

# **Investor Day**

Wednesday 5 June 2019

Worley

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The information in this presentation about the WorleyParsons Limited ("Worley Group") and its activities is current as at 5 June 2019 and should be read in conjunction with the Company's Appendix 4D and Interim Financial Report for the half year ended 31 December 2018. It is in summary form and is not necessarily complete. The financial information contained in the Interim Report for the half year ended 31 December 2018 has been reviewed, but not audited, by the Worley Group's external auditors. The financial information presented to YTD March 2019 and the Third Quarter financial information has not been reviewed or audited by the Worley Group's external auditors.

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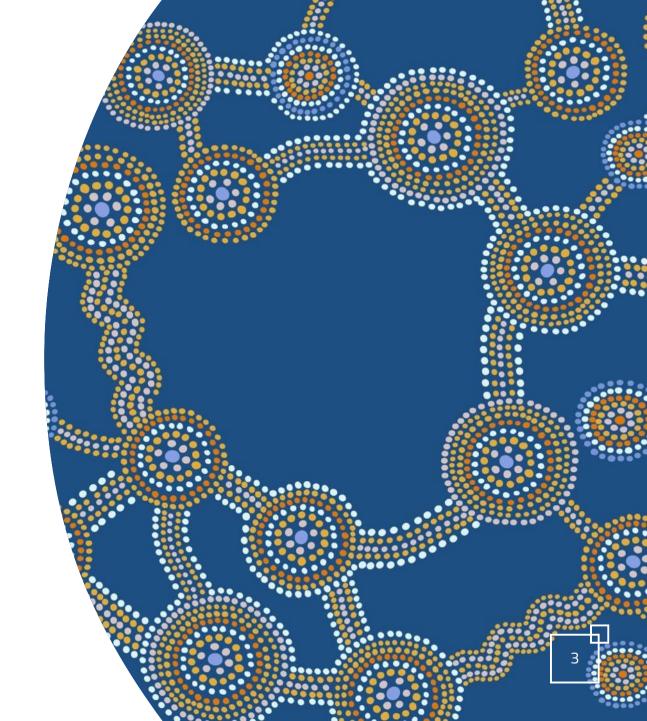
# Welcome and context

Welcome

Acknowledgement

Emergency procedures

Order of proceedings



# Agenda

Registration

Welcome and context

**OneWay™ moment** 

Welcome to Worley

**Financial reporting** 

Transition and transformation

Q&A

Morning tea

**Energy & Chemicals Services** 

**Major Projects & Integrated Solutions** 

Mining, Minerals & Metals Services

Advisian

Q&A

Wrap up

Lunch







# Stronger Together, Safer Together

**Catherine Wallis** 

**Eco**Nomics



# Stronger Together Safer Together

- Safety Week, 6-10<sup>th</sup> May
- United on safety as a **core value**
- Opportunity to explore safety through the lens of Past, Present & Future
- Local activity and events
- 24 hour online discussion



### Safety Week activities and events



### **Insight and learning**

empowered | enabled | ethica









# Welcome to Worley

Andrew Wood, CEO

**Eco**Nomics



# Worley, a leading global provider of professional project and asset services in the energy, chemicals and resources sectors



# Worley - A bigger, brighter future

Different perspectives, insights, capabilities and expertise from around the globe for the benefits of our customers and of the industries in which we work 56,700 people

# 51 countries

# Long history of successful transactions



- Construction and fabrication offering
  - Long-term relationship business in brownfield services

2007

### **JACOBS**<sup>®</sup> ECR

- Downstream & chemicals leadership
- Construction, maintenance and turnaround resources
- Competitive position via India Global Integrated Delivery (GID) services

2017

2019

2015

PARSONS EsC

- Mega projects capability
- Geographic diversity

2004

Industry diversification



- Maintenance, Modifications & Operations leadership
- Long-term OPEX relationships
- North Sea market entry

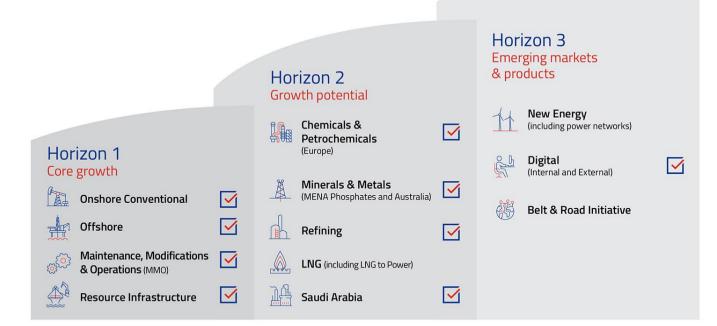


#### worley energy | chemicals | resources Management team **Chief Executive Officer** Andrew Wood **Chief Operating Officer Chief Financial Officer Chris Ashton** Tom Honan Advisian **Energy & Chemicals Major Projects &** Mining, Minerals Services **Integrated Solutions** & Metals Services **Adrian Smith** Vinayak Pai Karen Sobel Andrew Berryman President Group President Group President President

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# **Current focus**

- 1
- Integrate the operations and deliver cost & revenue synergies, aligned with the existing strategic priorities
- Cost synergy target increased from AUD130m to AUD150m
- 2 Development of the transformational strategy for the new Worley that will:
  - Enhance our leadership position in chemicals & petrochemicals
  - Capture the opportunities presented by the global energy transition
  - Change the way we work leveraging automation and the use of digital products

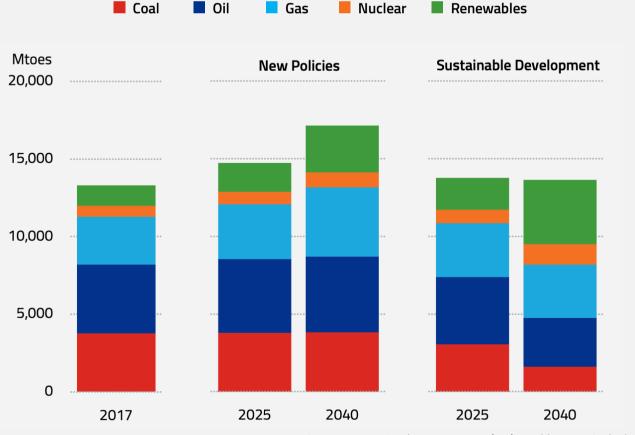


# Global energy transition

# Global energy transition

- Direction of change in energy mix is clear, however the pace of change is not
- Each country will react differently
- Oil and gas expected to increase annual sanctioned investments through to 2025
- Opportunities to strongly support the energy transition across all of our of core sectors:
  - Upstream & midstream
  - Downstream & chemicals
  - Mining, minerals & metals
  - Power & new energy

#### World primary energy demand by fuel and scenario (Mtoe)



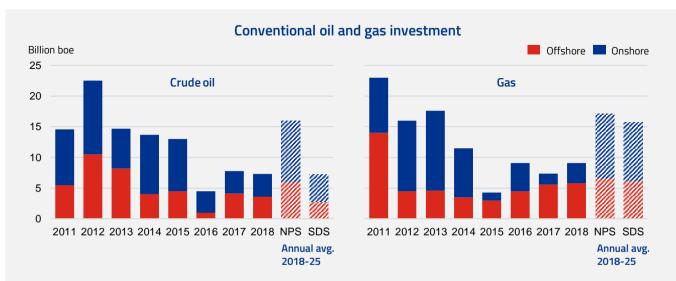
Notes:

Source: International Energy Agency (IEA), World Energy Outlook 2018

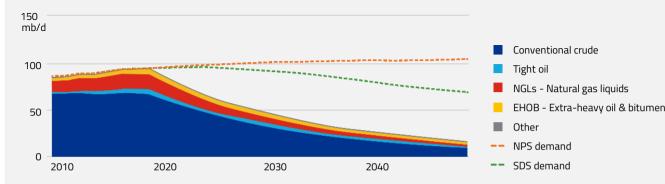
New Policies Scenario (NPS) includes policies and targets announced by governments

 Sustainable Development Scenario (SDS) outlines a major transformation of the global energy system in full alignment with the Paris Agreement

### Energy transition opportunities: Upstream & midstream Gas as the transition fuel...new oil demand remains



#### Oil production with no new investment from 2018 vs estimated demand in NPS and SDS

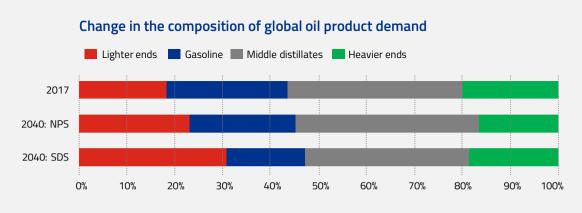


Source: International Energy Agency (IEA), World Energy Investment 2019 \*3-year CAGR estimate to 2022 extracted from Rystad Energy, UCUBE (May,2019)

- Pick-up in approvals of new upstream projects required to match demand
- Upstream investment to 2022 is estimated at 11% CAGR for gas and 4% CAGR for oil\*
- Midstream market is experiencing a sharp increase in project sanctions aligned to our global footprint
- Growth opportunities across the value chain:
  - Oil & gas production, processing, storage & transport
  - Greenfield LNG outside battery limits ("OSBL") and MMO
  - Floating storage & regasification
  - Gas-fired power generation, transmission & distribution

### Energy transition opportunities: Downstream & chemicals Refining investments responding

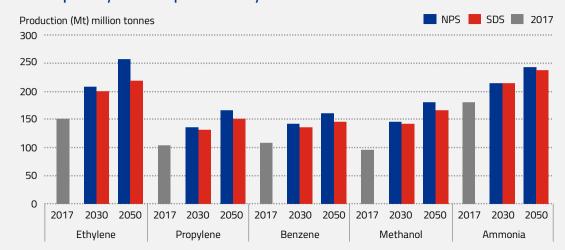
- Major shifts in the composition of oil product demand is presenting challenges for refiners:
  - fall in demand for gasoline and diesel
  - demand for lighter feedstock supply
  - increased proportion for chemical feedstock
  - decreased yields for residues
  - response to IMO 2020 regulations
- Changes are driving investment in upgrades and brownfield projects with CAPEX investment expecting 5.5% CAGR to 2022\*
- Well positioned with our customers, geographic diversity and leading desulphurization technologies



Source: International Energy Agency (IEA), World Energy Outlook 2018

### Energy transition opportunities: Downstream & chemicals Chemicals & petrochemicals play important role

- Industry to play important role in the global energy transition
- Key contributor to global oil demand
- IEA Sustainable Development Scenario:
  - primary chemical demand strength; increasing by 30% to 2030
  - long-term growth underpinned by demand for end-use products (e.g. plastics, fertilizers) by developing economies
- Capability and geographic positioning in investment hotspots provides strong growth platform

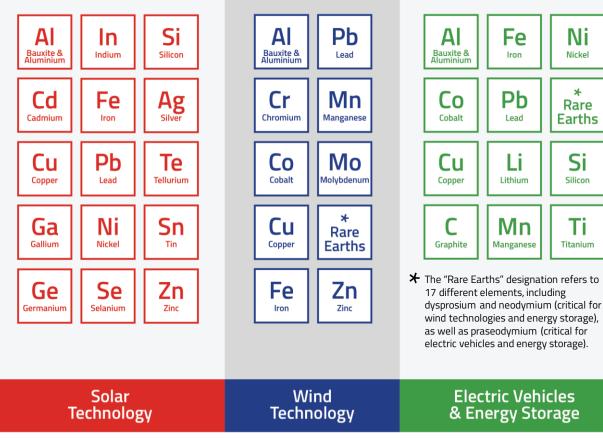


#### Global primary chemical production by scenario

Source: International Energy Agency (IEA), The Future of Petrochemicals (October 2019) New Policies Scenario (NPS) is equivalent to Reference Technology Scenario (RTS) Sustainable Development Scenario (SDS) is equivalent to Clean Technology Scenario (CTS)

### Energy transition opportunities: Mining, minerals & metals Energy transition minerals

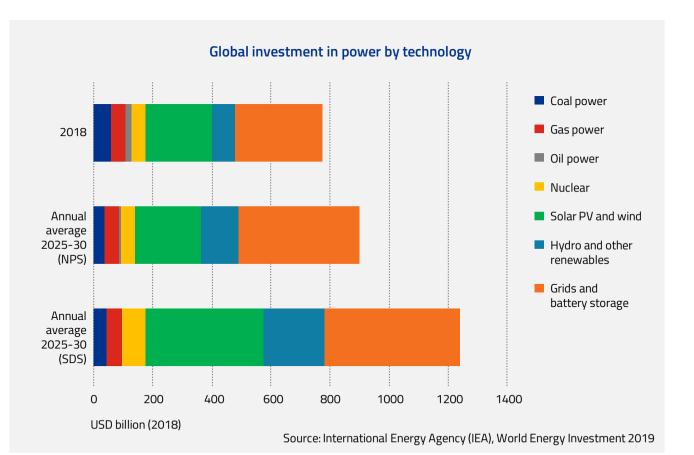
- Our core MMM capability is aligned to metals critical to the energy transition:
  - aluminium
  - copper & nickel
  - lithium & cobalt
- Well positioned to bring our digital and new energy capabilities to support new and existing mines to lower the environmental impact of their extraction and processing operations



