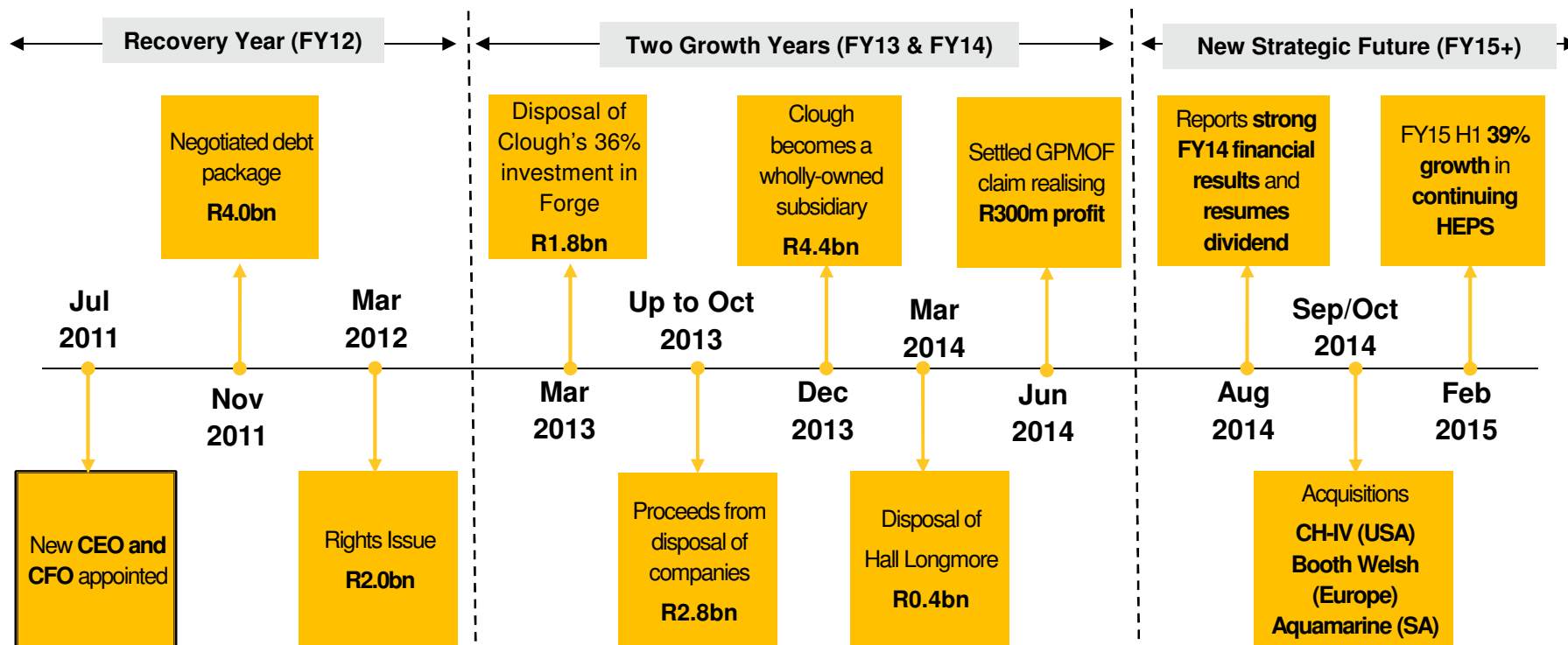
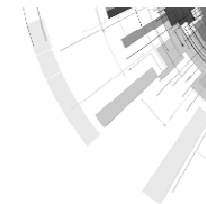
- Decrease in order book from R40,9bn (Jun 14) mainly due to Oil & Gas orders transitioning to smaller, shorter term contracts
- Underground Mining order book includes R3,0bn Booysendal (contract mining) and R1,3bn Goderich (shaft refurbishment) awarded in December 2014
- Kalagadi Manganese (contract mining) with a value of approx. R4,8bn in Underground Mining near orders (now secured)
- R2 billion from near orders awarded in the Infrastructure & Building platform after December 14
- Near term orders are for preferred bidder status with award subject to financial and commercial close
- Pipeline only includes targeted projects to be tendered on



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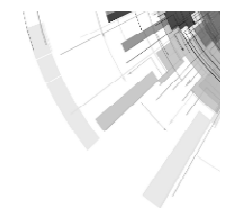
## KEY ACHIEVEMENTS:

- Successfully delivered Recovery & Growth strategy between FY12 and FY14
- Restored financial stability, returned to sustainable profitability and resumed dividend payments
- Created a focused international engineering and construction group
- Well positioned to take advantage of growth opportunities in selected market sectors
- Settled GPMOF major claim and received cash
- Gautrain Delay & Disruption and Dubai International Airport major claims processes progressing well and are expected to realise future value



## A NEW STRATEGIC FUTURE

A LEADING DIVERSIFIED INTERNATIONAL PROJECT ENGINEERING,  
PROCUREMENT AND CONSTRUCTION GROUP BY 2020



### Strategic objectives

### Strategic priority

#### Grow profitability and cash flows

- Resolve Gautrain and Dubai claims and Gautrain water ingress
- Enhanced EBT, free cash flow and ROICE performance

#### Focus on international natural resource market sectors

- Grow gas (LNG), metals & minerals and power market presences
- Enter industrial water market sector

#### Diversify business model into higher margin segments

- Expand specialist engineering capabilities into all project value chain segments to offer more complete project solutions to clients
- Grow commissioning, brownfields and O&M capabilities
- Invest in selected project development opportunities

#### Deliver project and commercial management excellence

- Enhanced EPC and project management capabilities
- Entrench project, risk and commercial management best practice

#### Enhance the safety, performance and diversity of our people

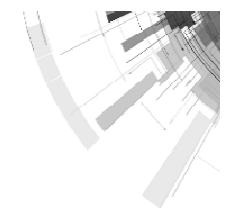
- Achieve industry leading HSE performance
- Enhance leadership capabilities and bench strength
- Improve employee relations and employee engagement

#### Enhance shareholder value

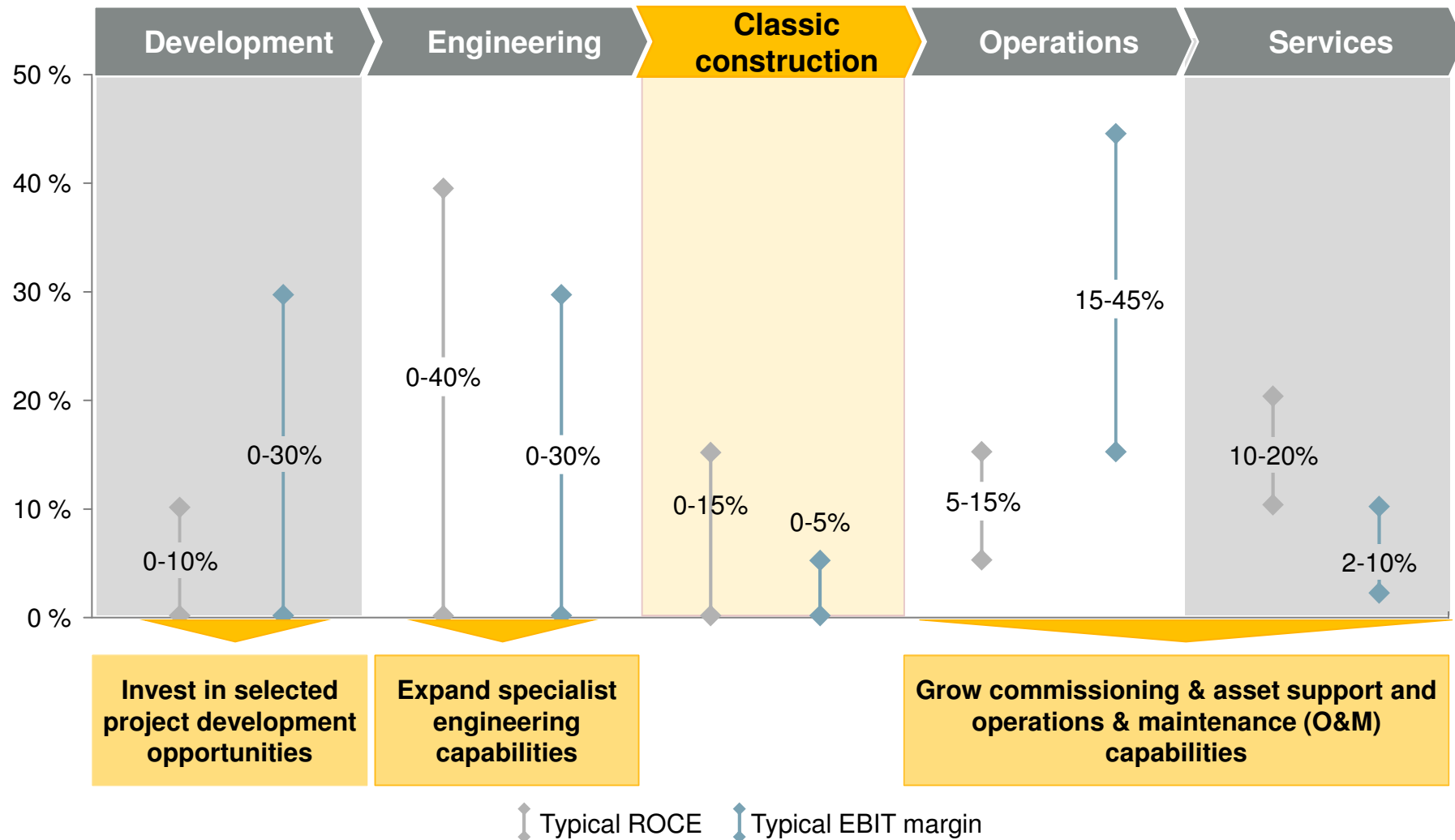
- Reposition Murray & Roberts and its brand with all stakeholders
- Enhance market valuation and positioning
- Develop attractive dividend policy

# PROJECT VALUE CHAIN

IMPROVED RETURNS THROUGH BUSINESS MODEL DIVERSIFICATION  
INCREASE CONTRIBUTION OUTSIDE CLASSIC CONSTRUCTION



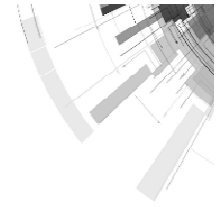
*Typical return and margin range per value chain segment*



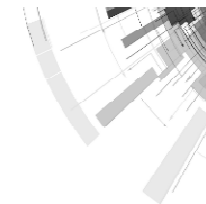
Source: Annual reports, Bloomberg, BCG



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## Oil & Gas (Appendix 1)

- Oil price is expected to recover from its current lows
- Growing Australasian LNG commissioning, operations & maintenance market. Clough has largest share of Australasian commissioning market
- 3 additional train LNG opportunity in PNG for O&G majors
- New geographies – strategic acquisitions CH-IV (USA) and Booth Welsh (Europe)
- Growth opportunities in the gas sector and the US / Africa expected to present major opportunity in LNG
- Growing energy demand in China and Europe expected to support investment in gas discoveries

## Underground Mining (Appendix 2)

- Commodity cycle upturn expected in the medium term
- Anticipated growth is reflected in a stronger order book largely from infrastructure replacement work
- Growing opportunities in USA, Canada and Africa and order book indicates promising early signs of market recovery
- Well positioned for major project opportunities: York Potash (UK), Oyu Tolgoi (Mongolia), Freeport scope growth (Indonesia)
- June 2015 secured R4.8bn manganese contract mining project in South Africa (Kalagadi)

## Power & Water (Appendix 3)

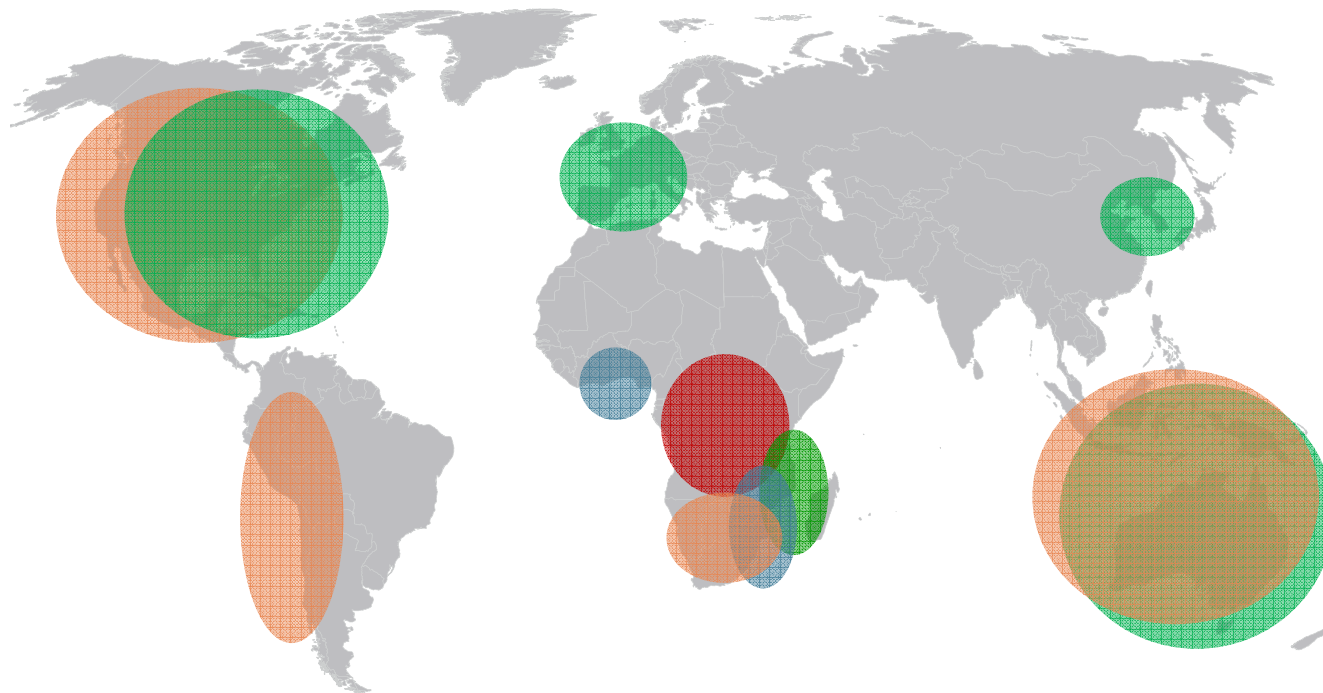
- Medupi & Kusile to provide baseload for the next 4 to 5 years, although declining year-on-year.
- Power sector is experiencing increased levels of private investment as government launches tenders for thermal generation IPPs
- South African nuclear capacity to be added to power mix by 2030
- Well positioned for significant opportunities in the renewable power sector – Ilanga solar opportunity reached financial close in March 2015 – mobilisation to site in FY16 H2
- Strategic acquisitions: Aquamarine (Water Treatment)

## Infrastructure & Building (Appendix 4)

- Co-developer of residential building opportunity with expected project value of about R1 billion
- Building opportunities in Africa with a South African blue chip financial services firm
- Need for new transport infrastructure with rail and port sectors as a key source of growth
- South African nuclear capacity to be added to power mix by 2030

# INTERNATIONAL FOCUS AREAS

POSITIONED FOR GROWTH IN TARGET GEOGRAPHIES



- **Underground Mining**
- **Oil & Gas**
- **Infrastructure & Building**
- **Power & Water**

## • Oil & Gas (International focus)

- Australasia commissioning over next 3 years followed by substantial O&M and brownfields opportunities (Accenture Australia LNG Readiness Report)
- Greenfield opportunities in PNG by FY17 and medium term in USA

## • Underground Mining (International focus)

- Growing opportunities from brownfields stay-in business capex
- Greenfield expansion from expected upturn in commodity cycle in the medium-term

## • Power & Water (Africa focus)

- Medupi & Kusile power station projects provide baseload
- Renewable sector opportunities. Ilanga solar in SA, financial close reached

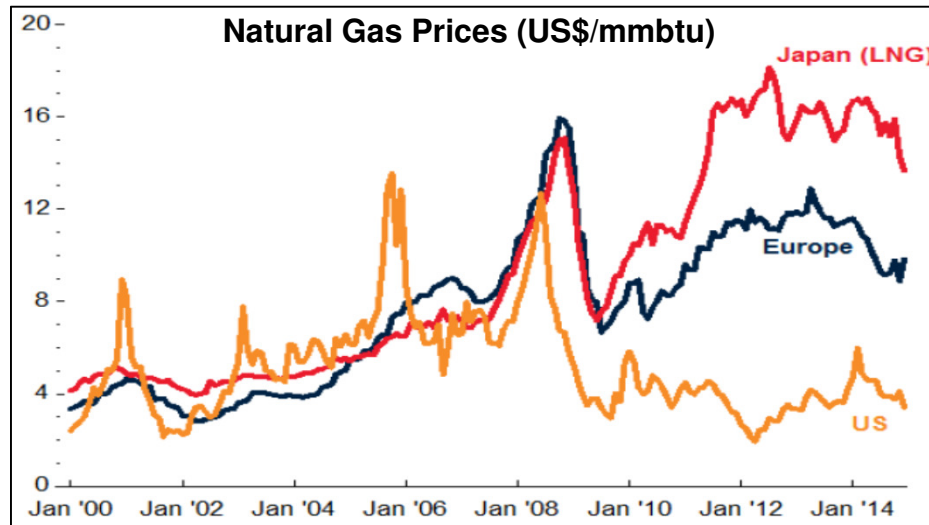
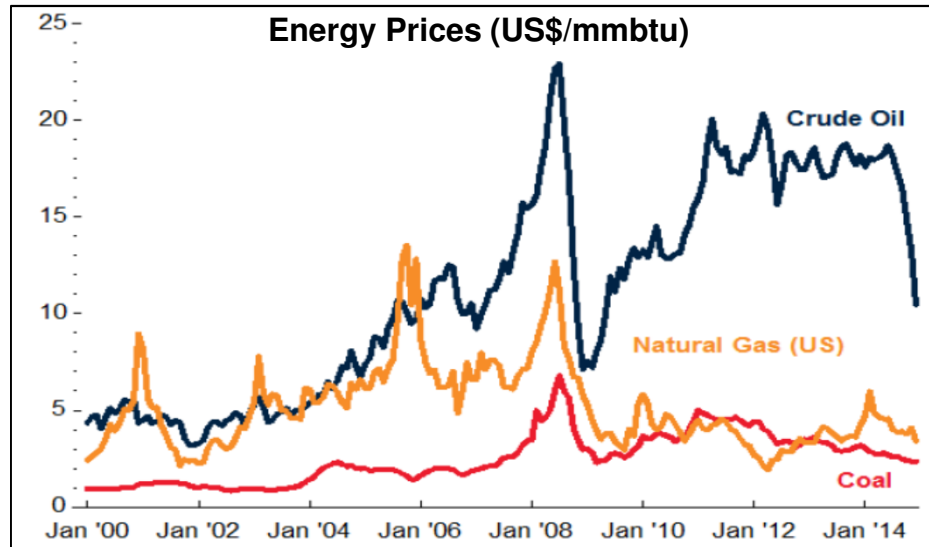
## • Infrastructure & Building (Africa focus)

- Building opportunities in Africa with blue-chip SA financial institution
- Residential development opportunity in SA
- Anticipated SA public sector infrastructure spend



## OIL PRICE

OIL PRICE COLLAPSE DEC 14 AND WORLD BANK FORECASTS MODEST RECOVERY IN 2016



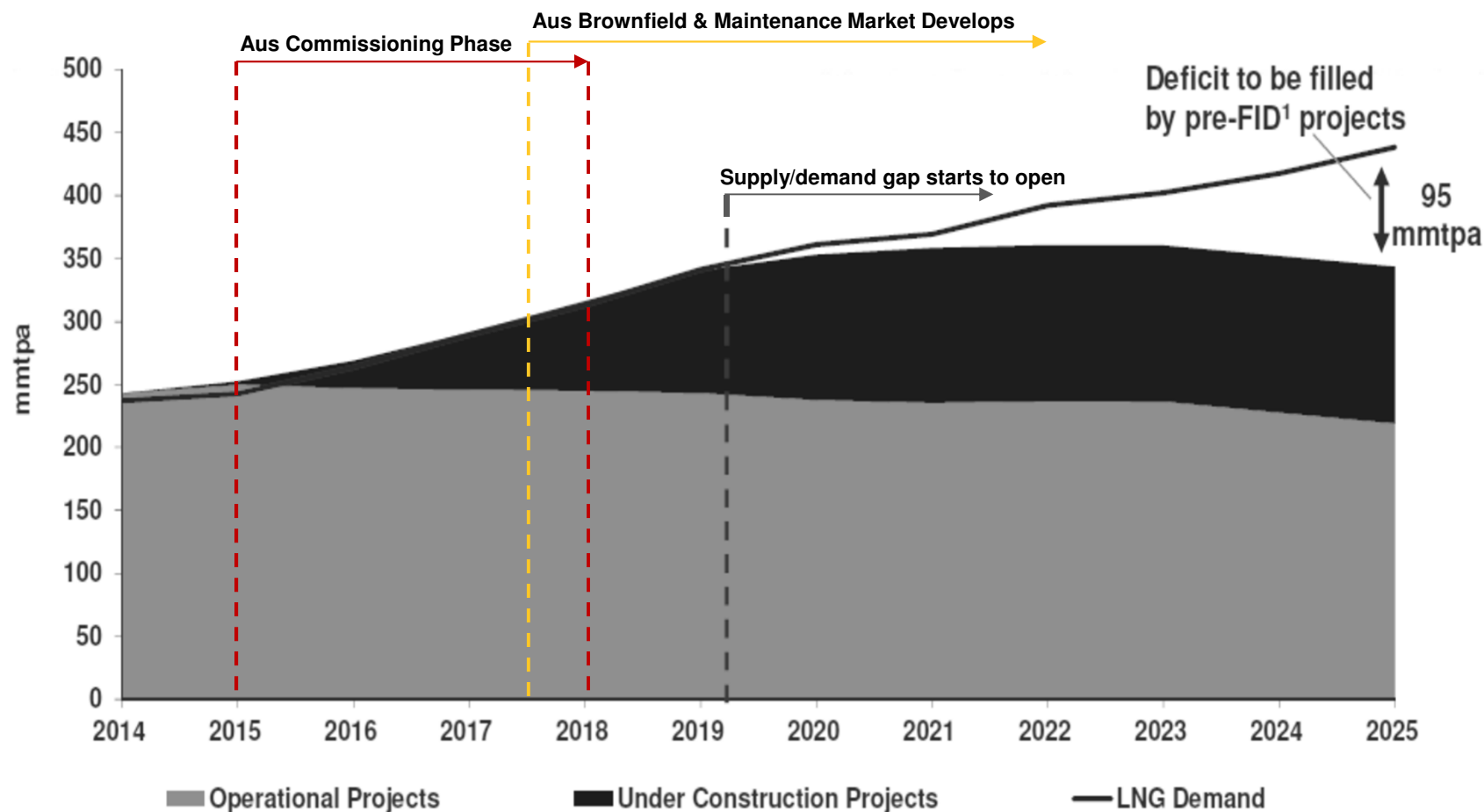
Source: World Bank

- The oil market fluctuated within a tight band around \$105/bbl between 2011 and 2013, one of the least volatile three-year periods in recent history
- OPEC's decision to abandon targeting of prices led to a sharp correction, with January 2015 averaging less than \$50/bbl
- The large production capacity currently in place points to a continuation of low oil prices for some time, with prices expected to recover modestly in 2016
- The global natural gas market remains segregated by geography, with price differentials between U.S., European, and Asian prices
- Natural gas (LNG) prices in Asia (main LNG market) linked to oil

# GLOBAL LNG SUPPLY AND DEMAND

GLOBAL LNG SUPPLY FROM PRE-FID PROJECTS WILL BE REQUIRED TO MEET DEMAND POST 2019

By 2020, pre-FID capacity is required to balance the market and growth in Asian demand could pull this forward

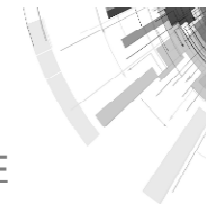


FID – Final Investment Decision. Pre-FID capacity refers to capacity which has not taken financial closure and is not under construction yet.

Source: Wood Mackenzie March 2015

# FORECAST LNG DEMAND GROWTH

WILL REQUIRE GLOBAL CAPITAL EXPENDITURE OF ~ US\$355BN OVER THE PERIOD 2015 TO 2025



## LNG Supply – Demand Dynamics Drive CAPEX

**Strong LNG demand growth in Pacific Basin will drive investment in supply projects**

- Global LNG demand is estimated to grow from 240 mmtpa in 2014 to 440 mmtpa by 2025 (6% growth p.a.). **Pacific Basin countries will account for 70% of this demand growth**
- LNG supply from operational & under-construction projects will be ~350 mmtpa but this supply only balances demand up to 2019
- **~95 mmtpa of new LNG liquefaction capacity will be required by 2025 to meet demand**

**New LNG supply will primarily come from projects in North America, Australasia and East Africa**

- Australia is set to become the world's largest LNG exporter by 2018 based on existing and committed projects. 6 liquefaction projects with capacity to produce 50 mmtpa are currently under construction in Australia
- East African LNG looks promising with potential to build 23 mmtpa and beyond by 2025; but challenges need to be overcome
- Growth in shale gas production is driving the North American LNG export story. Estimated potential for up to 95 mmtpa LNG supply from North America by 2025 (80 from US and 15 from Canada)
- **Project economics, country issues and buyer support will drive the development of projects**

**Capital expenditure of ~US\$355bn is estimated on LNG supply projects by 2025**

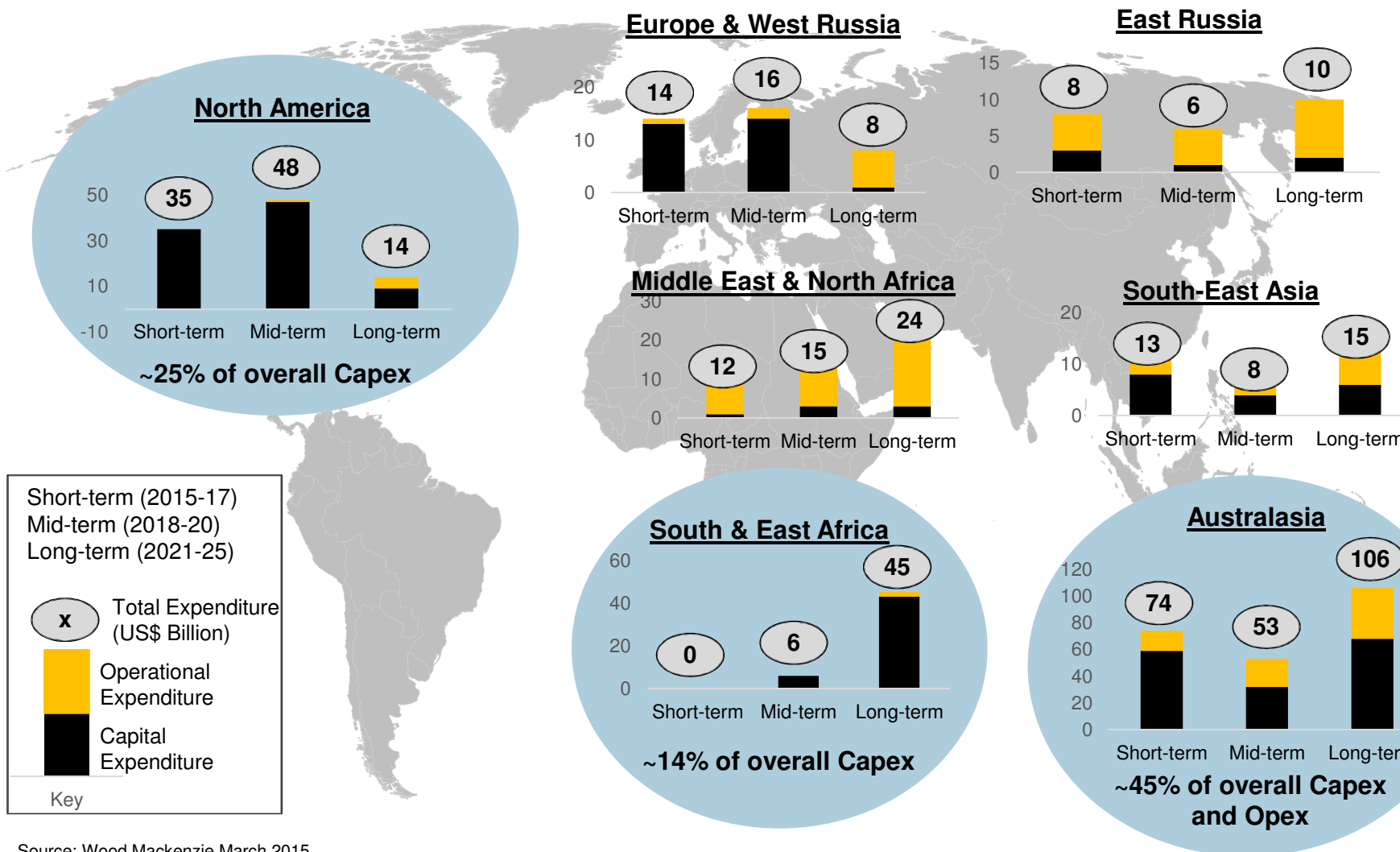
- Capital expenditure of ~ US\$355 billion is estimated to be incurred on LNG projects during 2015-25. More than 90% of this expenditure is estimated to be in: Australasia (US\$160bn), North America (US\$90bn), Africa (US\$50bn) and West Russia (US\$28bn)
- **Expenditure is expected to shift from an Australasia focus in short-term to North America in medium term. To the extent there is further build in the Australasia region, mainly in the longer term, brownfield expansions and possibly FLNG are the most likely development themes – also, East African LNG will accelerate in the longer term**

Source: Wood Mackenzie March 2015

# US\$527BN GLOBAL LNG MARKET (2015 – 2025)

REGIONAL BREAK-UP OF GLOBAL CAPITAL EXPENDITURE (US\$355BN) & OPERATING EXPENDITURE (US\$172BN) ON LNG PROJECTS

**Australasia, North America and Europe presents best short to medium term opportunity**

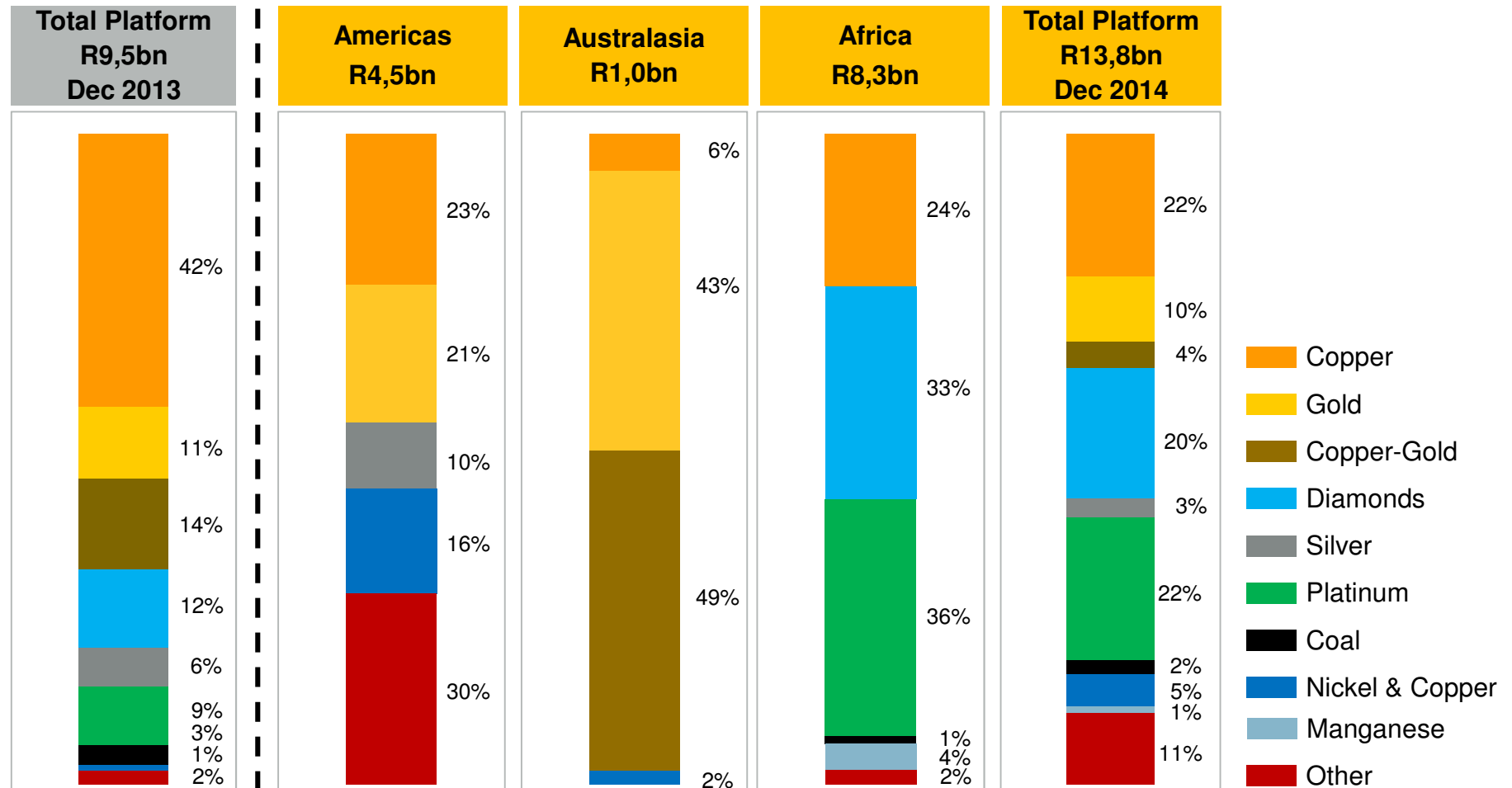
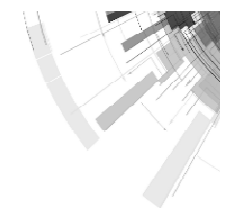