Source: International Institute for Sustainable Development (2018)

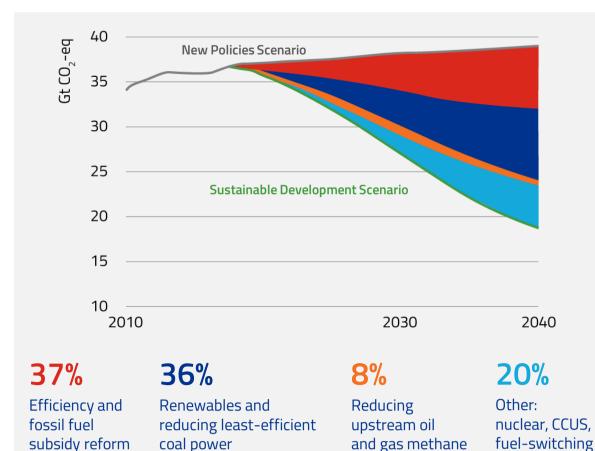
### Energy transition opportunities: Power & new energy Renewables & electrification

- Investment trend towards low carbon power generation and delivery:
  - solar and wind
  - nuclear
  - hydro
  - power networks and storage
- Focus areas for growth:
  - offshore wind
  - distributed energy systems (including microgrids & storage)
  - emerging technologies hydrogen
  - power operations & maintenance



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### Energy transition opportunities: All sectors Optimization and efficiency



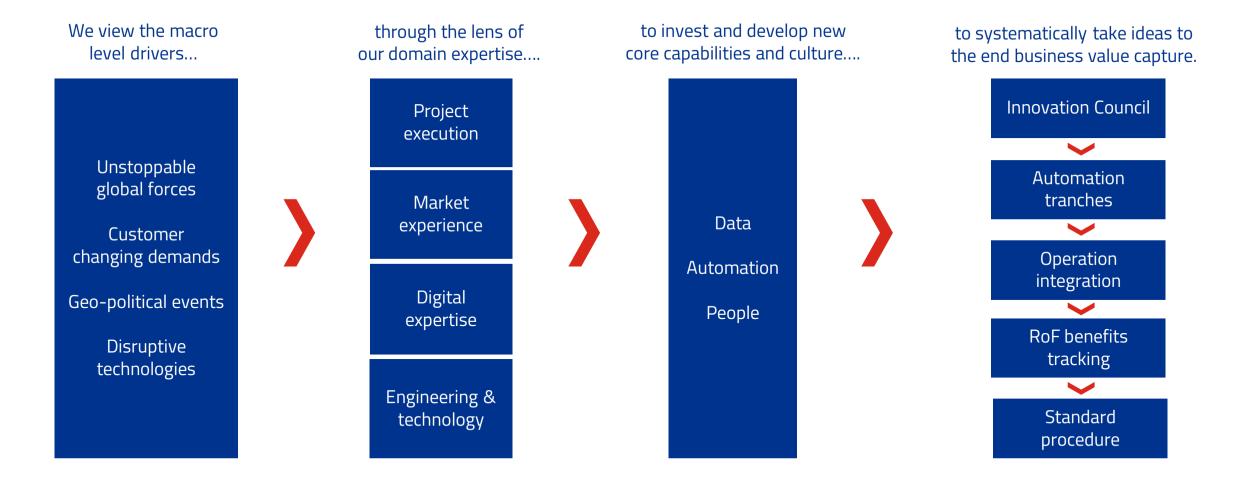


Source: International Energy Agency (IEA), World Energy Outlook 2018

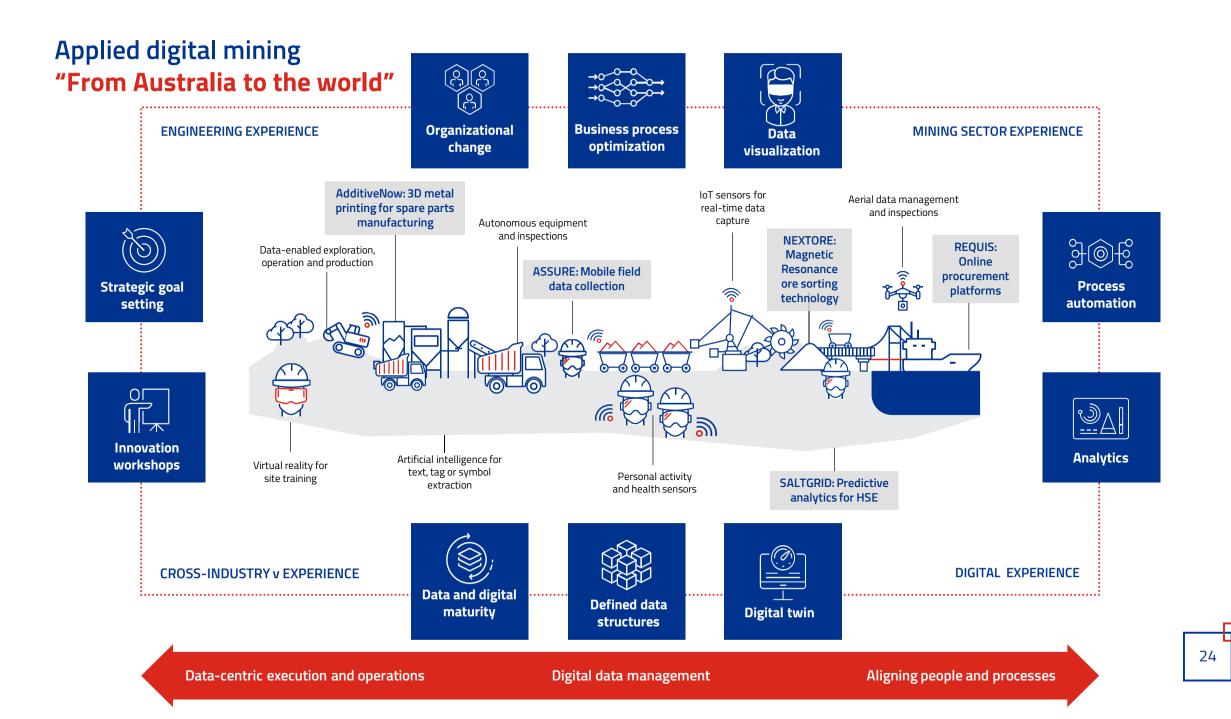
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# The way we work

### Worley digital evolution: From new to 'business as usual'



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# Summary

- Welcome to our new Worley
- New management team
- Leveraging history of major transaction success
- Transition focused on integrating operations and realizing cost, margin & revenue synergies
- Cost synergy target increased from AUD130m to AUD150m
- Transformation philosophy designed to build on the best of both companies to unlock long-term value
- Growth potential in our core markets underpinned by the global energy transition







# **Financial Reporting**

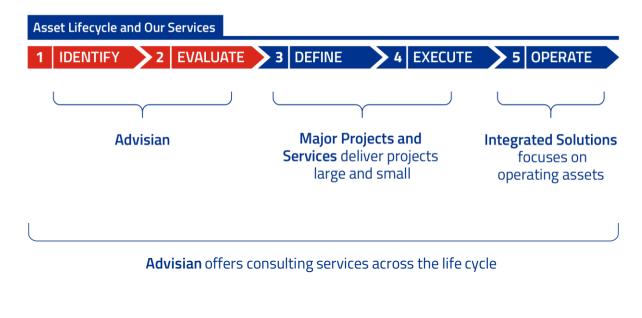
Tom Honan, CFO

**Eco**Nomics

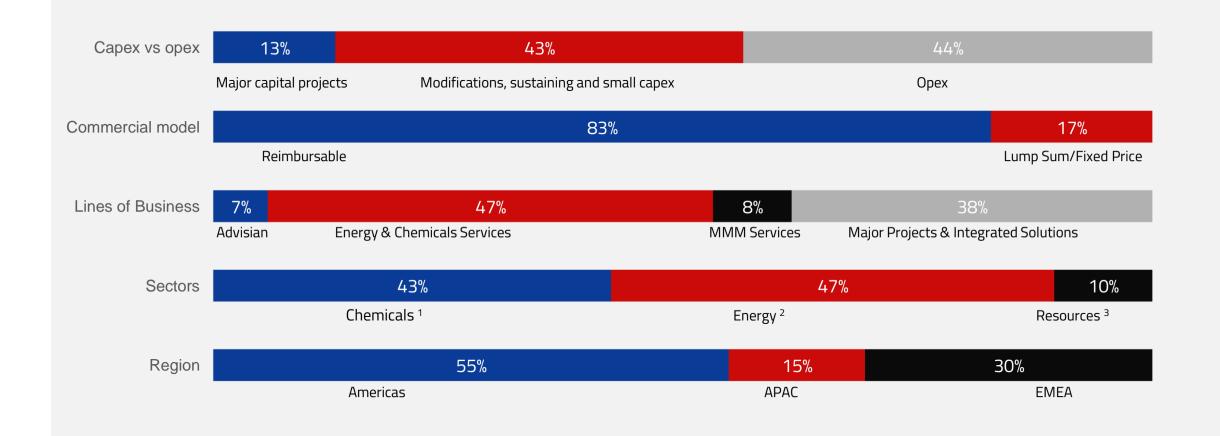


# Worley's business line structure offers support across all phases of the asset lifecycle

00 Mining, Minerals Upstream & Our markets Downstream Midstream & Metals & Chemicals Power & New Energy Infrastructure Chemicals Energy Resources Energy & Mining, Minerals **Chemical Services** & Metals Services Lines of business **Major Projects & Integrated Solutions** Advisian Australia, Pacific, Europe, Middle East Our global reach Americas & Africa Asia & China



# New business profile & reporting



Notes: 1 Chemicals includes petrochemicals and downstream hydrocarbons

2 Energy includes upstream and midstream hydrocarbons, and power and new energy

3 Resources includes mining, minerals & metals, and infrastructure

# Headcount and utilization

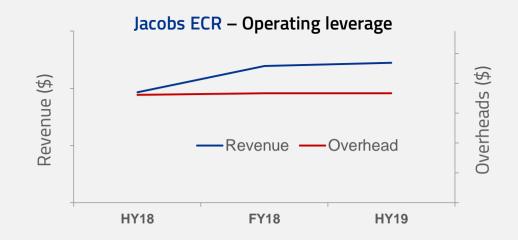


56,700 including 15,500 craft labor

WorleyParsons and Jacobs ECR both closely monitor utilization. Definitions to be aligned going forward.

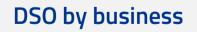
### Key operating indicators Operating leverage

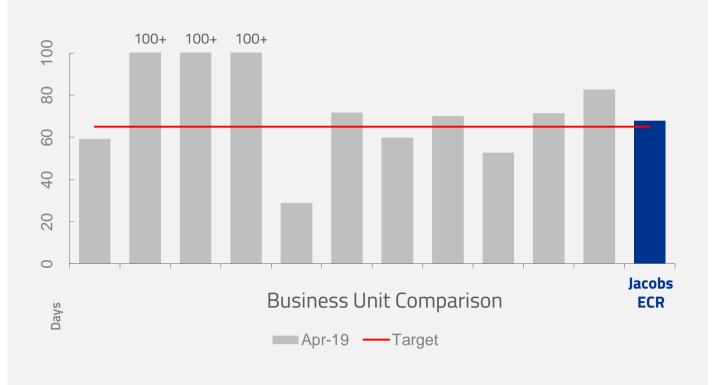
(\$) spequare (\$) spequare HY18 FY18 HY19



- Cost out program is proving sustainable with revenue growth in both heritage organizations
- Focus on achieving further margin growth with driver on gross margin / overhead ratio
- Business continues to be focused on achieving operating leverage with programs institutionalized:
  - Realize our Future program continuing, to address revenue growth, gross margin and cost control
  - Sustaining Performance management embedded at the performance unit level
- Cost synergy target increased from AUD130m to AUD150m

# Working capital



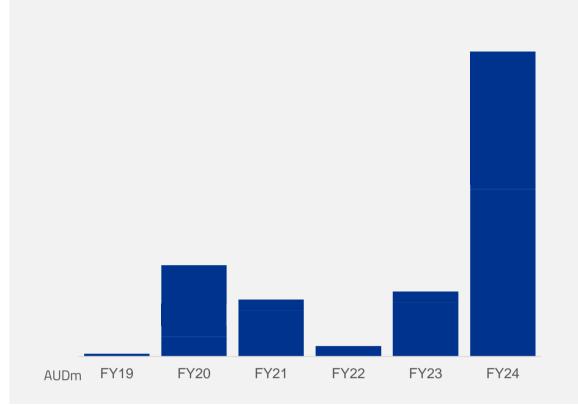


- Most regions & businesses performing at or ahead of target
- Heritage Jacobs ECR performance meets Worley target expectations