Source: Wood Mackenzie March 2015



# METALS & MINERALS

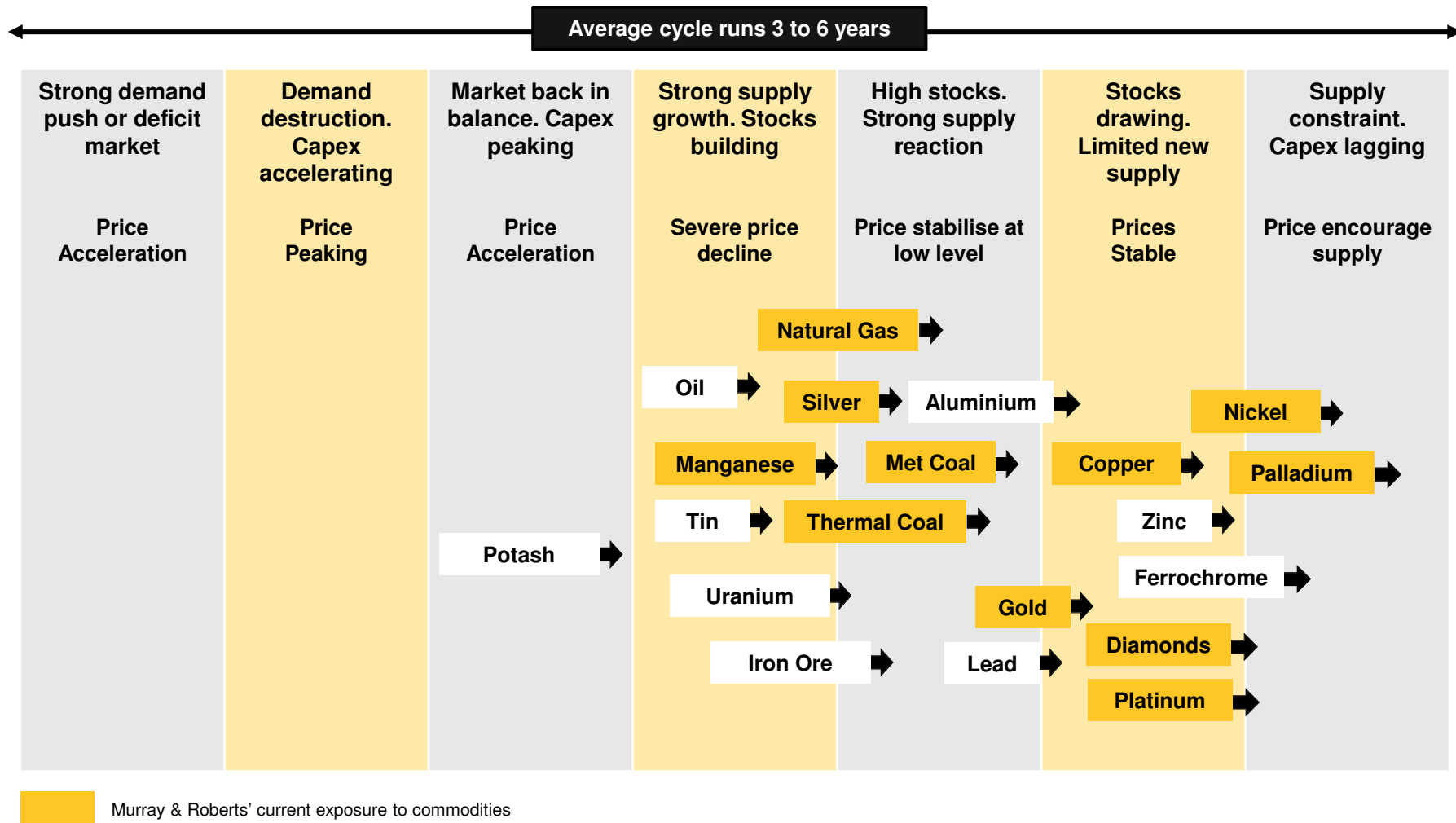
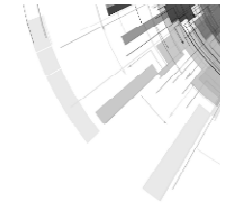
DIVERSE UNDERGROUND MINING PLATFORM COMMODITY PORTFOLIO  
ORDER BOOK BREAKDOWN



This platform contains no exposure to opencast mining projects

# KEY COMMODITIES POSITION IN CYCLE

GROWTH OPPORTUNITY FROM MEDIUM TERM CYCLE UPTURN

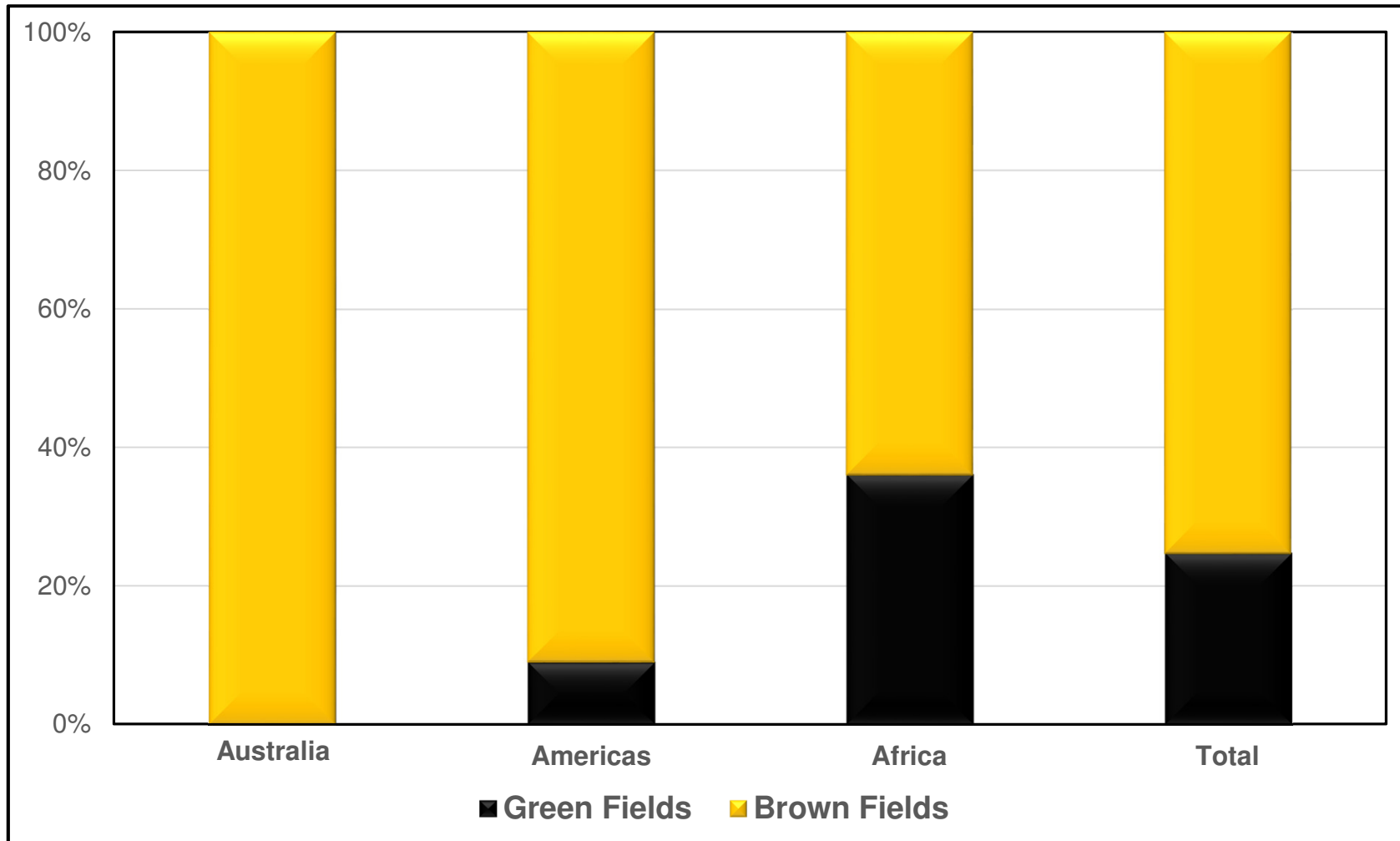
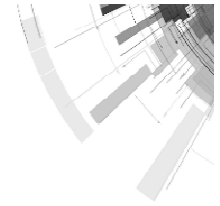


Source: Macquarie 2015



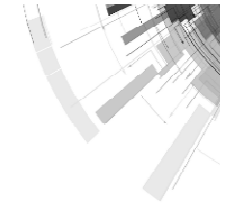
# UNDERGROUND MINING PLATFORM

DEMAND UNDERPINNED BY BROWNFIELDS PROJECTS





## DISCLAIMER



*This presentation includes certain various “forward-looking statements” within the meaning of Section 27A of the US Securities Act 10 1933 and Section 21 E of the Securities Exchange Act of 1934 that reflect the current views or expectations of the Board with respect to future events and financial and operational performance. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements, including, without limitation, those concerning: the Group’s strategy; the economic outlook for the industry and the Group’s liquidity and capital resources and expenditure. These forward-looking statements speak only as of the date of this presentation and are not based on historical facts, but rather reflect the Group’s current expectations concerning future results and events and generally may be identified by the use of forward-looking words or phrases such as “believe”, “expect”, “anticipate”, “intend”, “should”, “planned”, “may”, “potential” or similar words and phrases. The Group undertakes no obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after the date of this presentation or to reflect the occurrence of any unexpected events.*

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# **MURRAY & ROBERTS**

dbAccess South Africa Conference

**Appendix 1**

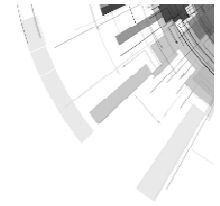
**Oil & Gas Platform – International Focus**

ENGINEERED EXCELLENCE



## CAPABILITIES

GLOBAL - ENGINEERING, PROCUREMENT AND CONSTRUCTION



### Operational Remit:

- ▶ Global engineering, from concept and feasibility studies through design and delivery including EPC & EPCM

### Capabilities include:

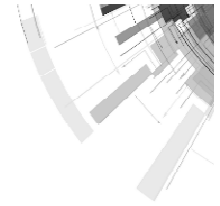
- ▶ Full spectrum of multidiscipline engineering services – concept, FEED, detailed design
- ▶ Global network of engineering and operating centres – work share via “the Cloud”
- ▶ Specialised high value engineering services including process engineering, high end LNG consulting (CH-IV) and ECI (Booth Welsh)
- ▶ Construction execution – only where risk can be controlled through local partners
- ▶ Project management (EPCM)





## CAPABILITIES

AUSTRALIA & PNG - ENGINEERING, PROCUREMENT AND CONSTRUCTION



### Operational Remit:

- ▶ Deliver fully integrated engineering, procurement and construction services to the Australia and Papua New Guinea (APNG) oil and sectors

### Capabilities include:

- ▶ Full spectrum of multidiscipline engineering services – concept, FEED, detailed design
- ▶ Specialised niche engineering services including process engineering, front end LNG consulting (CH-IV) and ECI (Booth Welsh)
- ▶ Construction execution via EPC, D&C or construct only
- ▶ Project Management (EPCM)
- ▶ Innovative construction execution products including ClearView Daily reporting, MAP and PM Academy.



**INPEX**



woodside



**TOTAL**



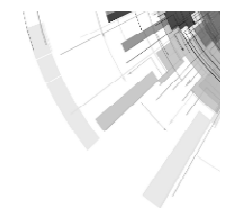
**arrow** energy  
go further

**apache**  
ENERGY LIMITED



## CAPABILITIES

GLOBAL - NEAR SHORE MARINE INFRASTRUCTURE



### Marine Operational Remit:

- ▶ Design and construct world-class near shore marine infrastructure supporting the resources and government sectors.
- ▶ Delivery models - BAM Clough in Australia & PNG, CMR Marine Globally

### Capabilities include:

- ▶ Import and Export Structures
- ▶ Jetty Topsides
- ▶ Ports and Port Development
- ▶ Quay Walls
- ▶ MOFs
- ▶ Regasification Terminals
- ▶ Berthing Structures, Quay Walls and Breakwaters
- ▶ Near Shore Pipelines
- ▶ Tug Pens
- ▶ Supply Bases
- ▶ Marine Engineering



woodside

ExxonMobil



VALE



JKC ICHTHYS



CHIYODA

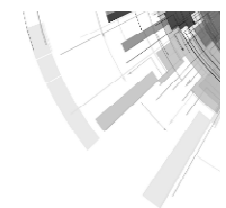
JKC AUSTRALIA LNG PTY LTD





## CAPABILITIES

GLOBAL - COMMISSIONING AND BROWNFIELDS



### Operational Remit:

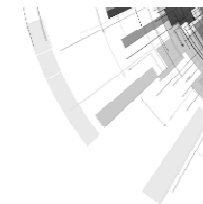
- ▶ Global pre-commissioning, commissioning and brownfield services for the oil and gas sector

### Capabilities include:

- ▶ Hook-up and Commissioning
- ▶ Maintenance Management and Execution
- ▶ Shutdowns and Turnarounds
- ▶ Operational Readiness
- ▶ Supply of Technical Trades
- ▶ Asian Fabrication Yard Support
- ▶ Competency Assurance and Training (classroom and e-training)
- ▶ Decommissioning



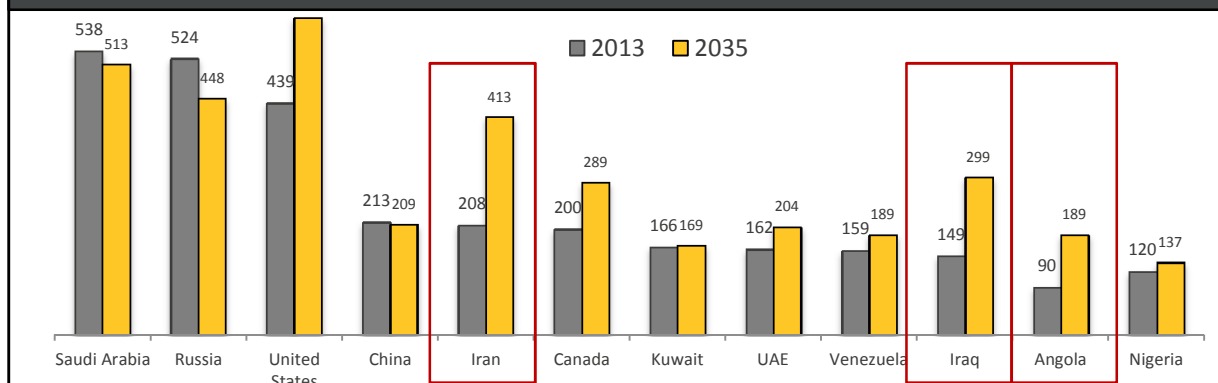
# CRUDE OIL MARKET OVERVIEW



## Top Countries: Crude Oil Production



## Crude Oil Production: 2013 – 2035e (Mt)



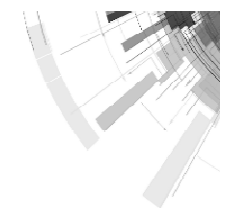
Country	Mt		CAGR
	2013	2035e	
Saudi Arabia	538	513	-0.22%
Russia	524	448	-0.71%
United States	439	601	1.44%
China	213	209	-0.09%
<b>Iran</b>	<b>208</b>	<b>413</b>	<b>3.17%</b>
Canada	200	289	1.68%
Kuwait	166	169	0.09%
UAE	162	204	1.06%
Venezuela	159	189	0.79%
<b>Iraq</b>	<b>149</b>	<b>299</b>	<b>3.21%</b>
Nigeria	120	137	0.62%
<b>Angola</b>	<b>90</b>	<b>189</b>	<b>3.45%</b>
Australia	0.02	0.02	0.13%
South Africa	0.001	0.002	1.14%
<b>TOTAL</b>	<b>2 967</b>	<b>3 661</b>	<b>1.0%</b>