# Improved debt structure

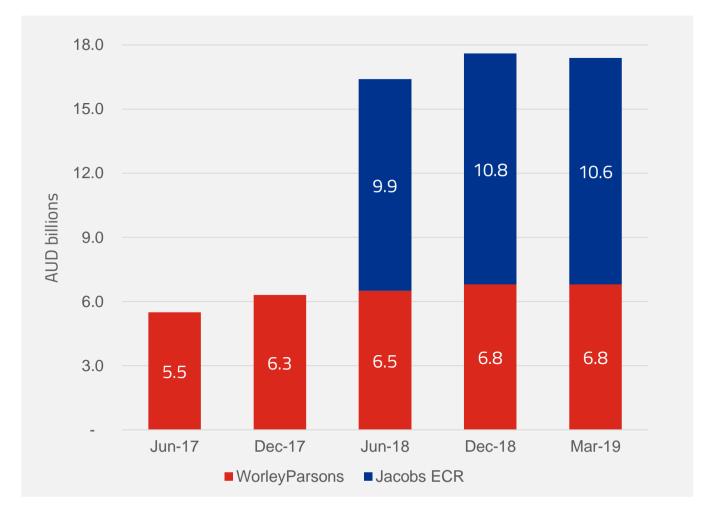
Additional flexibility and liquidity

### Debt facility maturity profile



- Core debt facility successfully refinanced in February 2019
- The new Syndicated Facility consists of a USD500m multi-currency revolving credit facility and USD800m term loans maturing in 2024
- Debt structure provides the Group with additional flexibility and liquidity to meet its working capital and strategic growth requirements
- Increased weighted average tenor to almost four years maintaining strong liquidity

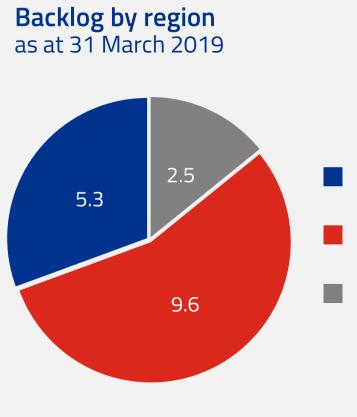
# Backlog



- Backlog definition revised to align across new organization<sup>1</sup>
- Historic numbers restated to new definition

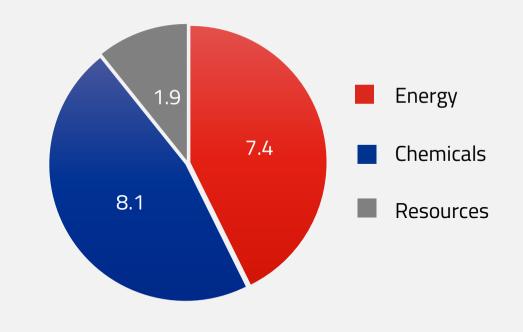
<sup>1</sup> Refer to Appendix: Supplementary Information

# Backlog by region and sector



- Americas
- Europe, Middle East, Africa (EMEA)
- Australia, Pacific, Asia, China (APAC)

#### Backlog by sector as at 31 March 2019



# Summary

- New operating model
- New business reporting profile that best reflects our diversified markets and broader offerings
- Operating metrics remain strong following financial integration
- Continued discipline on reducing overheads, cost control and synergy realization
- Cost synergy target increased from AUD130m to AUD150m
- Improved debt structure
- Backlog remains strong

Refer to Appendix for impact of AASB 16 Leases







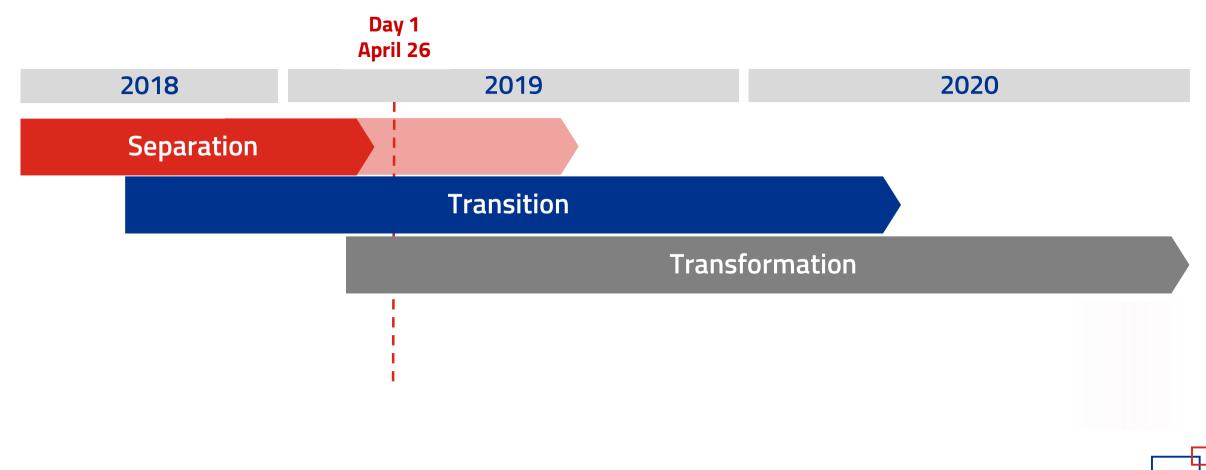
# Transition and Transformation

Chris Ashton, COO

**Eco**Nomics



## The transition journey to a new company



## Jacobs ECR acquisition progress - summary

Activities		Progress	Achievements
<b>Completion Activities</b>		$\checkmark$	<ul><li>Completion achieved</li><li>Day 1 roll-out successful and objectives met</li></ul>
Transition			<ul><li>Transition team in place with tools and processes operational</li><li>Program milestones on track</li></ul>
Synergy Realization	Cost		<ul><li>Cost synergies validated and target increased</li><li>Implementation commenced &amp; realization started</li></ul>
Synergy Realization	Margin and revenue		<ul><li>Margin and revenue synergies concepts validated</li><li>Work initiated on shared services model enhancement</li></ul>
Culture & People			<ul><li>New leadership in place</li><li>Majority of operational and functional structure in place</li></ul>
Customer Engagement			<ul><li>Positive customer feedback</li><li>Key customers engaged in shaping our future</li></ul>
Transformation			<ul><li>Leveraging the energy and excitement of Day 1</li><li>Transformation planning commenced</li></ul>

## Transition - Shift from planning to action

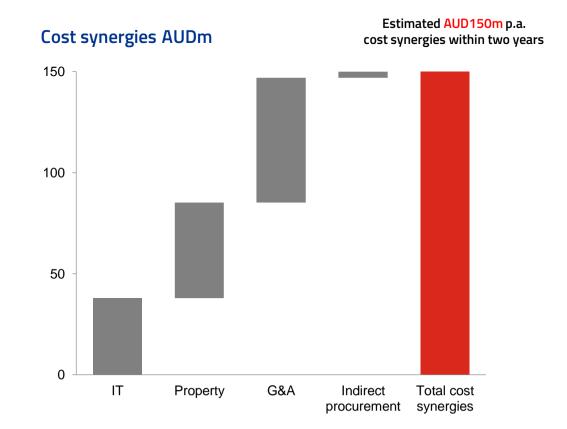


- Strong, proven leadership in place
   & organization set up for delivery of synergies
- Engaged a leading management consulting firm to de-risk delivery of planned synergies
- Detailed plan resources and schedule
- Four areas of synergies:
  - Cost synergy plans in action and delivering results
  - 2. Detailed margin synergy plans developed focusing on GID
  - 3. Revenue synergy capture plans under development, with revenue synergies already awarded
  - 4. Shared services center synergy planning commenced

# Synergy realization – Cost synergies

Cost synergies increased from AUD130m to AUD150m, expected to progressively deliver benefits over the next two years

т	<ul><li>Planning advanced and implementation underway</li><li>Consolidation of functional overhead</li></ul>
Property	<ul> <li>Relocations advanced (e.g. Houston &amp; Perth)</li> <li>Synergy values defined and validated in major locations</li> </ul>
G&A	<ul> <li>New operating model in place, synergy values defined and overhead reductions underway</li> <li>Savings realized from non-transferrable corporate and other overheads</li> </ul>
Indirect procurement	<ul> <li>Negotiated several key indirect procurement contracts</li> </ul>
Cost synergy Implementation costs	<ul> <li>Estimated one-off implementation costs of approximately AUD110m, plus AUD10m of capex – proportionally lower than previous estimates</li> <li>Approximately AUD55m of capex costs related to modernization including IT upgrades</li> <li>Costs primarily incurred within the first 12 months following completion</li> </ul>



# Synergy realization – Margin synergies: GID

## Global Integrated Delivery (GID)

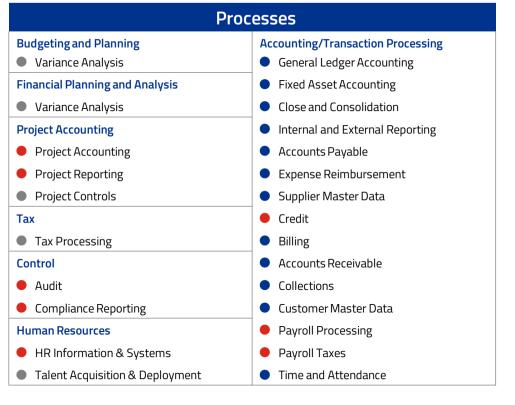
- Leverage Jacobs ECR's strong proven utilization of GID into heritage WorleyParsons
- Capture margin synergies enabled by wage arbitrage of hours delivered in India for global projects
- Replicate GID incremental system-wide margin per hour across company
- Detailed implementation & capture plans under development
- An enabler for revenue synergies



# Synergy realization – Margin synergies: Shared services

#### **Shared Services**

- Plan to extract additional value from shared services over three horizons (in the next three years):
  - Horizon 1 retire TSAs
  - Horizon 2 extend services & coverage
  - Horizon 3 new services ("NextGen")
- Expand the current shared services centers in Kuala Lumpur and Mumbai to a third in the Americas time-zone, better supporting the larger Worley organization
- Explore other channels to deliver mature transactional activities more efficiently
- Pursue process optimization, robotic automation and selfservice opportunities



Current support
 To extend services
 "NextGen"

# Synergy realization – revenue synergies

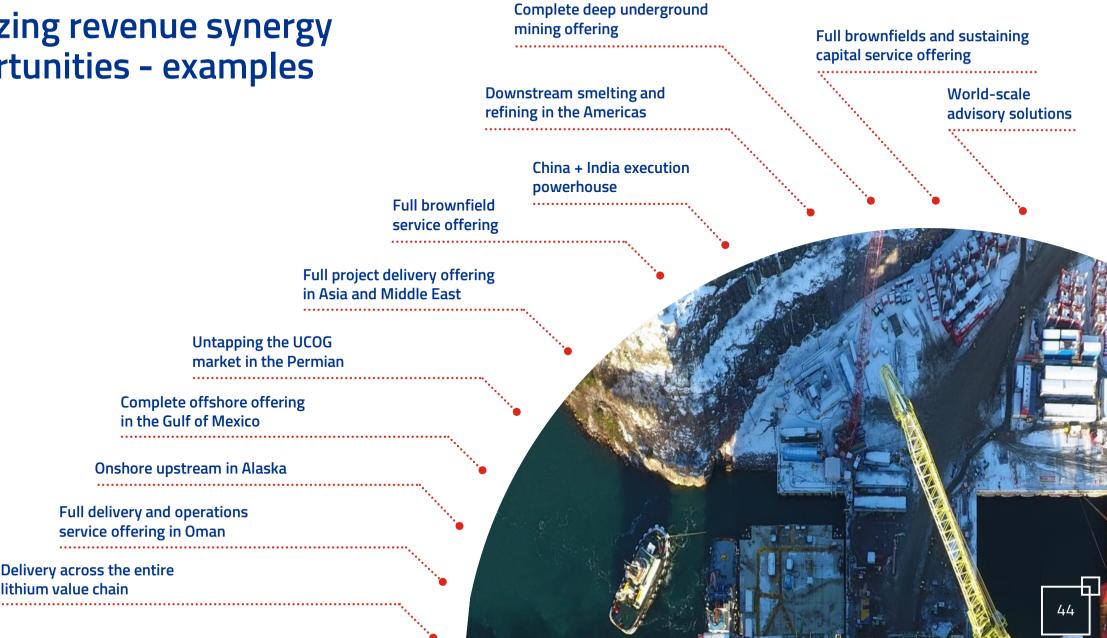
- Revenue synergy opportunities identified, linked to improved win-rate and quantity of work contested as a result of:
  - improved positioning
  - larger offering and
  - new opportunities
- Global revenue workshops complete and synergy capture plans in development



## **Realizing revenue synergy** opportunities - examples

Delivery across the entire

lithium value chain



## MMM Services – Revenue synergy Argentina – Orocobre Stage 2 expansion at Olaroz

Contract	Engineering, Procurement, Management and Construction (EPCM) contractor for the "Stage 2" expansion project for the Solar de Olaroz lithium facility. Worley will oversee the chemical process review and design of the facility expansion.		
	WorleyParsons brings	Jacobs ECR brings	
Relationship	Long-term global relationship with Orocobre	Track record of delivering services locally in Argentina	
Work Scope	Oversight of the chemical process review and design of the facility expansion	Engineering, Procurement, Management and Construction (EPCM)	
Expertize / Differentiator	Collaboration and joint effort from teams in Argenti	na and Chile helped secure the win	

## E&C Services – Revenue synergy Canada – Confidential project

	Contract	Stage 1 development planning for a multi stage greenfield in-situ project that involves replication of a standard design for the Centralized Processing Facilities (CPF) and well pads.		
,		WorleyParsons brings	Jacobs ECR brings	
	Relationship	Long-term relationship with upstream and downstream major projects and sustaining capital projects including engineering, procurement, fabrication and construction	Long-term relationship with upstream and downstream major projects and sustaining capital projects including engineering, procurement, fabrication and construction	T-
	Work Scope	Well pads and field facilities design and replication expertize	Technical design and delivery experience in CPF (including oil and water treatment facilities) and cogeneration	
	Expertize / Differentiator	Industry-leading low cost and replicable well pad design that delivers lower total project cost	Industry-leading CPF and cogeneration expertize	

## MPIS – Revenue synergy Canada – Fabrication expansion

	Within days of the merger, the Edmonton-based Jacobs ECR fabrication facility began seamlessly	
Contract	fabricating pipe spools for Cord's customer's project. The customer approved the shop's use of	
Scope	Worley's weld procedures prior to the merger and completed an audit of the facility. In late April, th	
	shop began receiving materials.	