Countries in the table highlighted Yellow have highest annual growth

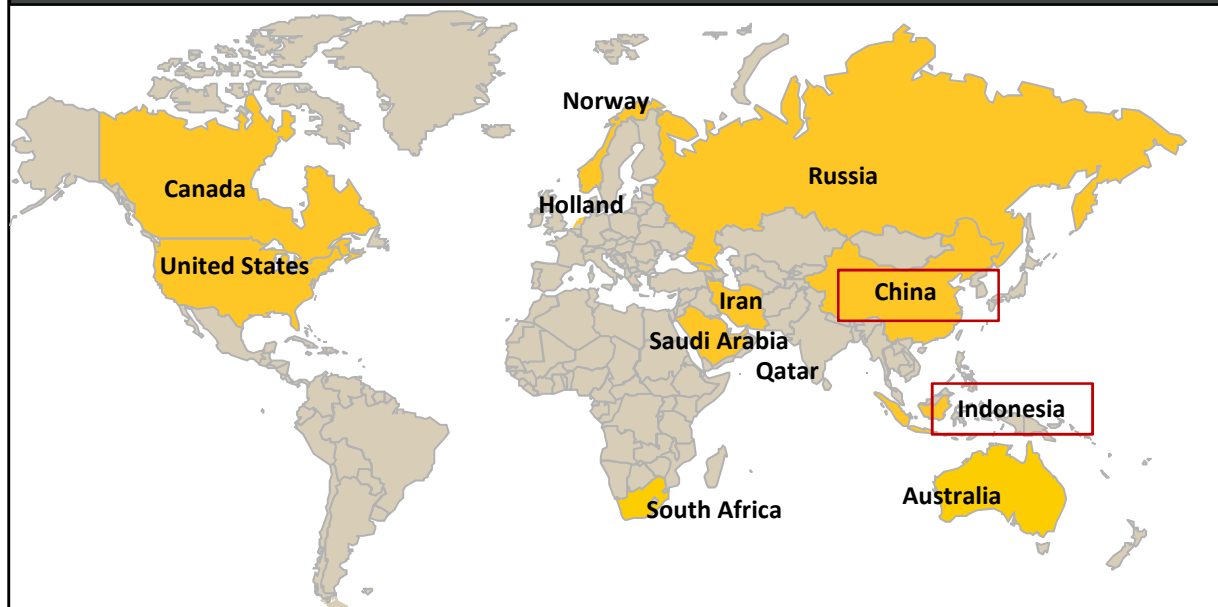
## Key Comments

- Overall, of the top crude oil producing countries, a growth rate of  $\pm 1\%$  is evident over the forecast period
- The key countries driving this growth are Angola ( $\pm 3.5\%$ ); Iraq ( $\pm 3.2\%$ ) and Iran ( $\pm 3.2\%$ )
- South Africa produced  $\sim 150$  tons of oil in 2013, expected to produce  $\sim 190$  tons in 2035

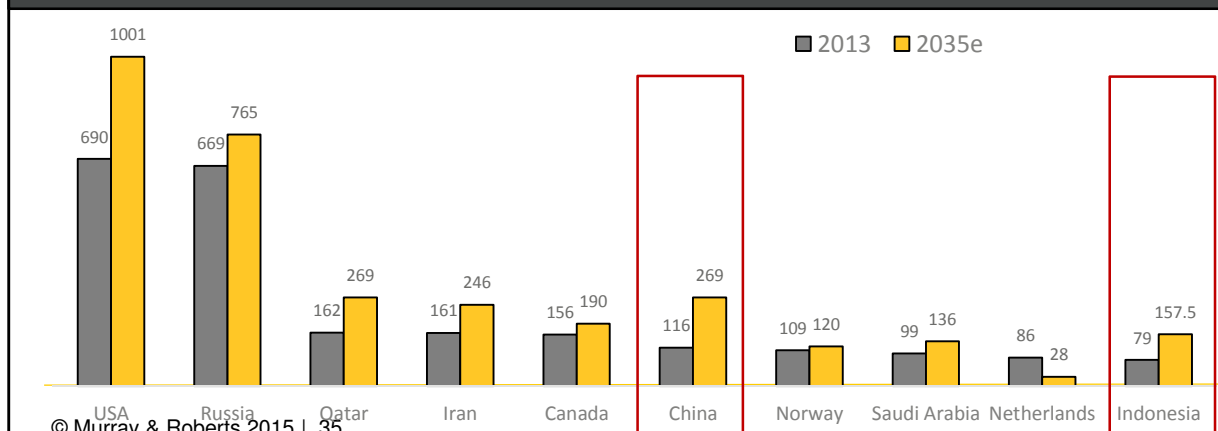
# NATURAL GAS MARKET OVERVIEW



## Top Countries: Natural Gas Production



## Natural Gas Production: 2013 – 2035e (bcm)



© Murray & Roberts 2015 | 35

Country	bcm		CAGR
	2013	2035e	
USA	690	1 001	1.7%
Russia	669	765	0.6%
Africa total	200	428	3.5%
Qatar	162	269	2.3%
Iran	161	246	2.0%
Canada	156	190	0.9%
<b>China</b>	<b>116</b>	<b>269</b>	<b>3.9%</b>
Norway	109	120	0.4%
Saudi Arabia	99	136	1.5%
Netherlands	86	28	-5.0%
<b>Australia</b>	<b>85</b>	<b>208</b>	<b>4.1%</b>
<b>Indonesia</b>	<b>79</b>	<b>157</b>	<b>3.2%</b>
<b>TOTAL</b>	<b>2612</b>	<b>3816</b>	<b>1.7%</b>

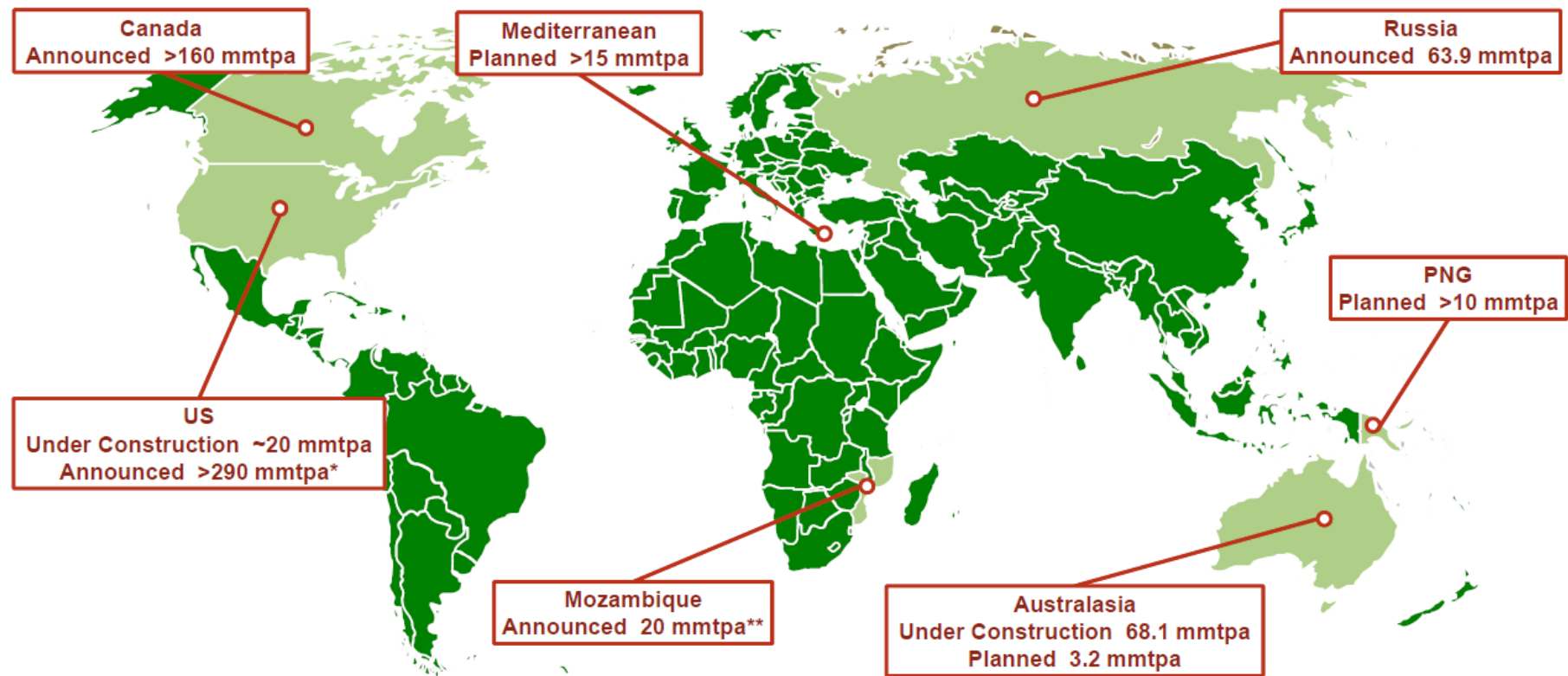
Countries in the table highlighted Yellow have highest annual growth

## Key Comments

- Overall, a CAGR of  $\pm 2\%$  is evident across the top Natural Gas-producing countries
- Australia looks set to be the dominant force behind this growth, with a CAGR of  $\pm 4\%$  forecast
- China ( $\pm 4\%$ ) and Indonesia ( $\pm 3\%$ ) are forecast to be additional forces behind this growth

ENGINEERED EXCELLENCE

## NEW SOURCES OF LNG SUPPLY

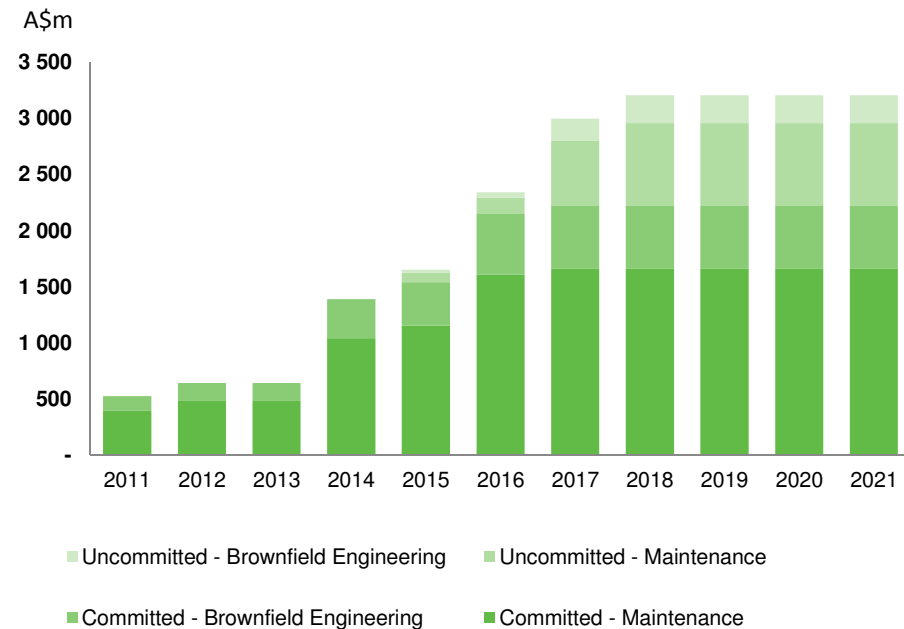
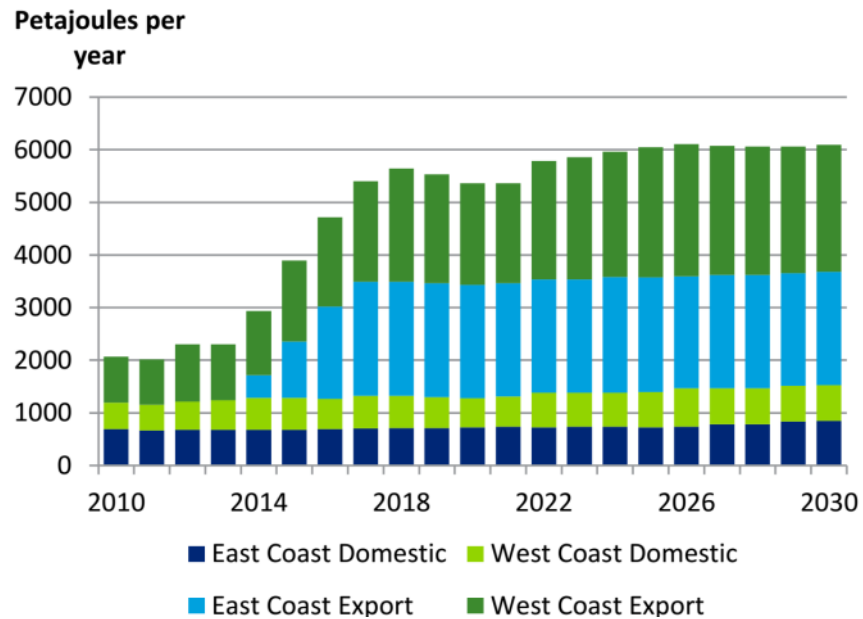
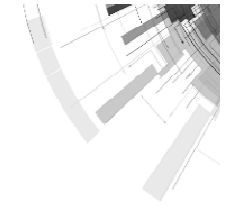


\*Capacity per Department of Energy authorization to Free Trade Agreement countries, in addition to capacities under construction

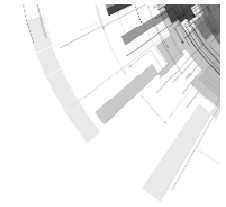
\*\*Project partners' plan includes expansion up to 50 mmtpa