#### WorleyParsons brings...

#### Jacobs ECR brings...

Relationship	Existing contract with major customer in Canada	Relationship with customer and Cord
Work Scope	EPCM for conversion of an existing alkylation unit at a refinery in the US	Fabrication capacity - the shop increased its manpower from 25 to 70 to execute this work, which consists of fabricating 29,000 factored diameter inches worth of pipe spools within a two-month window
Expertize / Differentiator	Technology, modular construction capability	Local fabrication capability, ability to adapt to new high quality fabrication requirements



## E&C Services – Revenue synergy Spain – Confidential, Chemical Plant Debottlenecking Revamp

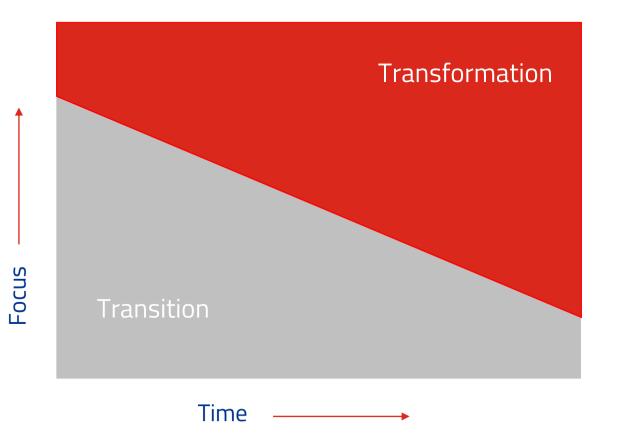
Contract Scope	Pre-FEED + FEED for the debottlenecking revamp to increase capacity of an existing elastomers plant in Spain. Scope includes pre-award of equipment, CAPEX estimate +/-10% and EPC execution plan.		
	WorleyParsons brings	Jacobs ECR brings	
Relationship	Executing revamp for the customer in analogous plant in South America	Recently executed FEED + PMC for analogous greenfield plant in China for same customer	
Work Scope	Joint execution team from project kick-off synergistically combining resources and expertise from both organizations	Avoidance of new hires having to undergo learning curve and fast ramp-up	
Expertize / Differentiator	Strong downstream sites engineering experience with large pool of discipline teams and 3D modelling group	Strong local team of process experts. Recent experience of chemical debottlenecking revamps	

## E&C Services – Revenue synergy US East – Confidential customer, ELG/CCR Engineering

Contract Scope	Conceptual engineering studies to develop solutions compliant with guidelines for effluent and coal combustion residuals. Preparations for final detail design work.		
	WorleyParsons brings	Jacobs ECR brings	
Relationship	Existing customer relationship based on previous consulting efforts for the plant assets	Long-term customer relationship with current customer and legacy plant owners	
Work Scope	Engineering and consulting services related to ELG/CCR requirements	Avoidance of new hires having to undergo learning curve and fast ramp-up	
Expertize / Differentiator	World-class water and wastewater capabilities	Power plant design and operation center-of- excellence	

# Transformation

- Shape and claim new spaces in the markets we serve
- Engage in creative partnerships with our customers and suppliers
- Deliver a level of service that generates step-change in our industry
- Build a purposeful, innovative and sustainable culture
- Create clear water between what we do and the rest of the pack



# Summary

- Transaction successfully completed with synergy capture in action
- Transition up and running thoroughly planned and resourced
- Focused on areas of synergy; cost, margin, shared services and revenue
- Cost synergy target increased from AUD130m to AUD150m
- Positive customer feedback
- Transformation at the right time, planning commenced









# **Lines of Business**

Driving the Strategy

**Eco**Nomics







# **Energy & Chemicals Services**

Vinayak Pai

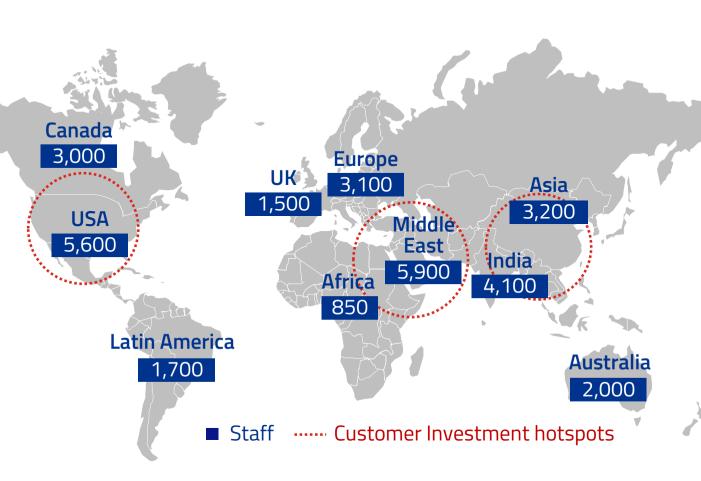
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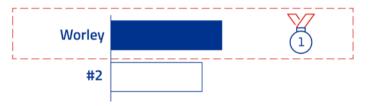
# **Overview of E&C Services**

# Global footprint with long-term customer relationships in key strategic markets

- Leading technical services provider delivering full lifecycle capabilities across Energy and Chemicals sectors
- Business and resources focused on:
  - long-term blue-chip customer relationships
  - key global growth markets
- Highly leverageable GID capabilities



#### ENR Energy global design rankings<sup>1</sup> (upstream only)



ENR Chemicals global design rankings<sup>1</sup> (includes petrochemicals & refining)





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<sup>1</sup>ENR Global Sourcebook 2018. Design firms (excluding construction) ranked by revenue estimate (international and domestic); adjustments applied to consider Global revenue by sector where only International revenue was provided; Hydrocarbons excludes downstream petrochemicals & refining revenue; Chemicals includes chemicals (non petroleum), petrochemicals & refining revenue

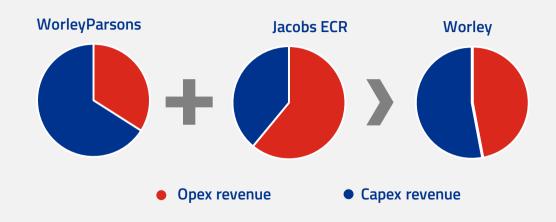
# **Operating model**

## **Typical projects include:**

- Sustaining capital programs
- Discrete improvement projects
- Greenfield projects



## Capex and opex balance improving resiliency in earnings



Our access to sustaining capital spend improves our economic cycle resiliency and drives stable revenue and steady backlog

Source: Company financials

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# Customer driven solutions across asset lifecycle

#### **Customer needs**

Local knowledge and resource

## Our solution



## Hub and spoke

- Large global delivery centers for large global projects
- Local offices for small and sustaining capital projects

- Consistency
- Efficiency
- Predictable project delivery



- Recruit top talent
- People development and upskilling
- Invest in tools, systems and processes
- Knowledge management

## Competitive

## Data driven



## GID

Digital

#### Worley Investor Day 2019



## Revenue synergy opportunities to drive growth in E&C Services

Unconventional oil & gas in Permian

Full project delivery offering in GoM – Jacobs ECR topsides and WorleyParsons subsea/floating systems

Combine ECR front-end and FEED capability with WorleyParsons PMC capability

Upcoming gas investments in Oman

Combine WorleyParsons and Jacobs ECR GID capabilities

China procurement capability to enhance Jacobs ECR alliance and EPC project solutions

Combine Jacobs ECR technology relationships with WorleyParsons China presence

Delivering WorleyParsons power capabilities to Jacobs ECR customers

> Focus on US power and renewables

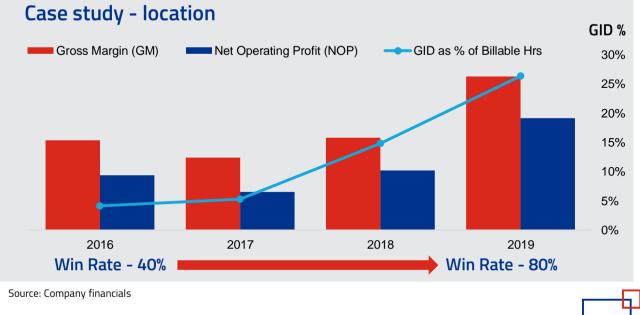
# Focused on driving location profitability

Strong focus on improving the profitability of E&C Services within each location

- Evaluate each location on ratio of GM / G&A
- For locations at lower end of spectrum focus on three pillars of profitable growth
  - improve margin
  - reduce overhead cost (including synergies)
  - improve GID content

#### Gross Margin G&A – Global trend for Jacobs ECR





# GID is a major driver of profitable growth across the business

# GID workhours (lacobs ECR) 10% CAGR FY15 FY16 FY17 FY18

## Why GID?

- Increase win rates
- Competitive with low cost service providers
- Help improve schedule by leveraging 'round the clock' operations globally
- Increase blended GM/hour
- Improve resource management

## How we do it?

- Build trust between customers & global employees
- Apply consistent systems, tools and processes
- Maintain quality
- Treat as one operation
- Continuous performance

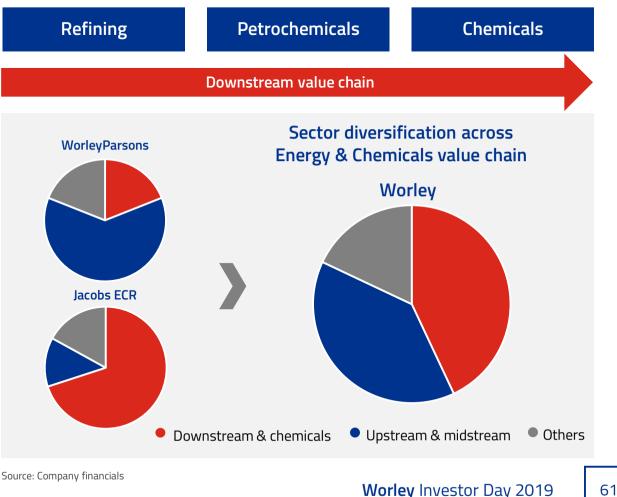


# Downstream and chemicals sector

## Overview

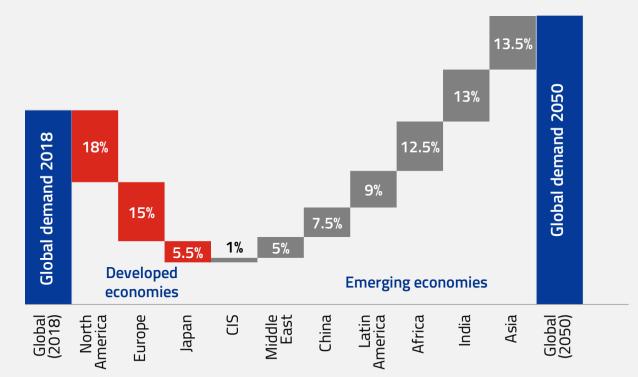
- Worley has expanded capability across the Energy & Chemicals value chain
- Key steps in value chain progression
  - 1. Refining oil into products such as fuels
  - 2. Manufacturing petrochemical feedstocks, polymers and derivatives ranging from polyesters, acrylic fibers, synthetic rubbers and polyurethanes etc.
  - 3. Specialty and agri-chemicals including ammonia / urea fertilizers, alcohols (MeOH / EtOH), acids, pharmaceutical intermediates, paints and resins, cosmetic ingredients et al.
- Different business model from upstream customers, multiple demand drivers and less sensitive to oil price volatility
- Sector driven by changing dynamic between feedstock availability and market demand

#### Three key industry segments



## **Refining** Market outlook

**Regional contribution to change in global refined product demand** 2018 to 2050 (million b/d)



Note: Refined product volume refers to Gasoline, Gasoil/Diesel, Jet/Kero, Naphtha, Residual Fuel Oil Source: IHS Markit (2019)

- Longer-term decline in traditional refining markets: As transportation fuel demand nears its peak, customers are re-evaluating their product mix as a result of competition with new energy forms
- Asia and Middle-East growth markets: Demand (Asia) and feedstock supply (Middle East) is forecast to drive global growth. Combined regions estimated to contribute 80% of capital spending to 2050
- Refining & petrochemical integration trend: Customers look to safeguard profitability, tieup supply chain and optimize downstream facilities for their upstream crude production

## **Refining** Market opportunities & focus

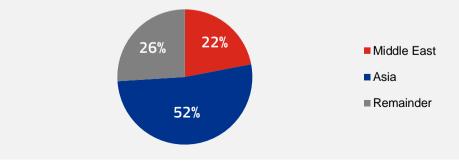
## Leveraging core capability

 Sustaining capital: Extend existing relationships in mature markets into growth geographies

#### Accessing key growth markets

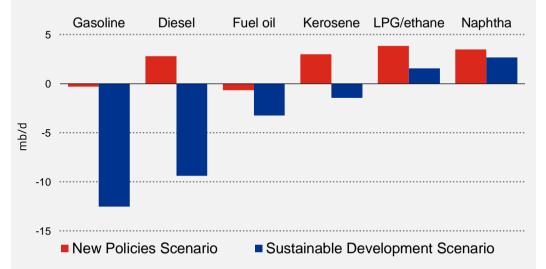
- Regulatory projects: Expectation for short-term investment as refiners adapt to new business reality of 2020 IMO regulations and continued implementation of clean fuels globally
- Renewable diesel demand currently US driven.
   Opportunities in Canada and Europe continue to evolve
- Large scale integrated refining & petrochemical plants across Asia (India and China) and the Middle East (Saudi Arabia and UAE)

Crude distillation capacity additions to 2025



Source: IHS Markit (2019)

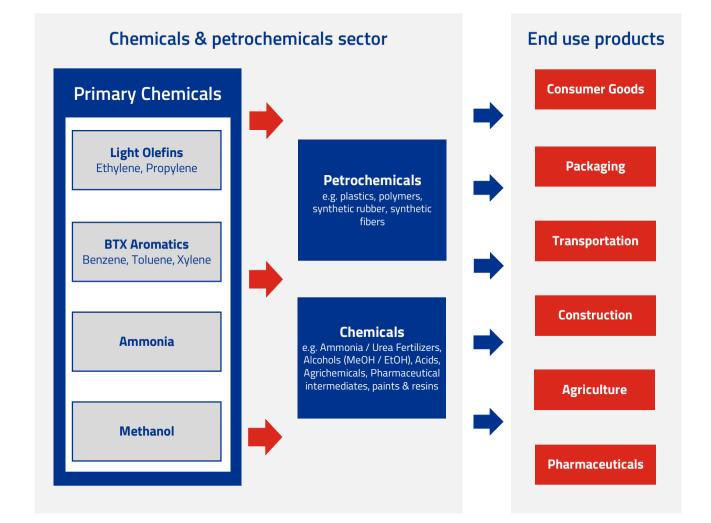
#### Change in global oil product demand, 2017-2040



Source: International Energy Agency (IEA), World Energy Outlook 2018

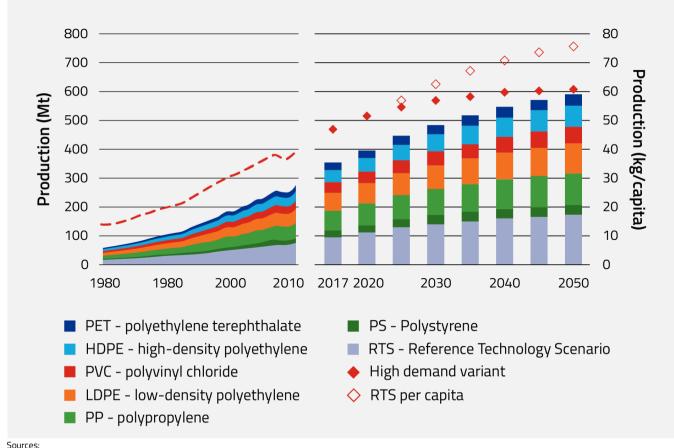
## Petrochemicals Market outlook

- Petrochemicals market growth forecast: Growth for petrochemicals historically exceeds GDP growth, forecast to continue with demand growth across all major products expected with end-use products demand increasing
- Crude oil-to-chemical growth: Greater returns per barrel for chemical production. Multiple large projects across Asia and Middle East, particularly Saudi Arabia
- Expected demand and expenditure growth in plastics driven from Asia and the Middle East; and substitution of materials, despite impact of wastes and recycling



## **Petrochemicals** Market opportunities & focus

### Production of key petrochemicals products



## Accessing key growth markets

- Grass roots ethylene complexes:
  - Mixed feed cracker complexes with a focus in the Middle East and India
  - US ethylene complexes based on shale gas
- Pursue western investments into China

#### Leveraging core capabilities

- Capitalize on Advisian's position as world leader in 'Optimized Crude to Chemical Concept' development. Engaged in all major pursuits in the Middle East and India
- Centers of excellence in US, Europe and China with key technology relationships
- Apply PMC model to ethylene cracking in Asia

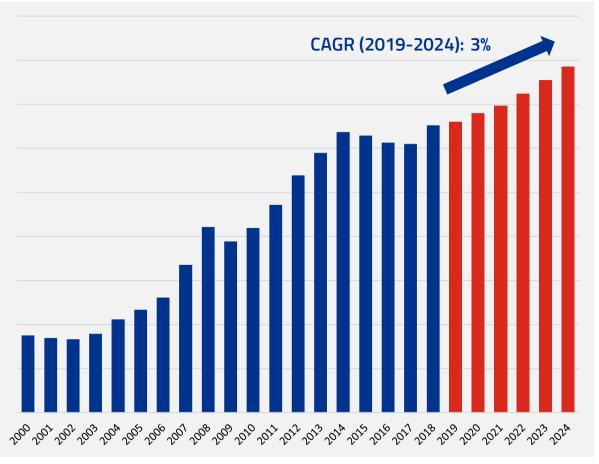
#### Immediate revenue synergy opportunities

 China + India execution powerhouse enables globally cost competitive delivery of subsequent project phases

International Energy Agency (IEA), Future of Petrochemicals (October 2018) International Energy Agency (IEA), World Energy Outlook 2018, Sustainable Development Scenario

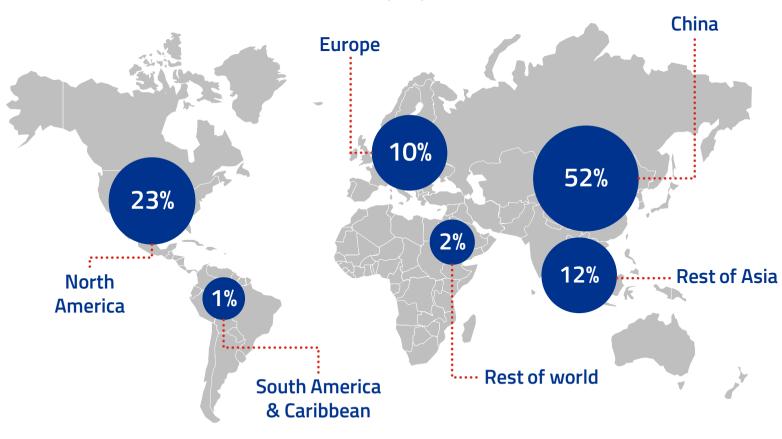
## **Chemicals** Market outlook

## Chemicals capital expenditure: Trend and outlook



- Stable growth market: Chemicals industry represents a large and historically stable market strongly linked to GDP growth. Investment cycles historically display limited cyclicality
- Multiple market drivers: Demands for end-use products in modern day society continues to drive demand for basic chemicals
  - population growth in emerging nations
  - urbanization
  - globalization
  - food security
- **Growth dynamic:** Regional growth areas are driven by changing dynamic between feedstock availability and market demand. Asia, Middle East and North America are current hotspots

## **Chemicals** Market opportunities & focus



#### Global chemicals industry capex (2019 to 2023)

#### Accessing key growth markets

 FDI market in China: Regulatory changes on foreign ownership stimulating investment into China

#### Leveraging core capability

 Extensive delivery capability in India and China enabling execution in local market and large-scale global projects

#### Immediate revenue synergy opportunities

- China + India execution powerhouse
- Full project delivery offering in Asia and the Middle East
- Leverage extensive front-end capability



# **BASF** Global Engineering Alliance

Global contract	Strong relationship originated in China and Belgium Regional partnerships in place since 2011 Global Service Agreement since 2014
Site engineering Europe	Providing multidisciplinary engineering services in Antwerp, Ludwigshafen and Schwarzheide delivering complex brownfield projects safely (>200 FTE)
Projects	Executing BASFs large capital investments globally
Digitalization	Our high value engineering center in Mumbai and Chengdu support BASFs global Digital Plant Initiative, > 150,000 workhours in backlog



# MEGlobal US Gulf Coast – BOOKRAMEG project

Contract scope	Design and construction of a world scale MEG facility including both ISBL and OSBL scope. PDP, FEED, EPC/CM
<b>Schedule</b> On time delivery	Project mechanical completion within schedule incentive bandwidth established by customer
<b>Procurement</b> Expedited POs	Project issued 90% of equipment purchase orders in a three month time period which met target expectation established at project start
<b>Cost savings</b> Customer satisfaction	Identified USD33.5m in savings during FEED phase



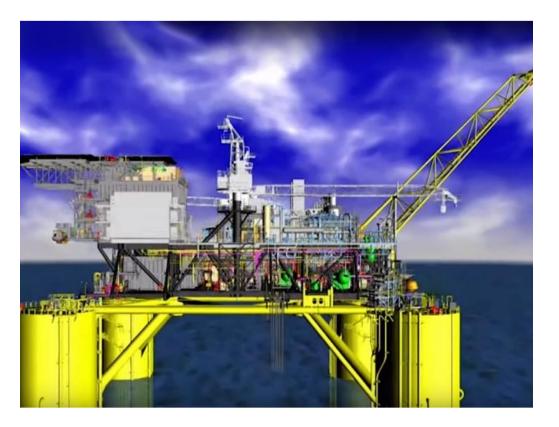
# BP Oman – Khazzan Gas project

Contract scope	Project objective to deliver gas and condensate product from the southern sector of Block 61. Selected as BP's EPCM partner for the long-term complex USD16b program, providing key leadership and technical specialist services for the gathering, well sites, export systems and supporting infrastructure 2014-2017 (Phase I) 2018-2021 (Phase II)
Integrated delivery	Engineering undertaken by a multioffice and multipackage approach led from Oman and supported by the UK and our high value engineering center in India
	Delivered almost 33m hours incident free
Safety & capital efficiency	Phase I delivered ahead of schedule and under budget resulting in beneficial production being achieved two months ahead of schedule
cinciency	Awarded the 2018 MEED best project in the Middle East



# **Confidential** Gulf of Mexico

Contract scope	FEED, detailed design, and procurement for semi- submersible deep-water platform in the Gulf of Mexico Topsides by heritage Jacobs ECR; hull, hull systems and topsides main steel by heritage WorleyParsons
Collaborative approach	Worked closely with customer to redesign a solution that challenged the norm in a cost prohibitive deep- water environment
Innovation	Designed a lightweight, expandable solution. Unlike a conventional modular design with multiple lifts during construction and installation, the new design is more economical to build and install and only requires one lift
Capital efficiency	Achieved a 70% reduction in weight from original concept





# Summary

- Diverse sector capability across the entire E&C value chain
- Unrivalled global footprint
- Core markets with positive long-term outlook
- Blue-chip customer relationships
- Proven GID driving competitiveness
- Strategic growth focus matched to emerging opportunity





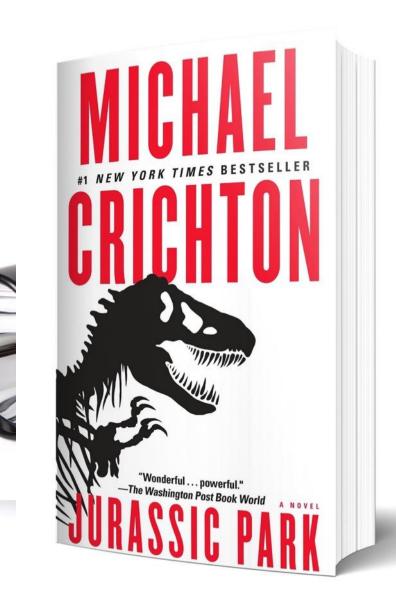


# Major Projects & Integrated Solutions

Karen Sobel

**Eco**Nomics

# **Innovation in MPIS**







# **Innovation in MPIS**

C

WIRELE

DCLOBERT & UM AUTO REVERSE

namu

ON SALAN

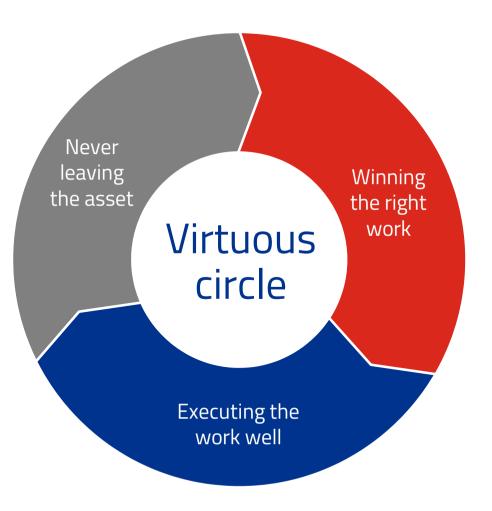
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# Major Projects & Integrated Solutions (MPIS)