Source: Goldman Sachs, FGE

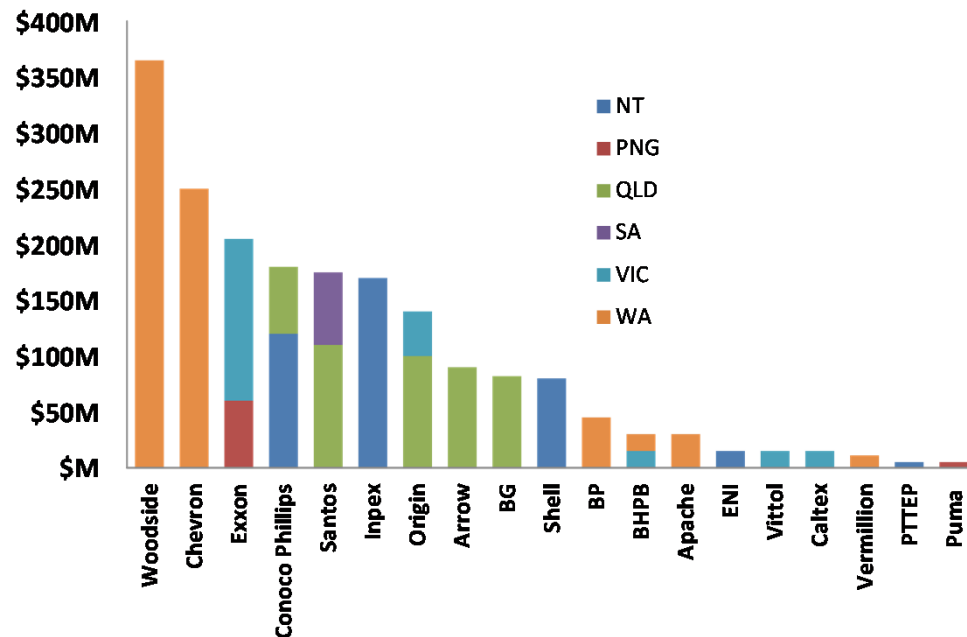




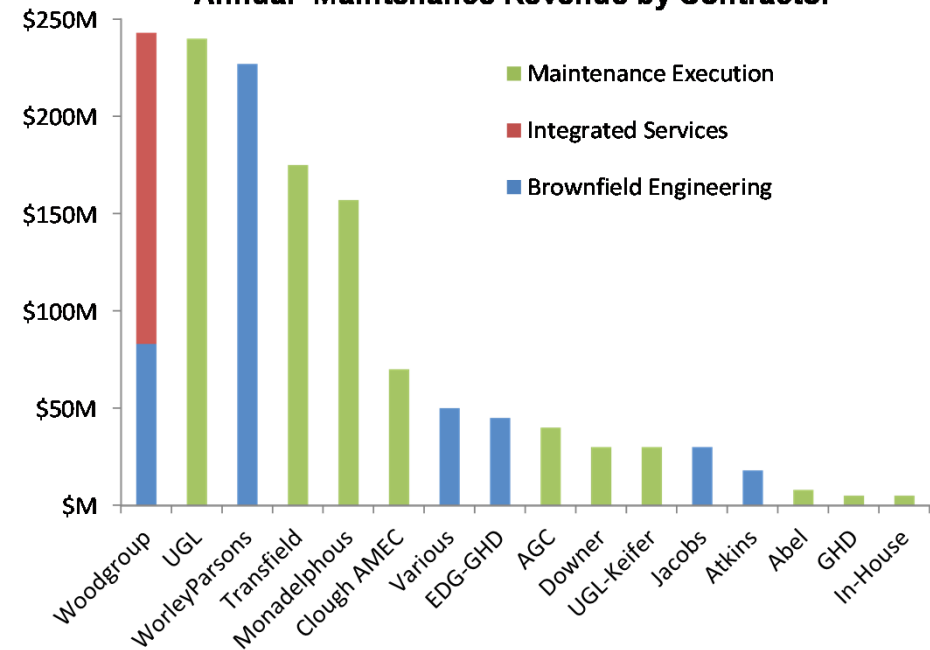
*Australian brownfield expenditure is forecast to increase by 300%*



**Annual Maintenance Spend by Operator**

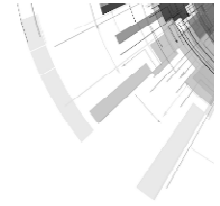


**Annual Maintenance Revenue by Contractor**



*Increase market share from <2% to be within top 3 of Brownfield & Commissioning contractors in Australia by 2020*

Source: Clough internal analysis



## USA LNG Export Projects



### USA LNG Market Snapshot

- ▶ 32 development approval applications received for Non-FTA export (circa 200 MTPA)
- ▶ Only 7 approved to date for Non-FTA (~100 MTPA)
- ▶ Of these 7, only 4 have full FERC approval (Cheniere, Cameron, Freeport, Cove Point)
- ▶ Majority located around the LA / TX border
- ▶ Bechtel and CBI are currently dominating this market

## Canada LNG Export Projects



### Canada

- ▶ 10 projects with export approval (totaling over 100 MTPA)
- ▶ 9 of the 10 are in BC
- ▶ Only 2 have Environmental Approval (Kitimat & Pieridae)
- ▶ All are “greenfield” facilities
- ▶ Of the 10, FID due this year for 2 of them (Kitimat & Pacific North West LNG)
- ▶ Four are in FEED and the remaining 4 are in earlier stages of development

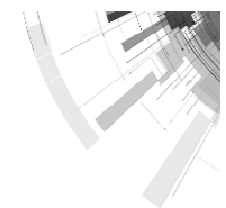
## *49 LNG Projects proposed or approved in the region*

### **CH-IV (based in Baltimore and Houston), acquired by Clough in 2014, recently secured:**

- the owner's contract for engineer for the engineering, procurement and construction (EPC) phase of the Magnolia LNG Project in the US; and
- managing the development of the formal Federal Energy Regulatory Commission (FERC) application, including detailed engineering and design, for Freeport LNG's Train 4 at the Quintana Island Facility

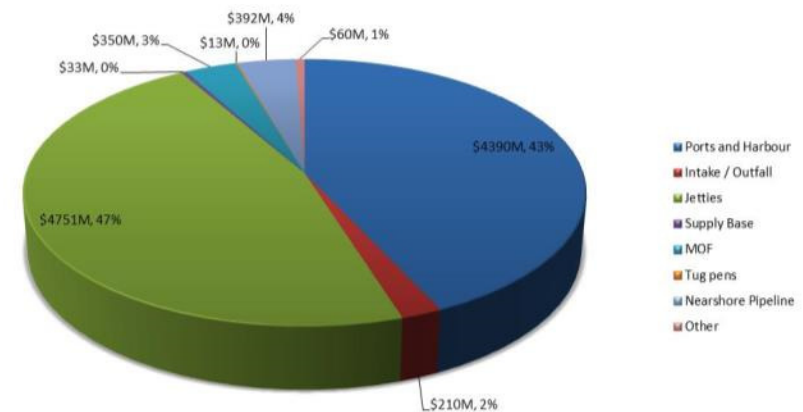


# GLOBAL MARINE OPPORTUNITY



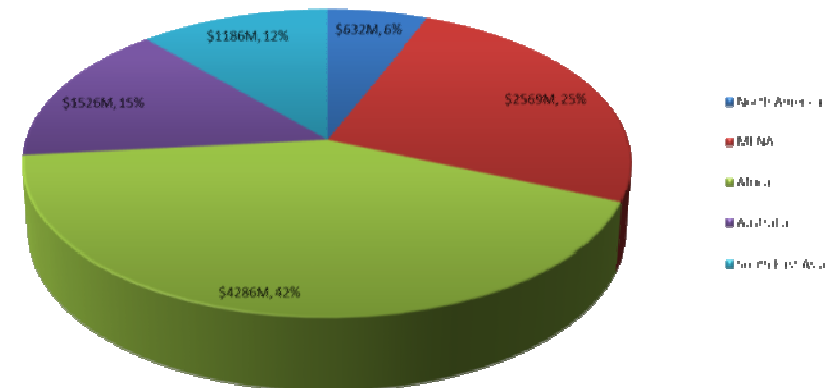
Product	A\$
Jetties	\$4,751M
Ports & Harbour	\$4,390M
Nearshore Pipeline	\$392M
MOF	\$350M
Intake / Outfall	\$210M
Supply Base	\$33M
Tug Pens	\$13M
Other	\$60M

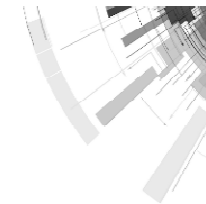
## By Product Type



Region		A\$
Africa	(EMEA)	\$4,286M
Middle East	(EMEA)	\$2,569M
Australia		\$1,526M
SE Asia		\$1,186M
North America		\$632M

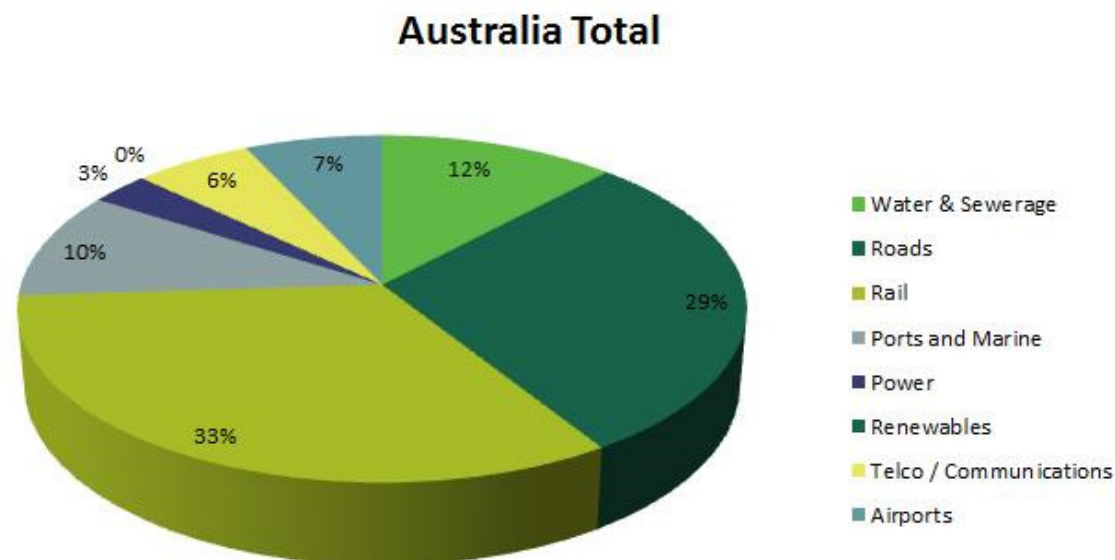
## By Region





Sectors	Expenditure 2015 to 2019
Water & Sewerage	\$12b
Main Roads	\$32b
Rail Infrastructure	\$38b
Ports and Marine	\$11b
Power	\$4b
Airports	\$8b

## Expected Infrastructure Spend by Sector



*More than \$100bn expenditure on Infrastructure Projects*



# **MURRAY & ROBERTS**

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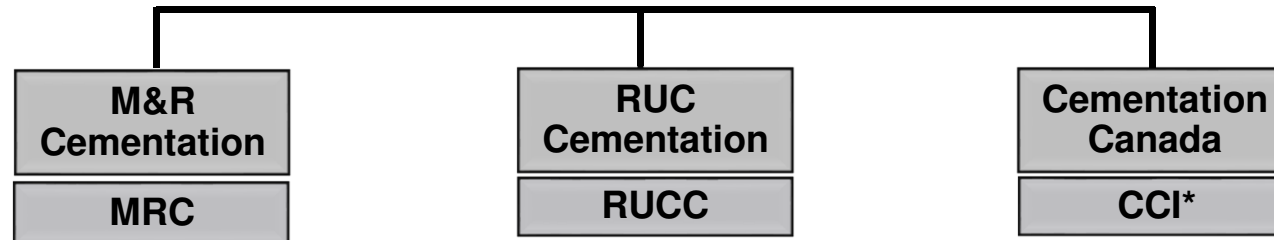
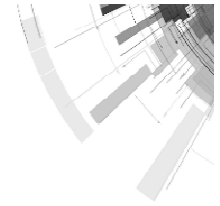
## **Appendix 2**

**Underground Mining Platform – International Focus**

ENGINEERED EXCELLENCE



# ONE OF THE WORLD'S LEADING FULL SERVICE UNDERGROUND MINING CONTRACTORS

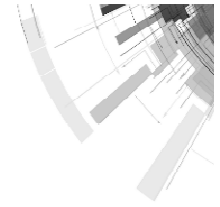


Service Offering	Specialist Engineering – Platform complement 140 (107 in 2014)		
	Mine Development: Shaft sinking, raise boring, underground development & equipping		
	Contract Mining		
Positioning - Differentiator	<ul style="list-style-type: none"> <li>• Africa's <b>leading</b> underground mining contractor</li> <li>• <b>Design-build</b> capability</li> <li>• World-class <b>training facility at Bentley Park (British Safety Council Accredited)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Manufactures own <b>raise boring</b> machines <b>Strata 400</b></li> <li>• Operates <b>largest raise-boring fleet</b> in Australasia</li> <li>• Asian capacity &amp; <b>track record</b></li> </ul>	<ul style="list-style-type: none"> <li>• One of the <b>largest mine contractors</b> in North America</li> <li>• In depth <b>Engineering</b> expertise</li> <li>• Excel at <b>client relationship</b> management</li> </ul>

\* CCI includes Cementation United States (CUSA) & Cementation Sudamérica (CSA): CC refers specifically to Cementation Canada





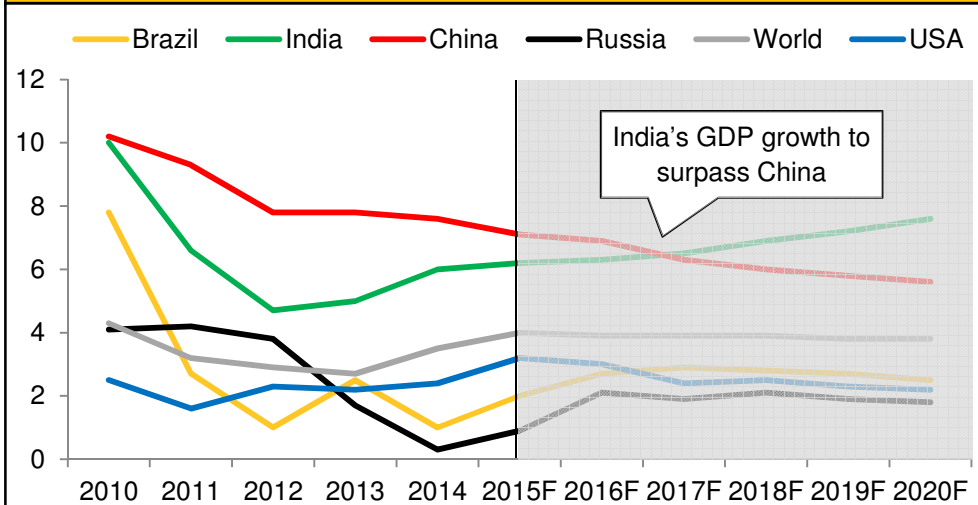


- Platform rode the commodity boom up until 2012 which has stalled for now with commodity prices struggling
- Arguably 2015 was a tougher year for the mining industry than the previous year
- **But, commodity demand projected to grow**
  - Not a case of whether it will grow but **when** & at **what pace**
  - **Growing opportunities** in brownfields stay-in-business capital spend
  - Greenfields expansion from expected upturn in commodity cycle **in the medium term**

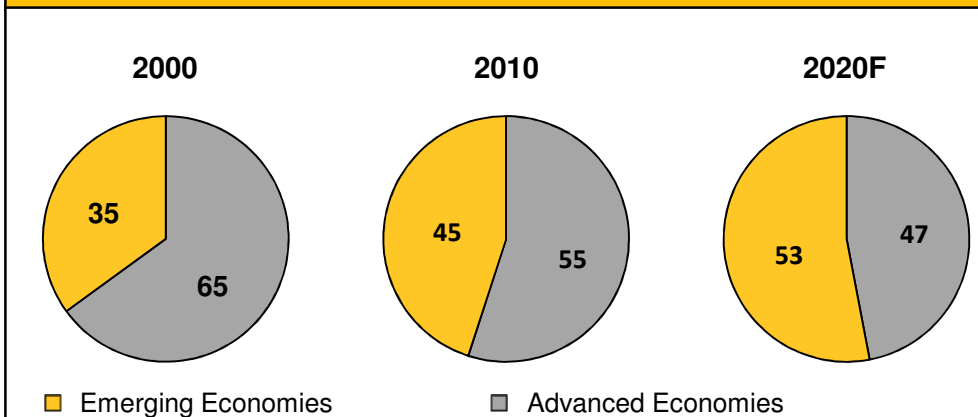




## GDP Growth Forecast 2010-2020F (%)



## Share of Global GDP (%)



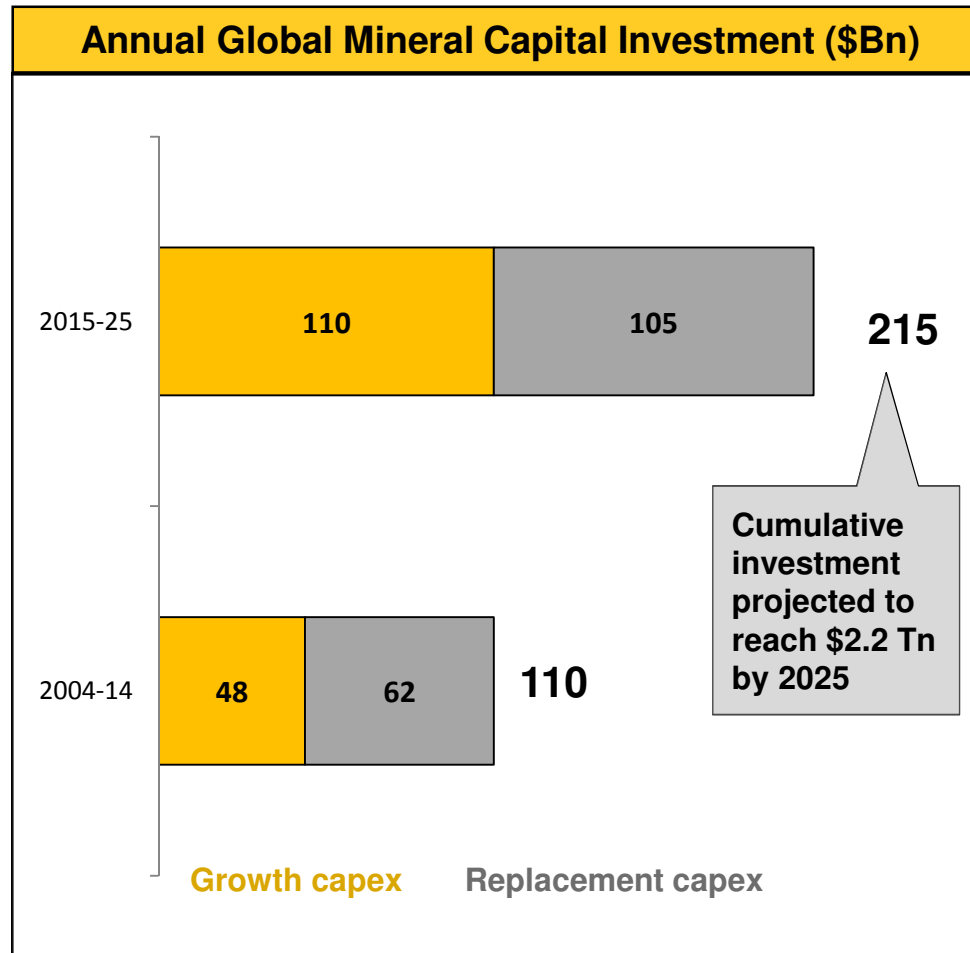
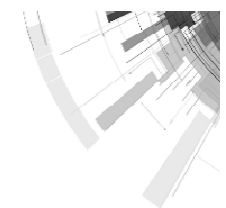
## Key Observations

- US economy **remains the most important engine** in driving global growth in 2015, with a GDP growth rate of 3%
- Emerging market growth **expected to drop slightly to ~5% per year through to 2020**, attributed to the slowdown & rebalancing in China
- However China will continue to **lead BRICs in economic growth** rates through 2016, but **India could pull ahead** closer to 2020 due to improved domestic demand, interest rate cuts & business oriented reforms
- Despite India projected to surpass China in GDP growth, China **still remains** an important growth market
- Emerging economies **set to surpass** advanced economies in share of global GDP (53% in 2020) attributed to the next wave of growth to emerge from seven key growth markets including **Chile, Peru, Philippines & Mexico**
- Looking ahead, **global foreign direct investment will grow** from \$1.3Trillion in 2013 to \$2.2Trillion in 2020

Source: AT Kearney Global Economic Outlook 2014-2020, IMF, World Bank, Economic Times, FTC Analysis

# MINING IS A CYCLICAL BUSINESS

THERE WILL ALWAYS BE A DEMAND FOR COMMODITIES



## 2012-14

- Project deferments, cancellations, scope reductions, care/maintenance
- Client focus on cost saving & capital preservation (**not tons at all cost**)
- M&A activity amongst miners **has decreased** by 72% from \$162bn in 2011 to \$45bn in 2014

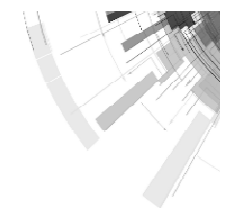
## 2015-25

- Average annual capex spend projected to **double**, exceeding 2012 peak
  - Ramp up period however
- Cumulative investment to reach \$2.2Tn by 2025 driven by **population growth & urbanisation** (China & India)
- The Americas to **lead capex spend** with Africa & Australia still **major consumers**

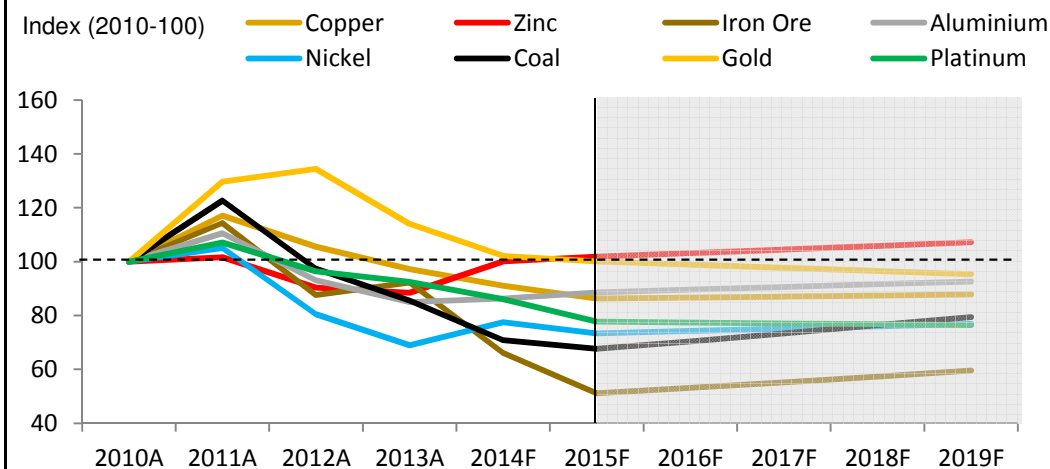
Short-term mining capex investment still tight but expected to improve in the medium to long-term, driven by increased population growth, urbanisation & economic development

# SHORT TERM PRICE OUTLOOK SUPPRESSED

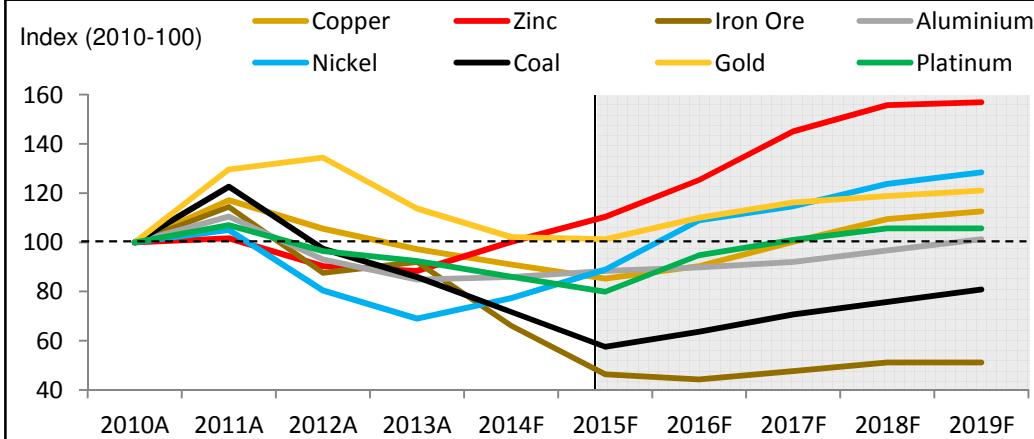
EMERGING MARKET'S DEMAND TO DRIVE PRICES UPWARDS



## Commodity Price Index Forecast 2010 -2019 (World Bank)



## Commodity Price Index Forecast 2010 -2019 (Macquarie)



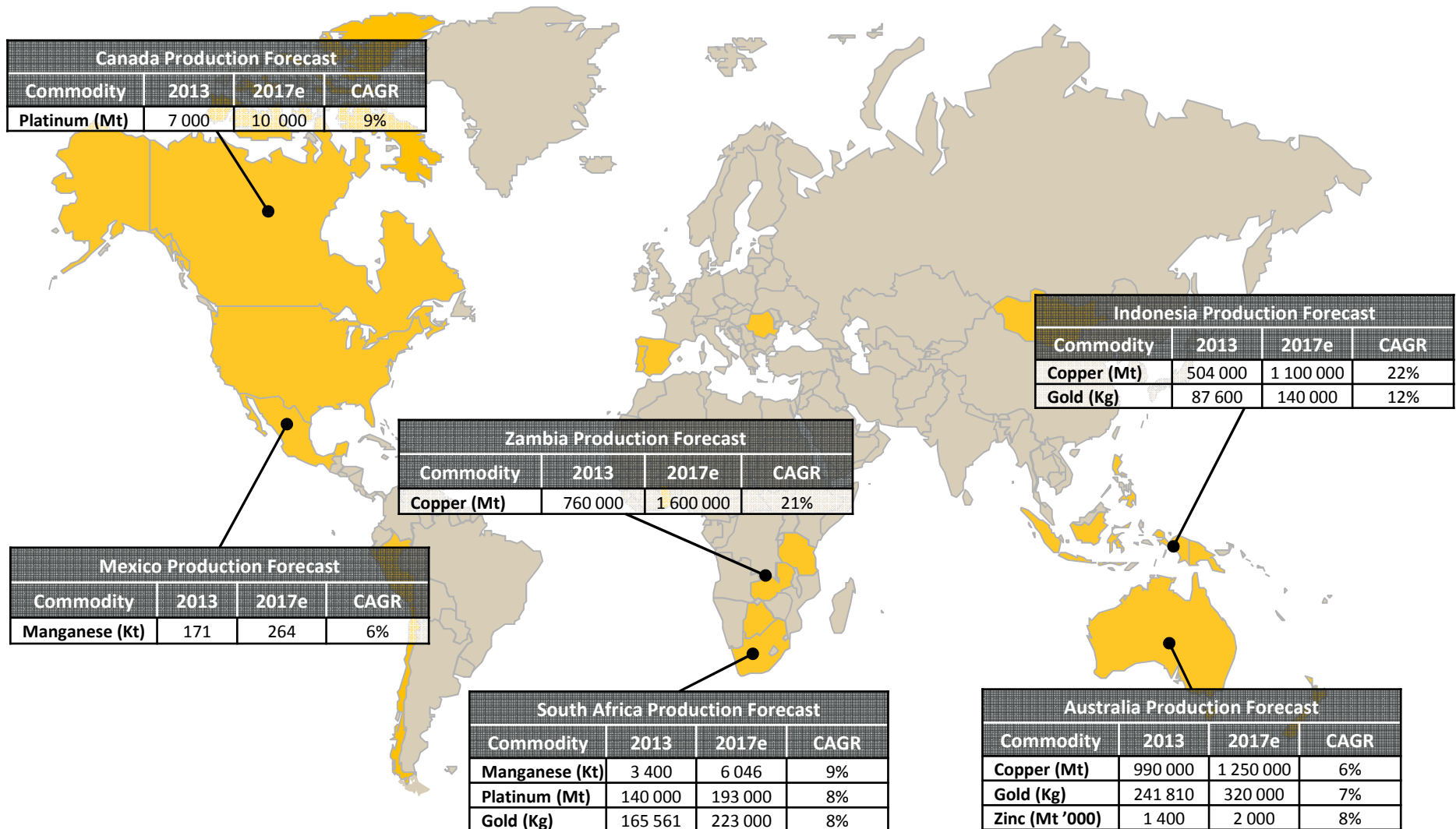
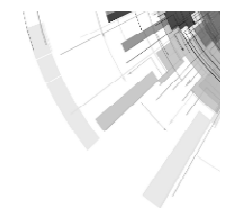
## Key Observations

- Metal prices expected to **drop >5% in 2015** due to weaker demand from China, who consume ~47% of global metal production
- **Commodity price decline** has led to mining houses cutting exploration & capex budgets in 2014 by 21% & 15% (\$12bn) respectively
- Despite the short term volatility, prices **should improve** in the medium to long term due to increased demand & consumption in emerging markets coupled with the market entering a supply deficit in selected commodities
- Both the World Bank & Macquarie forecast commodity prices **to improve in the medium to long term**
- Macquarie's forecast is **more optimistic** with the price of Copper, Nickel, Zinc, Gold & Platinum expected to increase from 2015
- Forecast difference -World Bank is **more conservative** with their estimates, basing it solely on financial indicators, while Macquarie **analyses the mining industry in more detail**

Source: IMF, World Bank, BMI, Commodity Outlook Forecast 2015, Macquarie 2015, FTC Analysis

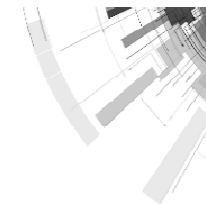
# GEOGRAPHIC POSITIONING

WHERE PRODUCTION IS FORECAST TO RAMP UP IN KEY COMMODITIES



Source: US Geological Survey, Wood Mackenzie, FTC Analysis

# TOP-TIER MINING CLIENTS ARE THE MAIN FOCUS ALTHOUGH NOT EXCLUSIVELY



STRATEGY TO DEVELOP LIFE-OF-MINE  
RELATIONSHIPS WITH TOP TIER CLIENTS

**Rio Tinto**

Kennecott (USA) – 4\*  
Diavik (Canada) - 6  
Resolution (USA) - 9  
Oyu Tolgoi (Mongolia) - 4

**VALE**

Totten (Canada) - 9  
Lubambe (Zambia) - 5

**GOLD FIELDS**

South Deep (RSA) - 7  
Agnew (Australia) - 3  
St Ives (Australia) - 3

**DE BEERS**  
A DIAMOND IS FOREVER

Snap Lake (Canada) - 2  
Venetia (RSA) - 2

**GOLDCORP**

Hoyle Pond (Canada) - 4

**ANGLOGOLD ASHANTI**

Sunrise Dam (Australia)  
Moab (RSA)

**PT FREEPORT  
INDONESIA**

Freeport Grasberg  
(Indonesia) - 5

**bhpbilliton**

Wessels (RSA) - 5  
Kutala (RSA) - 4  
Resolution (USA) - 9

**IMPALA  
PLATINUM**

Impala 20# Infrastructure  
(RSA)

**ANGLO  
COAL**

Vlakaagte (RSA) - 8  
Kriel (RSA) - 8

**GLENCORE  
xstrata**

Mufilira (Zambia) - 3  
Synclinorium (Zambia) - 3  
George Fischer (Australia)  
Fraser (Canada)

**NEWMONT**

Waihi (New Zealand)

\* Indicates relationship with client in number of years

Mid-tier clients are also important including Lundin (USA), Saracens (Australia),  
Hudbay, Compass Minerals, Hecla (Canada), & Northam (RSA)