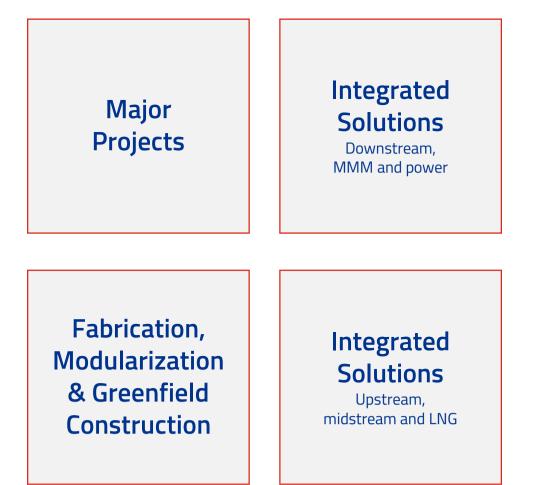


# Maximizing ROI at every stage of the asset life cycle

Worley Investor Day 2019



# Overview of MPIS Globally aligned for value





# **Powerful growth engine**

- Construction capability is ingrained in the MPIS value chain
- Well-developed workforce delivers
   successful construction projects





**10** fabrication & modularization facilities



# Craft and construction management



# **Delivering value** starting with our people

Investing in training our field-based workforce:

- accurate forecasting
- strategic recruitment
- develop learning paths, training and mentoring
- engage to retain

Investing in training our office-based personnel:

Resources we can quickly mobilize

projects on time and on budget

- array of online training available in Worley Academy
- mentorship and sponsorship programs



#### Investing in training our craft workforce in the US and Canada

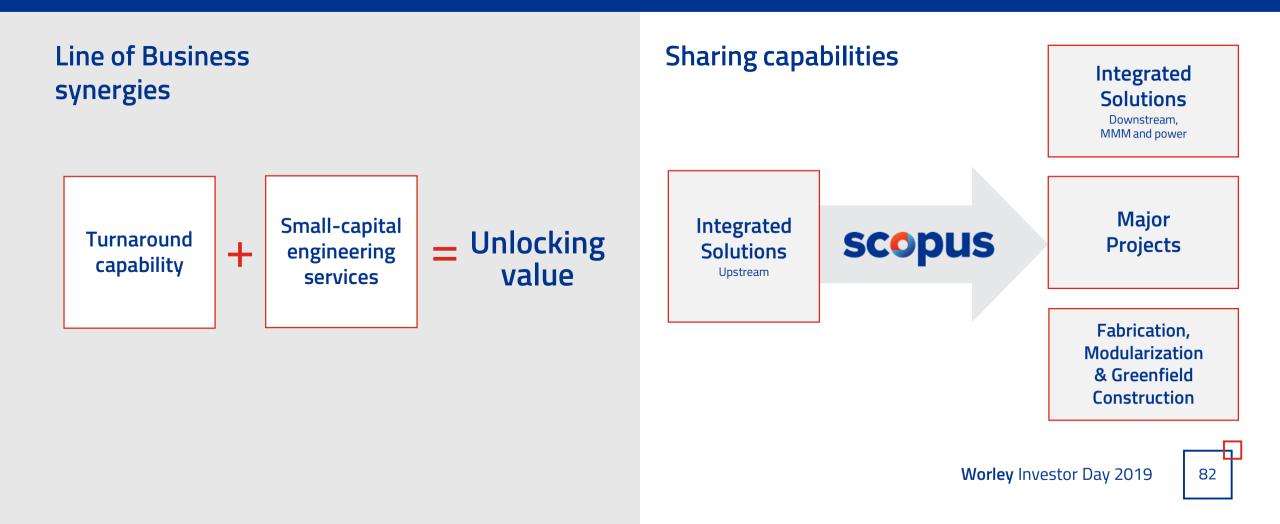
Construction workers in US and Canada obtain National Center for Construction Education & Research (NCCER) Certification

- Increases productivity\*
- Reduces turnover, injury and rework\*

\* Construction Industry Institute (CII). RT231-1 "Construction Industry Craft Training in the United States & Canada" (2007)



# Unlocking the value of MPIS



#### Lubrizol La Porte, Texas – Lubrizol Zeus

Contract scope	EPC of a proprietary chemical plant
Construction- focused engineering & procurement	Early construction established sequence and detailed Field Installation Work Packaging (FIWP) to drive efficient installation >90% detailed design using GID in India
EPC tool integration in AWP	Full integration of construction management tools created measurable efficiencies in advanced work packaging (AWP) process
True global procurement	India procurement personnel co-located in China supplier shops interfacing between engineering and fabricators which drove priorities, real time decision- making and expediting



#### Encana Corporation Alberta, Canada – Pipestone processing facility

Contract scope Engineering, Procurement, Fabrication, and Construction (EPFC) scope for a greenfield 200m standard cubic feet per day, sour, shallow-cut gas processing plant

Complete lump sum, EPFC delivery of a gas plant for detailed engineering, fabrication, and construction

**EPFC** delivery model

Synergy

Working

together

Heritage Jacobs ECR team delivering balance of plantengineering services combined with heritageWorleyParsons Cord fabrication and site construction

Completion<br/>on trackOn track for completion by September 2020 per the<br/>project schedule



## Eastman Chemical Company Kingsport, TN and Longview, TX

Contract scope Turnarounds, shop fabrication, capital material warehouse operations, supplemental maintenance, capital program management and technical support

Long-term relationships & solutions	Nearly nine-year tenure; proven performance led to winning re-bid in April 2018
<b>Skilled Trades</b> Development, retention & growth	Worley is the largest contractor for skilled trades scope at both locations
<b>Value Reach</b> Capitalizing capabilities	Sustaining services at two Eastman locations: Longview, TX, and Kingsport, TN



TNO Site – Kingsport, Tennessee



TXO Site – Longview, Texas

#### Upstream, midstream and LNG integrated solutions Global portfolio

Hook-up<br/>& commissioningProven success with North Sea hook-up &<br/>commissioning services spring boarded to GoM,<br/>including successful integration of scrum principlesAlaska<br/>full-service<br/>deliveryWorley has the most competent and diverse portfolio<br/>of oilfield support services on the North SlopeLNGLeverage deep LNG domain knowledge and<br/>substantial construction workforce to capitalize on<br/>growing LNG liquefaction market in the US

#### Scrum differentiation - GoM portfolio

Visual factory program employs continuously improving scrum techniques that generate measurable results; reduction of engineering and construction rework and 100% on time delivery





## Revenue synergy opportunities to drive growth in MPIS

US and European customer projects in China and SE Asia

Unconventional oil & gas in Permian

Integrated Solutions growth (Refining & MMM)

LNG Gulf Coast - MMO

China + India execution powerhouse for the downstream market

Onshore upstream - Alaska

Oman – full service offering

Offshore Gulf of Mexico floating facilities

Chemicals and petrochemicals FE + FEED + PMC

> Offshore Gulf of Mexico – EPC and MMO

# Summary

- Win the right work. Execute projects well. Never leave the asset – solutions for the full asset life cycle
- MPIS now has a larger global footprint and is enabled to deliver in-house EPC solutions to our customers
- We invest in our people to deliver the best value
- We partner with customers to transform the industry





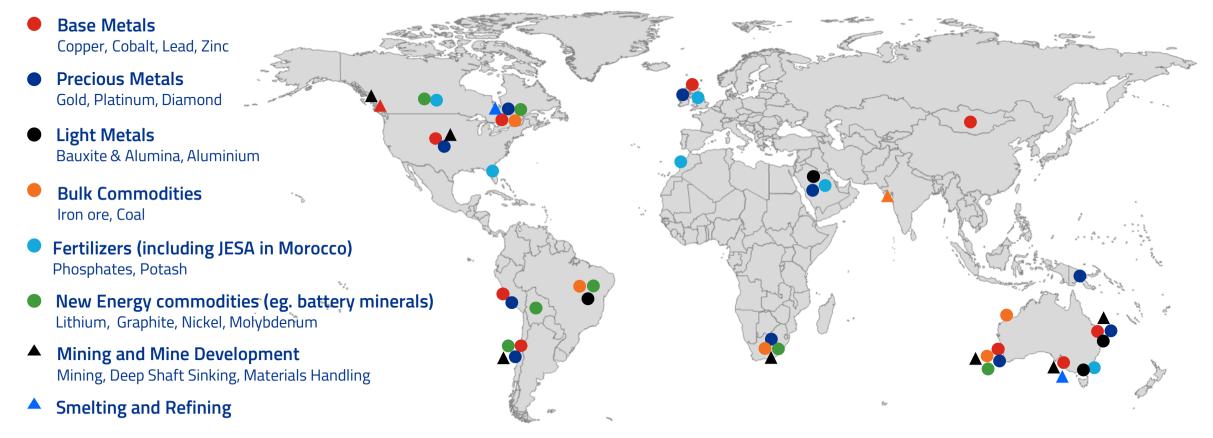


# Mining, Minerals & Metals Services

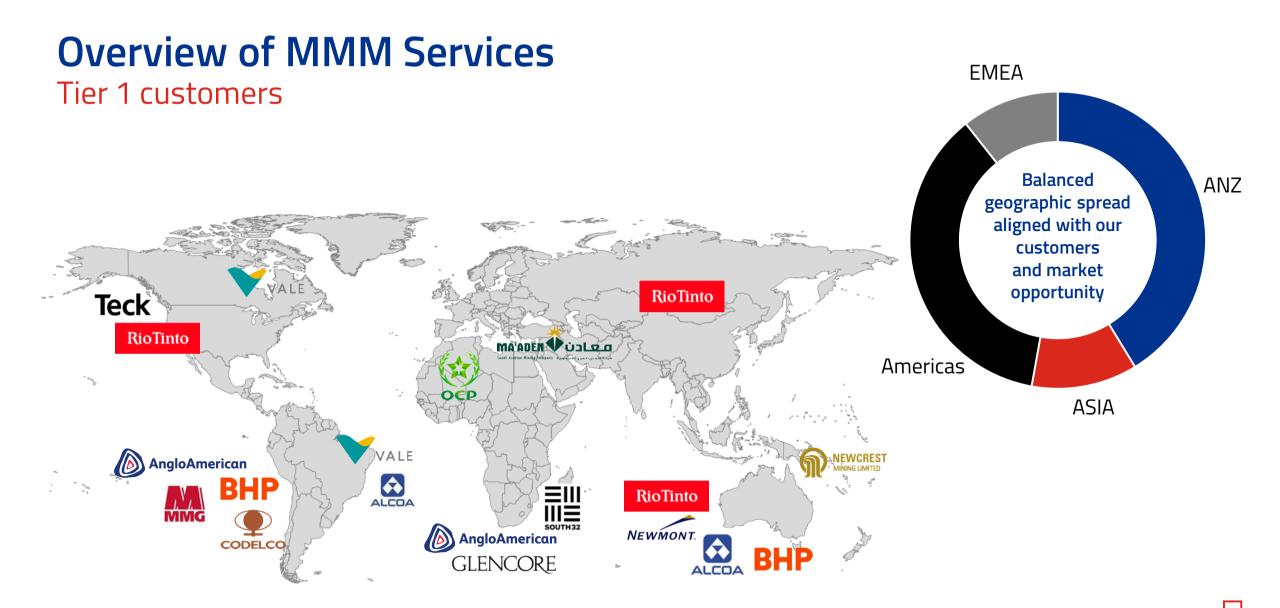
Andrew Berryman

**Eco**Nomics

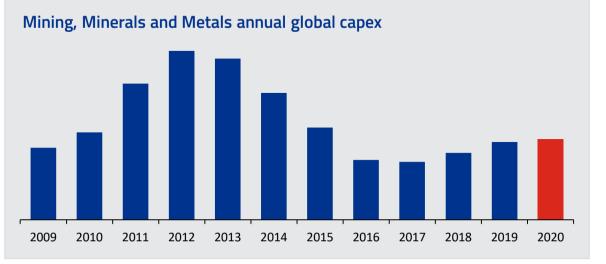
## Overview of MMM Services Global capability



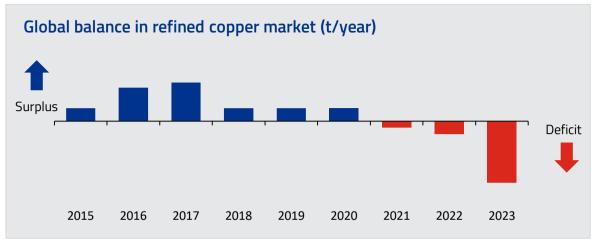
- GID office
- Chemetics



# Market outlook



Source: Factset CAPEX Data (May, 2019)\*



# Capex continues with strong market fundamentals across key commodities

- Focus is on life of mine extension and increased investment in underground mining
- Copper: structure supply deficit emerging in 2023
- Fertilizers: investment driven by global population growth and food shortage
- Iron ore: large sustaining capital investment, market tightens with recent supply disruption and demand for higher grade ore