# **MURRAY & ROBERTS**

dbAccess South Africa Conference

## **Appendix 3**

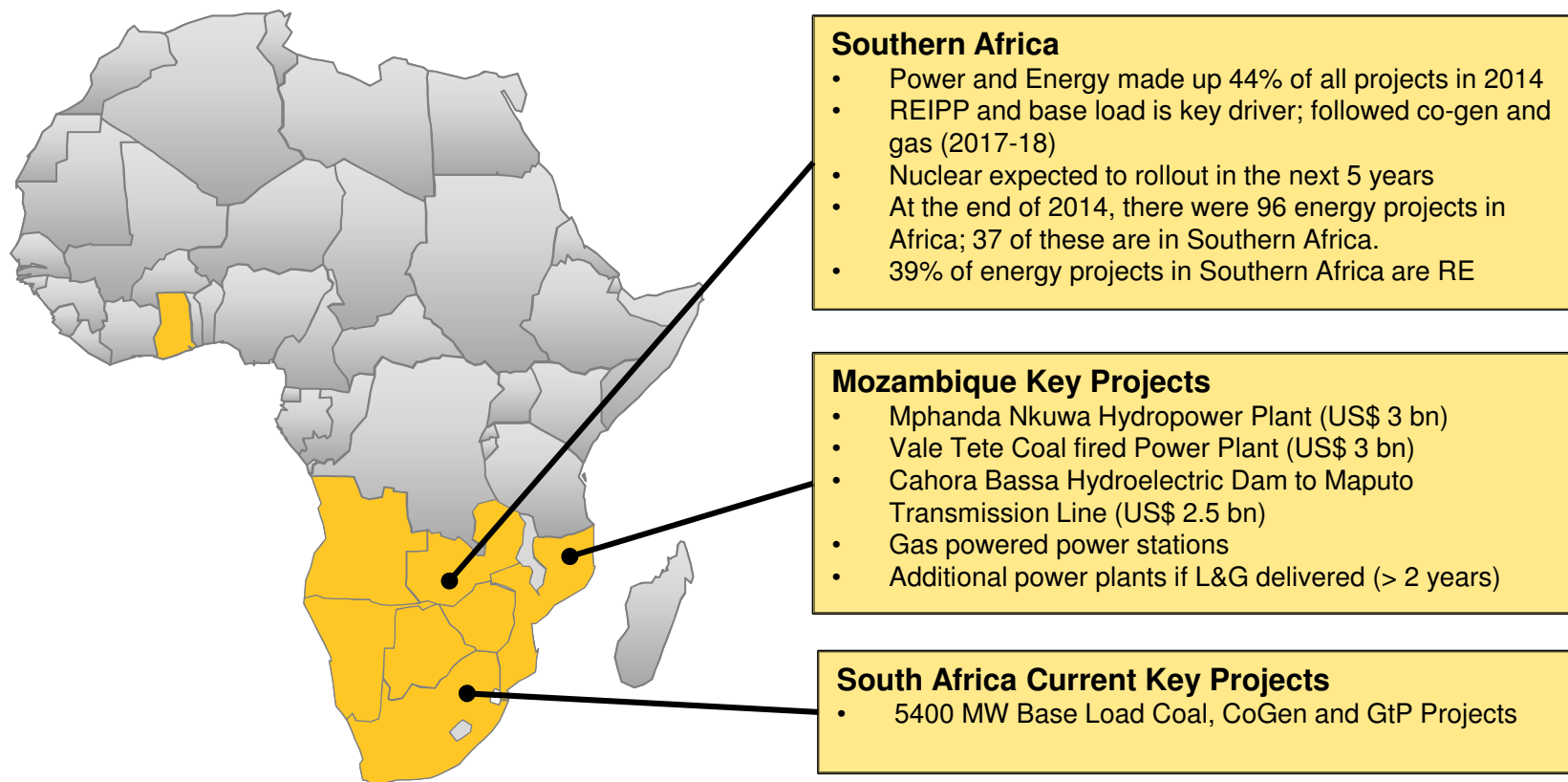
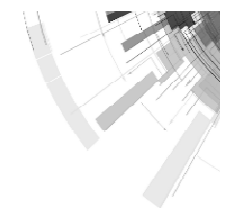
**Power & Water Platform – Africa Focus**

ENGINEERED EXCELLENCE

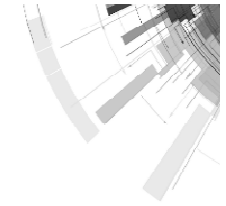


# POWER MARKET OUTLOOK

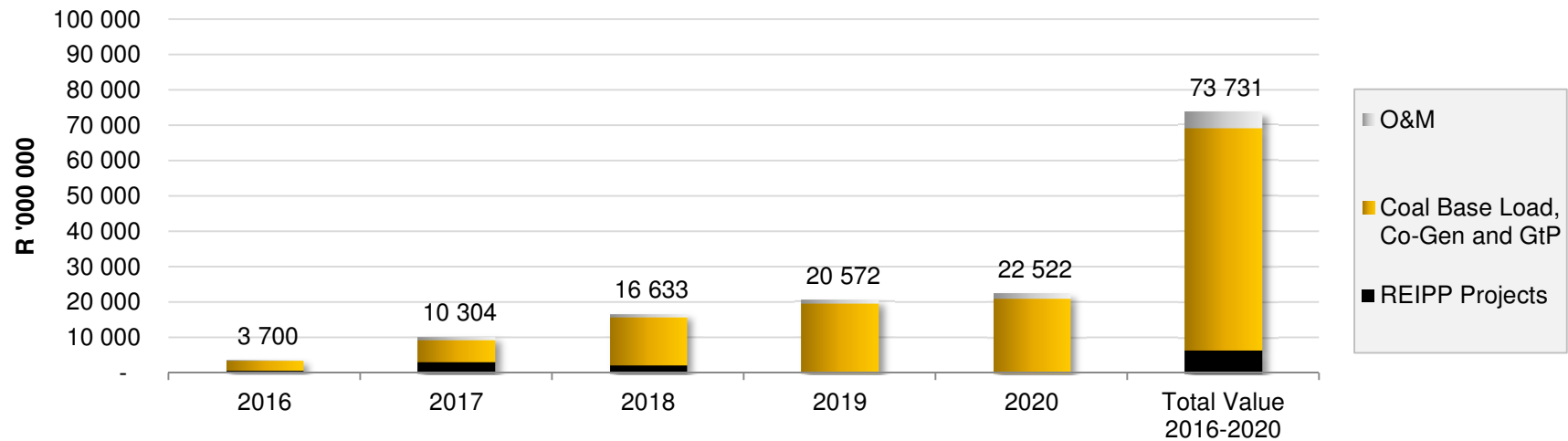
## SOUTHERN AFRICA: GENERAL AND KEY PROJECTS



Source: Deloitte: Construction Trends Report; Power & Renewables Deals; PwC: Trends, Challenges & Future Outlook

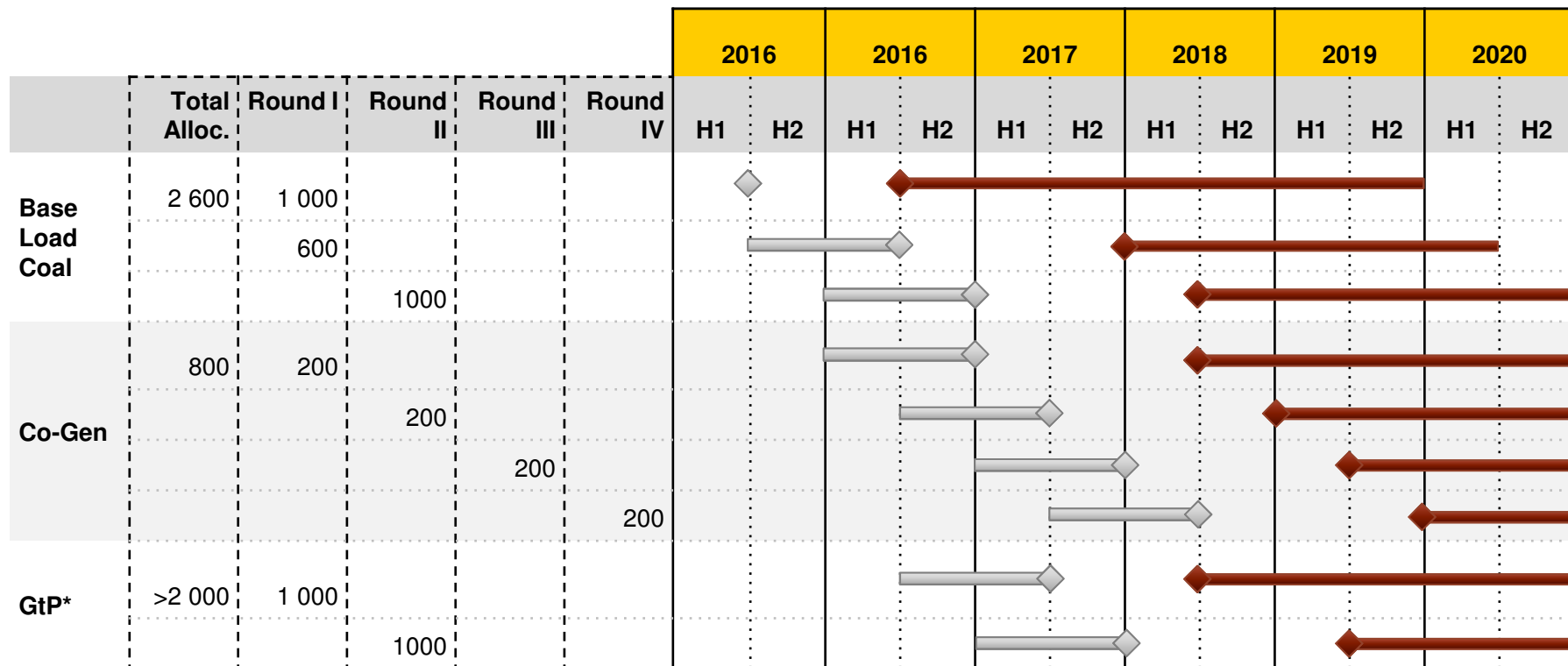
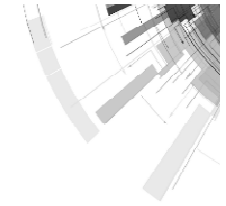


### Value of Key Opportunities in the SADC Region

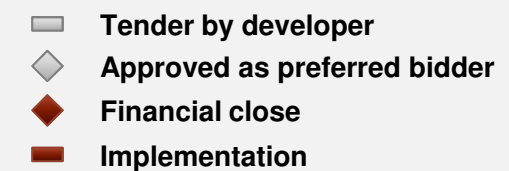


	2016	2017	2018	2019	2020	Total Value 2016-2020
REIPP Projects	850	3 195	2 310	175	-	6 530
Coal Base Load, Co-Gen, GtP	2 700	6 200	13 400	19 200	21 000	62 500
Nuclear	-	-	-	-	-	-
O&M	150	909	923	1 197	1 522	4 701
<b>Total</b>	<b>3 700</b>	<b>10 304</b>	<b>16 633</b>	<b>20 572</b>	<b>22 522</b>	<b>73 731</b>





\*Gas to Power





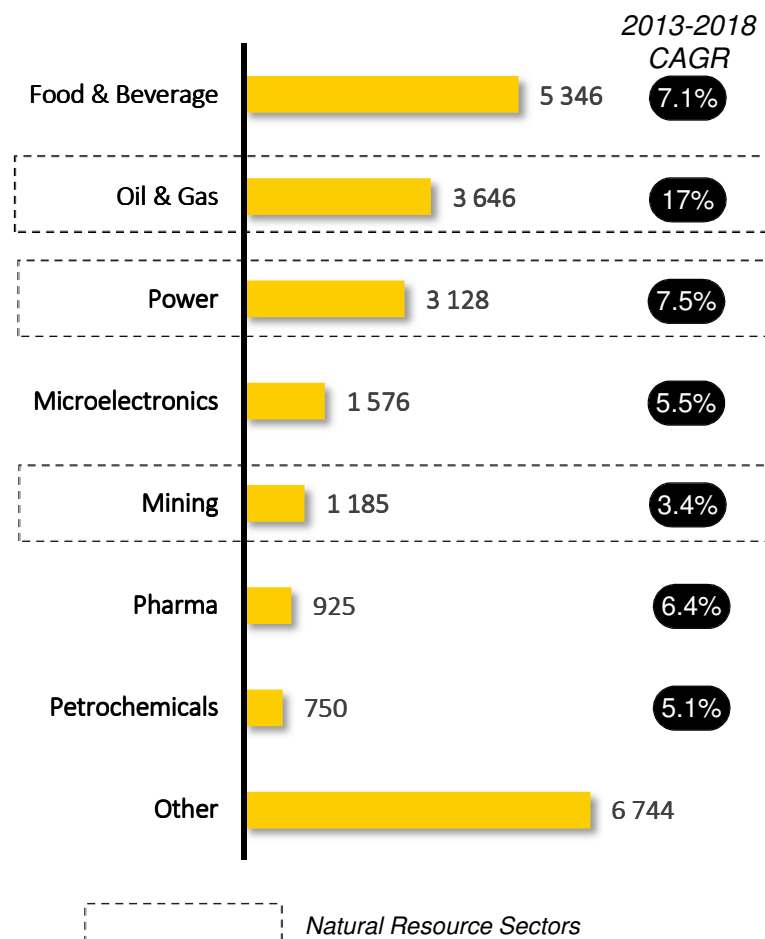
**Top 5 Market Growth Drivers**

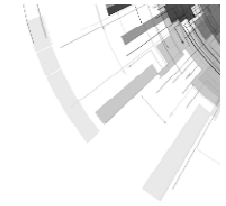
1. **Water Source Development**
2. **City Sanitation**
3. **Water Utility Performance**
4. **Resource Industry Effluents**  
water treatment will be a growing theme in the mining and oil & gas industries.
5. **Corporate Awareness**

**Growth Drivers in Industrial Market**

1. **Increasing complexity of industrial processes**  
Need to adapt water equipment to sophisticated industrial processes and efficiency demands
2. **Stronger international competition and price pressure in most industries**  
Demand for efficiency increases in water reuse, reduce sludge, water treatment
3. **Tougher environmental regulations and investor concerns**
4. **Increasing water scarcity**  
Desalination, mobile water, water reuse

**Sector Capex (US\$ Mn) 2018**





Constructors, utilities and suppliers are looking to provide full services with financial involvement

	Technology, Design	Engineering, Procurement, Construction	Ownership	Operation and Maintenance
<b>Service</b>	<ul style="list-style-type: none"> <li>Technology and design</li> </ul>	<ul style="list-style-type: none"> <li>Project development</li> <li>Construction</li> <li>Engineering consulting</li> <li>Project management</li> <li>Technology integration</li> </ul>	<ul style="list-style-type: none"> <li>Asset management</li> <li>Concessions</li> </ul>	<ul style="list-style-type: none"> <li>Engineering consulting</li> <li>Facilities management</li> <li>Operational management</li> </ul>
<b>Investment</b>	<ul style="list-style-type: none"> <li>Smaller investment but higher risk capital</li> </ul>	<ul style="list-style-type: none"> <li>Capital investment but negative working capital cycle</li> </ul>	<ul style="list-style-type: none"> <li>Capital intensive</li> </ul>	<ul style="list-style-type: none"> <li>Low investment</li> <li>Annuity style income</li> </ul>
<b>Financials</b>	<ul style="list-style-type: none"> <li>EBIT margin: 5-15%</li> <li>28% of project revenue</li> <li>30% + EBIT margin on high specialised propriety technology</li> </ul>	<ul style="list-style-type: none"> <li>EBIT margin: ~5-6%</li> <li>High revenue: ~62% of project revenue</li> </ul>	<ul style="list-style-type: none"> <li>EBIT margin: ~13% on pure ownership</li> </ul>	<ul style="list-style-type: none"> <li>EBIT margin: 5-15% on municipal with higher margins on high-tech membrane plants</li> </ul>

**Types of Contracting Models in Water**

**DB: Design Build**

**DB(F)O, DBOT: Design, Build, (Finance), Operate, (Transfer)**



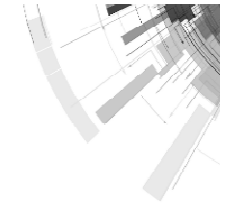
# **MURRAY & ROBERTS**

dbAccess South Africa Conference

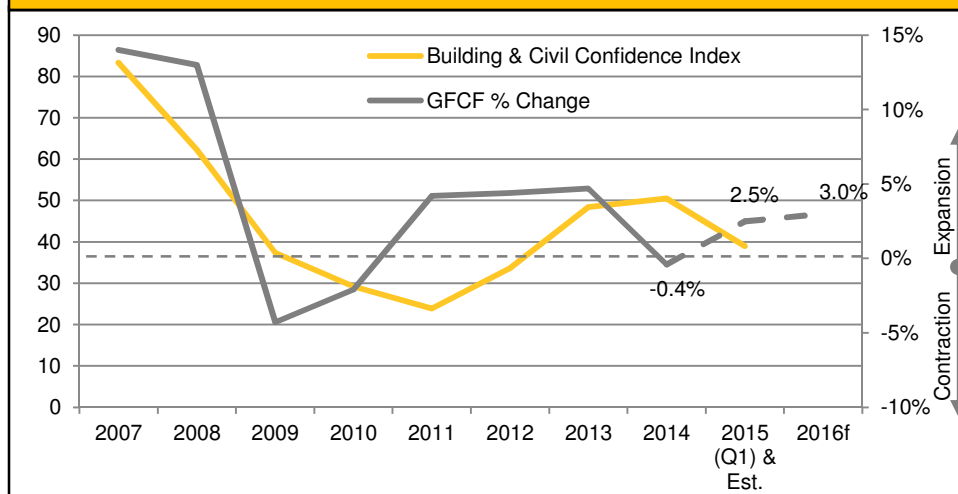
**Appendix**

**Infrastructure & Building Platform – Africa Focus**

ENGINEERED EXCELLENCE



## Construction Confidence<sup>(1)(2)(4)</sup>



## Key Trends

### Subdued Confidence and Investment

- Private sector fixed investment contracting by 3.4 percent, despite some recovery in the final quarter of last year.
- The main contribution to fixed capital formation came from general government, which accounts for a relatively small proportion of the total.
- With business confidence subdued, and amid binding electricity supply constraints, the prospects for a meaningful acceleration remain weak<sup>(2)</sup>