\*Analysis of company announcements from BHP, Rio Tinto, Anglo American, Glencore, Vale S.A., South32, Fortescue Metals Group, Freeport-McMoRan, Southern Copper Corporation, Public Joint Stock Company Mining & Metallurgical Company Norilsk Nickel Sponsored ADR, Norsk Hydro ASA, Fresnillo PLC, ALROSA PJSC, MMG, Newmont Goldcorp Corporation, Barrick Gold Corporation, Newcrest Mining, Alcoa Corp, Grupo Mexico S.A.B. de C.V. Class B

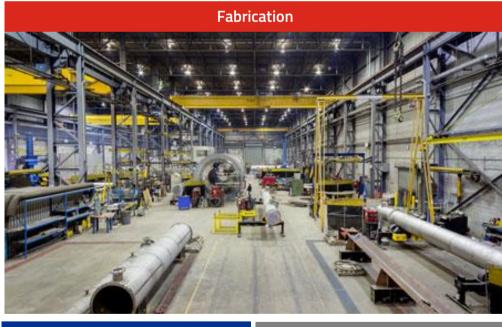
# Sustaining capital growth

- Sustaining capital is a key pillar to our growth strategy
- Revenue from sustaining capital spend represents over half our global Mining, Minerals and Metals Services business
- Sustaining capital investments are expected to continue across growth commodities, including iron ore, copper and fertilizers
- Continued performance and strong customer relationships are key



# **CHEMETICS**<sup>®</sup>

- Delivers technology and solutions for sulphuric acid and electrochemical plants across industries
- Major consumer of sulphuric acid is the mining industry copper, lithium, nickel, zinc, and phosphates
- New mines often demand on-site acid supply due to transportation constraints
- Over 50 years experience, with:
  - research and development laboratory and custom-built fabrication facility in Canada
  - global logistics management capabilities
  - specialized project teams and worldwide network of trusted suppliers
- From feasibility studies, equipment supply, EP/EPC plant projects, sustaining capital projects, to long-term, after sales technical service





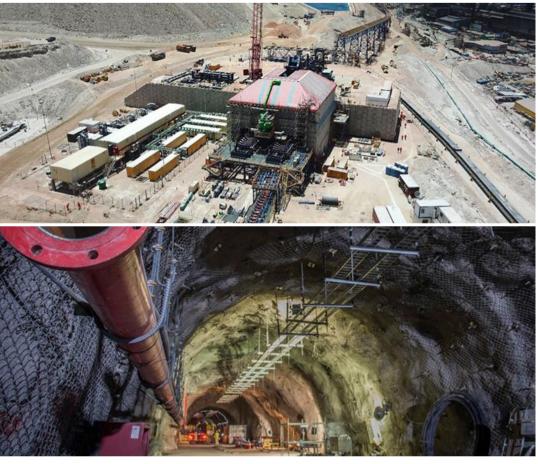
## Oyu Tolgoi Mongolia – Oyu Tolgoi underground copper mine

Contract scope	EPCM delivery of the expanded underground development and copper processing facility
Underground mining solutions	Team specializing in mining including underground and surface material handling, shaft sinking, mineral processing and infrastructure
Global integrated team	Interfaces across surface facilities and underground teams to successfully utilize depth of knowledge and experience located in Australia, Chile, South Africa and Mongolia
Innovative engineering solutions	Decreased capex, improved safety outcomes and ongoing operational benefits resulting in cost savings. Includes improvement to foundations, heating and conveyors



### Codelco Chile – Chuquicamata underground copper mine

Contract scope	Conceptual study, pre-feasibility study for the project that will transition one of the world's largest open-pit mines into an underground mine
Underground mining	Conceptual engineering for ore extraction options; panel caving and block caving. Various configurations investigated in order to identify the optimal mine development solution
Integrated team	Ability to harness the global skills and expertize in investigating technical and commercial feasibility to align with our customers' project drivers
Safety	In-depth analysis of the human factors associated with underground mining to enable the operational methodology to consider occupational health and safety in the structure of the shift/roster system



### BHP Western Australia – South Flank iron ore project

Contract scope	Deliver engineering and consulting services. The project is expanding the existing Mining Area C (MAC) operation with ore sourced from the adjacent South Flank deposit. Includes major process infrastructure and non-process infrastructure
Long-term relationship	Creating value for our customers from the earliest concepts development stage. Services continue through construction and handover to the customer
Digital	Partnering with our customer in the move to digital mines enabling productivity improvements across the entire asset lifecycle
Safety and Technology	Through the use of virtual reality, our team is able to undertake safety and design reviews for the iron ore project in a new way. It is also being developed at a lower cost than traditional 3D models



## OCP Khouribga, Morocco – Beni Amir phosphate wash plant

Contract scope	This project develops a wash plant that contains two phosphate wash lines to enhance the quality and adapt the transportation through pipeline	
Industry benchmark	No similar project in the world for phosphates The 190km pipeline is the longest of its kind in the world	
Environment and sustainability	<ul> <li>Awarded the COP 22 label in 2016 as a sustainable development project</li> <li>90% transportation cost reduction</li> <li>around 3m cubic meters per year of water savings</li> <li>CO2 emission reduction of 930,337 tons/year</li> <li>Increase of transport capacity from 26.6Mt per year in 2012 to 38Mt per year in 2019</li> </ul>	
Delivered on time	Complex project with linkage to upstream and downstream projects being executed in parallel. The schedule of 48 months was very tight and project delivered successfully on time	



## Revenue synergy opportunities to drive growth in MMM Services

Full project delivery offering in all key geographies

China + India execution powerhouse

Leadership position in underground mining from concept through to execution

Strength across commodities (e.g. copper, gold, iron ore, phosphates and battery minerals)

Full brownfields and sustaining capital service offering

Downstream smelting and refining in the Americas

Delivery across the entire lithium value chain

#### World-scale advisory solutions

Applied digital mining

# Summary

- Global leadership position
- Industry seeing strong project development pipelines
- High growth potential in sustaining capital, particularly in iron ore, copper and fertilizers
- Drive growth through long-term partnerships with our key customers
- Capitalize on revenue synergies including large investments in underground mining







# Advisian

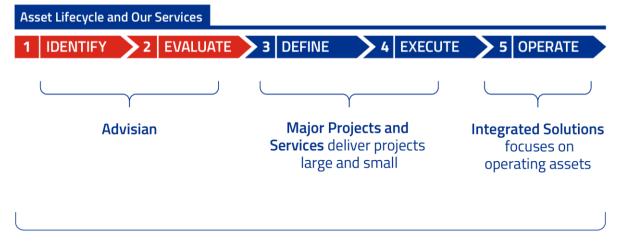
#### Adrian Smith

**Eco**Nomics

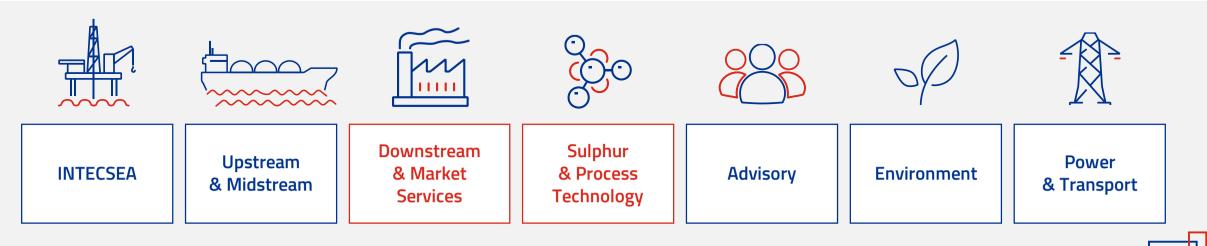
# Advisian business profile

Advisian is the **global advisory, consulting** and **early project development** line of business for Worley and is a key enabler to the broader business.

Unique to its offering is the ability to **combine technical** and **advisory valued solutions** across the full lifecycle.

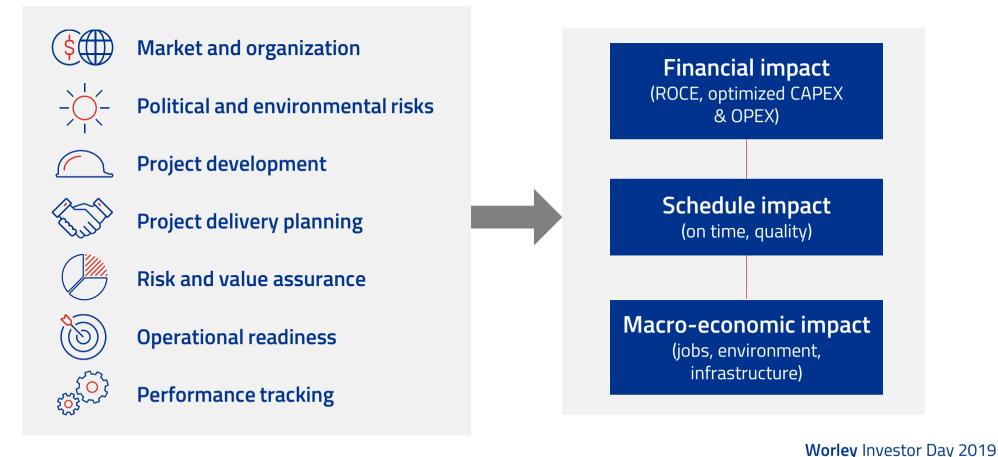


Advisian offers consulting services across the life cycle



# Our value proposition

Clustering our capabilities to cover the **seven critical aspects of capital projects** where we can drive financial, schedule and macro-economic benefits for our customers.



# **Downstream & Market Services**

The **combination of our teams** enhances our offering to the market. It provides a **new addition to Advisian** with the **market and subscription market services offering and capability** 

#### Downstream

- Technical and economic consulting practice provides customer project development services with specialized advisory support across the downstream value chain
- Industrial Water team, legacy CH2M, providing customer project support and technology solutions or source and wastewater streams

#### **Market Services**

Specialist market reports and data available through subscription services



Providing **consultancy services** to the downstream industry **since 1957** 



# Sulphur & Process Technology

Together, as **two of the largest sulphur technology suppliers**, our **combined capabilities**, **project histories**, and **portfolios** are **unmatched** in the industry

#### Comprimo adds:

- Specialist technologies for gas processing and sulphur removal in addition to Worley Sulphur (Shell – Huntsman)
- Third party licensing packages outside sulphur
- Proprietary catalyst and equipment sale





## Revenue synergy opportunities to drive growth in Advisian

#### Downstream & chemicals Front-End + FEED + PMC

**Complete offshore** 

offering in Gulf of Mexico

Resource infrastructure to MMM and downstream

.....

Industrial water offering

Modularization for refineries (Sulphur units)

Sulphur value chain

Power sector advisory capabilities

.....

#### Confidential customer Gulf of Mexico – multiple projects

Contract scope

Advocacy implementation, maintenance and reliability studies, production optimization studies and automated dashboards

Strong relationship	Developed a strategic and trusted advisory relationship through excellent project delivery, that continues to provide ongoing and new work
Strategic projects	Trusted with strategic projects, driving safety performance and helping to achieve our customer's goal of 50m BOE/year from an aging asset base over the next five years
Excellent collaboration	Highlights excellent collaborative work between Advisian, INTECSEA and Worley



#### Imperial Oil Canada – Strategic environmental protection

Varied environmental services across multiple sites. Includes water, ESG, decommissioning & restoration and geoscience services

Contract scope

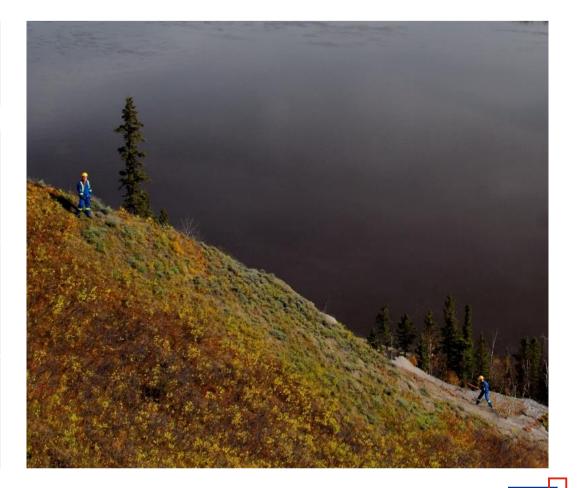
Long standing

advisors

Support through project lifecycle From planning and approvals, social licence and geohazard assessment to plant decommissioning and well pad restoration

Adding value though deep understanding of business drivers, sensitive physical environment and regulatory pressures

Leveraging<br/>First Nations<br/>partnershipNewly agreed partnership for joint project execution,<br/>including training and capacity building for similar<br/>contracts



### South Stream Transport B.V. Russia to Turkey – TurkStream natural gas pipeline

	Feasibility study, FEED, detailed design, owners
Contract scope	engineering, survey management, specialist
	engineering studies, permitting support