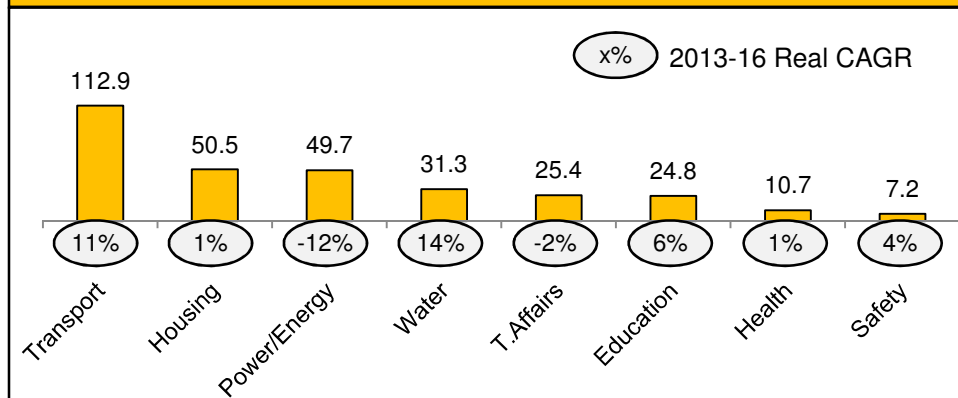
### Mining expenditure uncertain

- Influence of lower commodity prices
- Late or no awards of contracts

### Renewable energy ongoing

- Opportunities arising in South Africa and Africa
- Increasing competitiveness in sector
- Hydro – selected opportunities. Limited experience in market, which means that Dam experience could differentiate I&B

## Public 2014-2017 Forecast<sup>(3)</sup> Per Segment (R Bn)



## Platform Impact

- Competition for those projects that do reach implementation likely to be fierce in both Public and Private sectors
- Expertise and expanded value offering critical to winning work

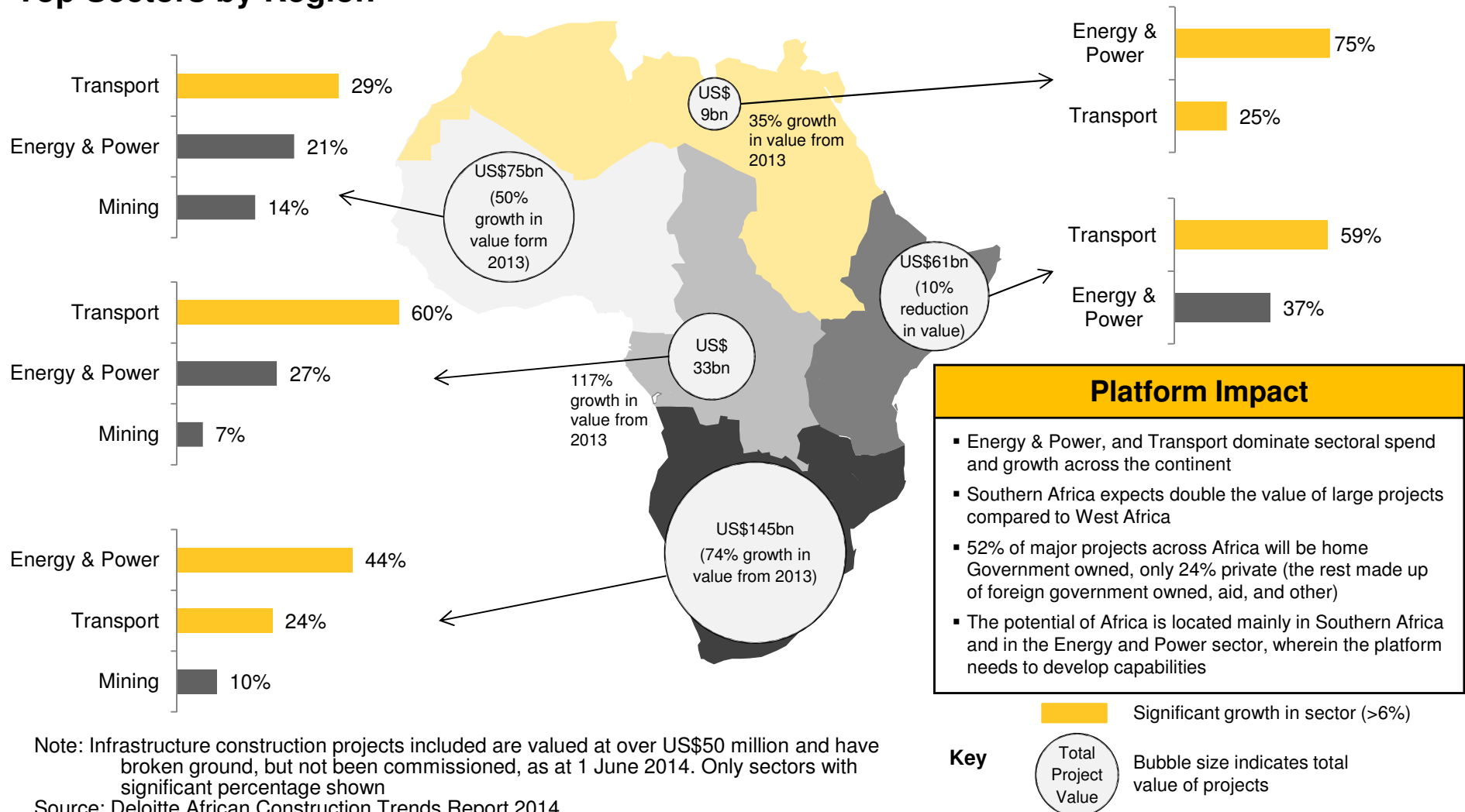
Source: (1) BER; (2) SARB; (3) Industry Insight; (4) FNB Economics weekly 27/03/2015; SAFCEC, FTC Analysis

# AFRICA CONSTRUCTION OPPORTUNITY

A TOTAL OF 257 MAJOR INFRASTRUCTURE PROJECTS ARE UNDERWAY ACROSS AFRICA, DOWN FROM 322



## Top Sectors by Region

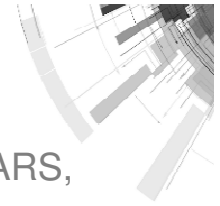


Note: Infrastructure construction projects included are valued at over US\$50 million and have broken ground, but not been commissioned, as at 1 June 2014. Only sectors with significant percentage shown

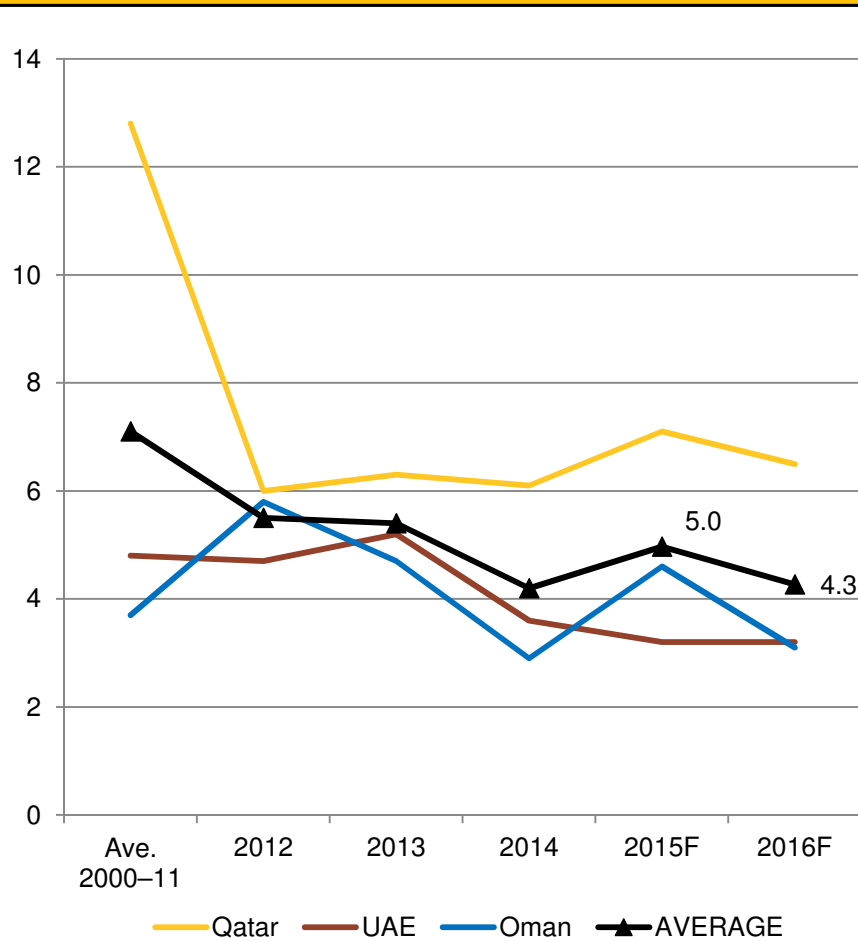
Source: Deloitte African Construction Trends Report 2014

## MIDDLE EAST

GDP GROWTH IN THE REGION IS SUBDUED COMPARED TO PREVIOUS YEARS, BUT INVESTMENT IS EXPECTED TO PROCEED

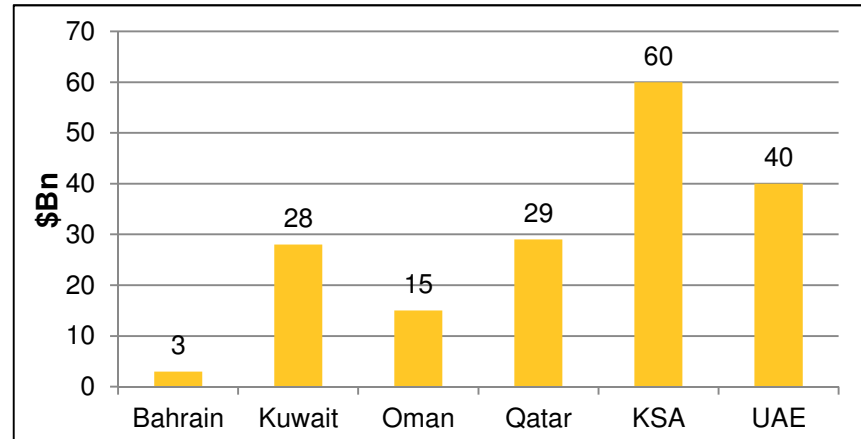


**Real GDP Growth (%)**

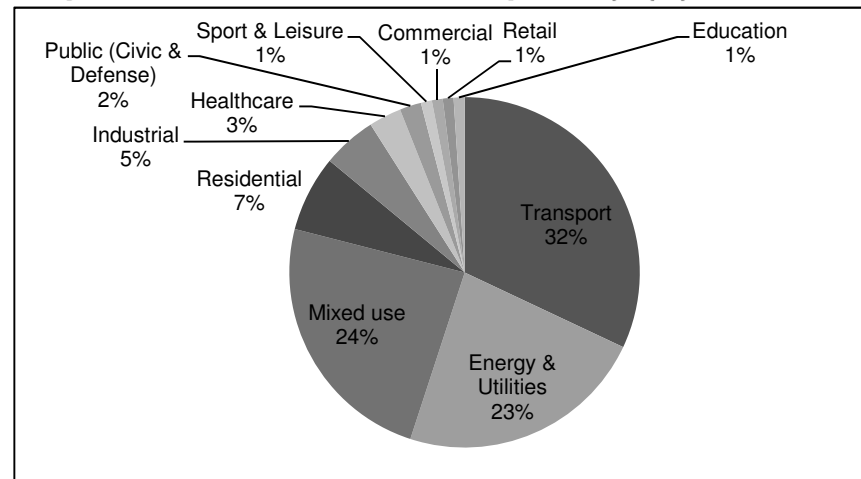


Source: IMF, Deloitte GCC Powers of Construction 2014; EC Harris Research

**Forecast For GCC Contract Awards, 2015 (\$Bn)**

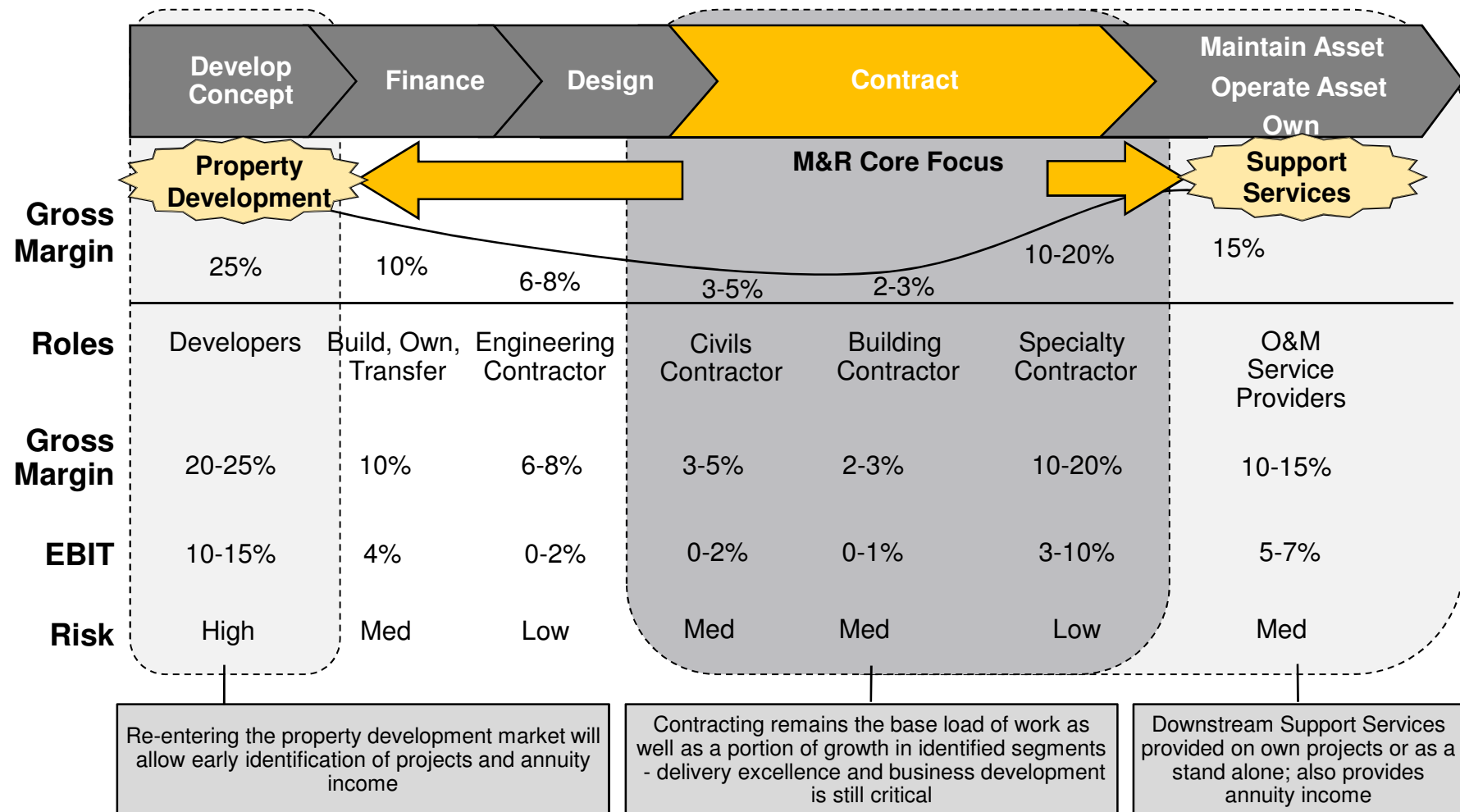
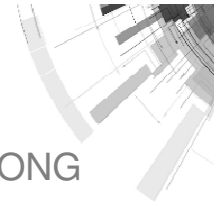


**Expected Sector Share of Spend (%) (2014-2016)**



# SERVICE OFFERING

IN THE MEDIUM TERM, THE PLATFORM IS ADJUSTING ITS POSITIONING ALONG THE VALUE CHAIN







# MURRAY & ROBERTS

dbAccess South Africa Conference

18 & 19 June 2015

This presentation is available on  
[http://www.murrob.com/fin\\_presentations.asp](http://www.murrob.com/fin_presentations.asp)

ENGINEERED EXCELLENCE