Technology extension	Successfully extended the notional technology limits for ultra-deepwater gas pipelines
Successful installation	Both pipelines installed successfully, and the project is on schedule to meet its first gas target date
Additional services	Provided technical, procurement, construction and project management support throughout the project timeline



### Borouge (JV between Abu Dhabi National Oil Company (ADNOC) and Borealis) Ruwais, UAE - Borouge 4 petrochemical complex

Pre-FEED, including detailed licensor evaluations, capital cost estimates & site surveys, integration and logistics studies

Challenge Optimal integration of the world's largest single train mixed feed steam cracker unit and associated petrochemical derivatives into the existing Ruwais Industrial City

**Contract scope** 

**Collaboration** Scope successfully delivered with a combination of resources from UAE, London, Houston and Toronto

Pull-throughEarly positioning through pre-FEED work and strong<br/>customer relationship leading to award of PMC<br/>services for FEED phase to Worley with a view to roll<br/>into the EPC phase once the project reaches financial<br/>close



### BCI Minerals Western Australia – Carnegie SOP project

Contract scope Engaged as the hydrogeology and brine resource consultant for Lake Carnegie as part of the scoping study

Challenge	Supported the establishment of an initial exploration target and inferred mineral resource for Lake Carnegie
Collaboration	Worked with MMM Services to introduce the business to the Mardie Salt and SOP project of BCI Minerals, and secured the basic engineering scope of services
Future possibilities	Further discussions with BCI Minerals about their other assets, as well as potential downstream delivery roles for the Mardie Salt project



## Summary

- Unique combination of technical and advisory capabilities
- Clustering capabilities is a key strength, differentiator and strategic enabler
- Numerous opportunities to drive growth through revenue synergies
- Early positioning with customers and successful high-end engagements leads to further work for Worley





## **Concluding remarks**

- Leading global service provider with deeper capability & expanded global footprint
- Growth potential in all our core markets
- Transition program exceeding expectations cost synergy target raised
- Realizing revenue synergies through projects
- Developing margin synergies and planning shared services model synergies
- Backlog strong
- Transformation planning commenced to accelerate strategic growth











## Appendix

### Supplementary information

**Eco**Nomics

## Acronyms

Acronym	Meaning	Acronym	Meaning
AASB	Australian Accounting Standards Board	DB	Design Build
APAC	Australia, Pacific, Asia & China	DSO	Days sales outstanding
AUD	Australian Dollar	E&C	Energy & Chemicals
AUDm	Australian Dollar millions	ECR	Energy, Chemicals & Resources
AWP	Advanced work packaging	ELG	Effluent limitation guidelines
BOE	Barrel of oil equivalent	EMEA	Europe, Middle East & Africa
BTX	Benzene, Toluene, Xylene	ENR	Engineering News Record
CAGR	Compound annual growth rate	EPC	Engineering, Procurement and Construction
CAPEX	Capital asset expenditure	EPCM	Engineering, Procurement and Construction Management
CCR	Coal combustion residuals	EPFC	Engineering, Procurement, Fabrication and Construction
CCUS	Carbon capture underground storage	ESG	Environmental and Social Governance
CEO	Chief Executive Officer	FDI	Foreign Direct Investment
CFO	Chief Financial Officer	FEED	Front End Engineering Design
CO0	Chief Operating Officer	FTE	Full Time Equivalent
COP 22	Conference of the Parties	G&A	General and Administrative
CTS	Clean Technology Scenario	GDC	Global Delivery Centre
CM	Construction Management	GDP	Gross Domestic Product

## Acronyms

Acronym	Meaning	Acronym	Meaning
GID	Global Integrated Delivery	ММО	Maintenance, Modifications and Operations
Gt CO2 - eqiv	Gigaton carbon dioxide equivalent	Mtoe	Million tonnes of oil equivalent
GM	Gross Margin	NPS	New Policies Scenario
GoM	Gulf of Mexico	0&M	Operations & Maintenance
Gt	Gigatons	Opex	Operational expenditure
IEA	International Energy Agency	OSBL	Outside Battery Limits
IFRS	International Financial Reporting Standards	PDP	Process Design Package
IMO	International Maritime Organisation	PO	Purchase Order
ISBL	Inside Battery Limits	PV	Photovotaic
IT	Informational Technology	ROF	Realize our Future
LNG	Liquefied Natural Gas	RTS	Reference Technology Scenario
LOB	Lines of Business	SDS	Sustainable Development Scenario
MEED	Middle East Economic Digest	SOP	Sulphate of Potash
MEG	Mono Ethylene Glycol	ТМО	Transition Management Office
MeOH / EtOH	Methanol / Ethanol	TSA	Transitional Service Agreement
Million b/d	Million barrels oil per day	UCOG	Unconventional Oil and Gas
MMM	Mining, Minerals & Metals	USD	United States Dollar





## **Speakers**

Profiles

**Eco**Nomics

Worley Investor Day 2019



#### Andrew Wood Chief Executive Officer

Andrew was appointed Chief Executive Officer of WorleyParsons Limited in 2012. An ASX listed global engineering and project delivery company Worley provides professional services to the energy, chemicals and resource sectors. The company operates in over 50 countries with services revenues in excess of AUD9b and a workforce of almost 60,000 people. With tenure of over 25 years with the Group, and over 35 years' experience in the resources and energy industry, Andrew has extensive knowledge across the WorleyParsons group of companies. Working in SE Asia, the Middle East and North America over the course of his career, Andrew was responsible for Worley's early expansion into Thailand and the Middle East, Canada and Chile in his capacity as Managing Director for International Operations.



#### **Tom Honan** Chief Financial Officer

Joining Worley on 1 December 2015, Tom is accountable for finance, information management, assurance, development, communications and investor relations. Tom brings his leadership in driving transformational change, his ability to create shareholder value and his experience in the management of complex major systems replacements to his role at Worley. Most recently Tom was CFO of Federation Centres (2013 – 2015), Transurban (2008 – 2012) and Computershare (2002 – 2008). He has an MBA from Melbourne Business School and an Economics degree from Monash University.



#### **Chris Ashton** Chief Operating Officer

Chris is accountable for the growth and performance of the Major Projects and Integrated Solutions portfolio across the organization which includes our fabrication businesses, WorleyParsonsCord and WorleyParsons Rosenberg, and our Global Delivery Center. Chris held a number of senior operational, sales and strategy roles, working in Europe, Middle East, Africa and the US prior to taking on his current role. A results driven leader focused on developing high performance teams, his experience brings together strong commercial and financial acumen with general business leadership combined with a strong commitment to talent development. Chris joined WorleyParsons in 1998 after more than 15 years in senior engineering and operational roles with international organizations. Chris holds a Degree in Electrical and Electronic Engineering from the University of Sunderland, a Master Degree in Business Administration from Cranfield School of Management, and has completed the Executive Management Program at Harvard Business School.



#### Vinayak Pai Group President, Energy & Chemical Services

Vinayak is responsible for the newly formed Energy & Chemical Services group. He held the position of President of the Energy, Chemicals and Resources business at Jacobs before the acquisition of the Jacobs ECR business by Worley Parsons. He has been part of the oil and gas industry for over 30 years and has extensive experience in executing upstream and downstream projects and successfully growing the business in a competitive environment. He has held positions in engineering design, technology licensing, project management, business development and operations. Vinayak holds a Bachelor of Engineering from the College of Engineering in Pune, India. He also is a post graduate in management from Symbiosis Institute, Pune and holds an executive MBA from IIT Mumbai. Vinayak is a member of the Advisory Board for Chemtech Foundation and the CII Advisory Committee. He is presently based in Houston.



#### **Karen Sobel** Group President, Major Projects & Integrated Solutions

Karen is accountable for the growth and performance of the Major Projects and Integrated Solutions portfolio across the organization which includes our fabrication businesses, WorleyCord and Worley Rosenberg. Previously, Karen was Regional Managing Director for Services, Canada and US East. Karen joined Worley in March 2013 and over her 25-year career has delivered significant projects in both the energy and resources sectors, domestically and internationally. Her extensive international experience provides a strong foundation for building successful, diverse and collaborative teams. She has held senior project and executive positions with global engineering/construction firms. Karen sits on the Worley Foundation Council and has a Bachelor of Science degree in Metallurgical Engineering from the University of Utah.



#### Andrew Berryman President, Mining, Metals & Minerals Services

Andrew leads our global Mining, Minerals & Metals Services Business, including major Mining & Metals offices in the Americas, Asia Pacific and Africa, our phosphates focused JESA joint venture in Morocco, and our Chemetics Technology business. He joined the company in 2019, when Jacobs ECR became part of Worley. In his previous role, Andrew was responsible for the Mining, Minerals & Technology business of Jacobs. He joined heritage Jacobs ECR in 2011 with the acquisition of Aker, where he led the global Chemetics business. Prior to this, Andrew held a variety of international project and product development roles with Foster Wheeler, Ausenco and Gemini Corporation. Andrew has an affinity for project and business leadership and has worked in a diverse range of international industries including Mining & Metals, Power, Chemicals and Oil & Gas. Andrew is a Mechanical Engineer (University of Waterloo, Ontario, 1993) and a Professional Engineer in British Columbia.



#### Adrian Smith President, Advisian

Adrian is responsible for Advisian, WorleyParsons' global advisory business. Adrian joined WorleyParsons in 1998 and has since held various senior leadership positions including operations management of regional businesses in Australia and Asia, global sector leadership of the WorleyParsons Minerals and Metals sector, and was most recently the Regional Director of the Advisian Europe Middle East business. Adrian's extensive experience encompasses commercial strategy, business leadership, marketing, strategic planning, and contract negotiation and his leadership style combines strong operational focus with an ability to build high performing teams. Adrian holds a Bachelor of Electrical and Electronic Engineering from the University of Southern Queensland.



#### **Mark Trueman** Executive Group Director Strategy, Planning and Investor Relations

Mark is the Executive Group Director of Strategy, Planning and Investor Relations for Worley, based in Sydney. Prior to this Mark was based in Mexico City as Managing Director with responsibility for Worley's Latin American businesses in Brazil, Chile, Peru, Colombia, Mexico and Ecuador. Mark was formerly Managing Director of the Power customer sector group globally based in Singapore. He joined Worley in 1994 as Country Manager for Singapore before taking on various regional management roles in the Power and Infrastructure sectors in Asia, the Middle East, Australia and New Zealand. In addition to the operational and strategy based roles, he has led many acquisitions, both as transaction leader and also following through with the integration, transition and transformation phases. Mark is a registered Professional Engineer in Australia and Singapore with an honours degree in civil engineering from the University of Sydney.







### AASB 16 Leases

Impact

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## Impact of AASB 16 Leases

- The group will adopt AASB 16 on 1 July 2019
- AASB 16 brings the majority of leases on balance sheet
- The net impact is recognized against retained earnings
- There will be a significant impact on the Group's assets and liabilities, as well as key financial metrics (EBITDA, EBIT, NPAT).
- There is no impact on free cash flow for the Group, however the classification of cash flows will be affected as operating lease payments under the current standards are presented as operating cash flows; whereas under the AASB 16 model, the lease payments will be split into a principal and an interest portion which will be presented as financing and operating cash flows respectively
- The Group is well advanced for full implementation of the Standard in FY20

# The actual impact will depend on the following key judgements:

- Group's borrowing rates on 1 July 2019
- Composition of the lease portfolio post Jacobs ECR integration
- Final determination of reasonably certain renewal options, termination options and onerous leases on 1 July 2019



### IFRS 16 P&L Impact – example

The example below is set out for a six year lease starting on 1 July 2019 with \$11,000 annual property lease payments (\$10,000 for rental and \$1,000 for on costs).

	Current accounting standards	Under AASB 16	Change
Revenue	100,000	100,000	-
Costs	(50,000)	(50,000)	-
Operating lease expense	(11,000)	(1,000)	(10,000)
Subtotal	39,000	49,000	(10,000)
D&A	(500)	(8,696)	8,196
EBIT	38,500	40,304	(1,804)
Interest expense	(1,000)	(3,950)	2,950
Tax	(11,250)	(10,906)	(344)
NPAT	26,250	25,448	802

Recognition of **Right of use** of asset (RoU) and respective lease liabilities will lead to an increase in depreciation and finance charges.

These charges will replace the operating lease expense that is currently reported in the Group's financial report.





# Backlog

### **Revised definition**

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# **Backlog definition**

Old definition	Backlog is the total dollar value of the amount of revenues expected to be recorded for the next 36 months as a result of work performed under contracts or purchase/work orders already awarded to the Group. With respect to long-term agreements and framework agreements, an amount is included for the work expected to be received over the period under consideration. The view of backlog is sensitive to timing of awards and as such a conservative view of timing has been adopted.
New definition	Backlog is the total dollar value of the amount of revenues expected to be recorded as a result of work performed under contracts or purchase/work orders already awarded to the Group. With respect to discrete projects an amount is included for the work expected to be received in the future. For multi-year contracts (i.e. framework agreements and master services agreements) and O&M contracts we include an amount of revenue we expect to receive for 36 months, regardless of the remaining life of the contract. Due to the variation in the nature, size, expected duration, funding commitments and the scope of services required by our contracts and projects, the timing of when the backlog will be recognized as revenue can vary significantly between individual contracts and projects.







