



Waggaman, Louisiana  
USA

# Company Overview

July 2017

**Incitec Pivot Limited**  
GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

ASX: IPL  
US ADR: INCZY

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Incitec Pivot Limited

ABN 42 004 080 264

**Note:** All figures in Australian Dollars (A\$) unless otherwise noted

# Zero Harm

**Zero Harm for Everyone, Everywhere is IPL's number one priority**

**Long term target to reduce TRIFR to less than 1.0 set in 2012<sup>1</sup>**

- 12-month rolling TRIFR as of 31 March 2017: 0.89<sup>2</sup>
- 36% reduction since setting target
- 93% reduction in Employee Lost Day Severity Rate over the same period<sup>3</sup>

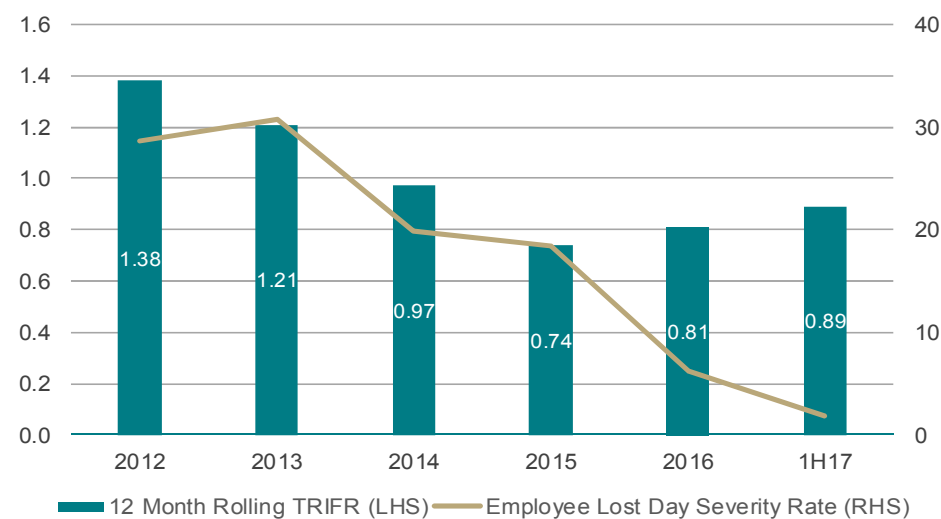
## Process Safety

- 64% reduction in process safety incidents in the 12-months ended 31 March 2017<sup>4</sup>

**Notwithstanding progress, focus remains on further improving performance**

## TRIFR and Employee Lost Day Severity Rate

12-month rolling



1. TRIFR calculated as the number of recordable injuries per 200,000 hours worked; includes contractors

2. Subject to finalisation of the classification of any pending incidents

3. Employee Lost Day Severity Rate calculated as the number of employee lost work days per 200,000 hours worked represented in days; does not include contractors

4. Tier 1 and Tier 2 process safety events as defined by the Center for Chemical Process Safety. 12-month statistics shown, as dataset for longer periods is not available



**Incitec Pivot Limited**

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

# Corporate Overview

July 2017

Phosphate Hill  
Australia



# IPL – At a Glance

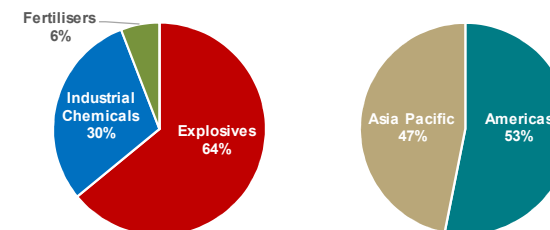
IPL is a global diversified industrial chemicals company

<b>Safety</b>	<b>Zero Harm for Everyone, Everywhere is IPL's number one priority</b> <ul style="list-style-type: none"> <li>- 36% reduction in TRIFR since 2012</li> <li>- 93% reduction in Employee Lost Day Severity Rate over the same period</li> </ul>
<b>Global</b>	<b>Global operations via Dyno Nobel and Incitec Pivot Fertilisers</b> <ul style="list-style-type: none"> <li>- Primary operations in North America and Asia Pacific</li> <li>- ~4,400 employees worldwide</li> </ul>
<b>Diversified</b>	<b>Balanced end market earnings exposure<sup>1</sup></b> <ul style="list-style-type: none"> <li>- ~64% Explosives driven by global mining and US Quarry &amp; Construction</li> <li>- ~30% Industrial Chemicals driven by US industrial demand</li> <li>- ~6% Fertilisers driven by global population growth</li> </ul>
<b>Industrial Chemicals</b>	<b>Explosives</b> <b>DYNO</b> Dyno Nobel <b>#2 provider by volume in North America</b> <b>#2 provider by volume in Australia</b>
	<b>Industrial Chemicals</b> <b>DYNO</b> Dyno Nobel <b>Major North America ammonia producer</b> - Expected to contribute ~3.4% of 2017 consumption <sup>2</sup>
	<b>Fertilisers</b> <b>Incitec Pivot Fertilisers</b> <b>#1 manufacturer and distributor in Australia by volume<sup>3</sup></b> <b>50+% east coast market share<sup>3</sup></b>
<b>Manufacturing</b>	<b>Operates 7 major nitrogen and 7 initiating systems plants</b> <ul style="list-style-type: none"> <li>- World scale Waggaman ammonia plant completed on time and under budget</li> <li>- BEx has delivered \$226m in net productivity benefits to date<sup>4</sup></li> </ul>
<b>Financial</b>	<b>Strong balance sheet and cash flow profile</b> <ul style="list-style-type: none"> <li>- 1H17 revenue of \$1.5Bn; NPAT of \$152.1m</li> <li>- Investment grade credit rating from S&amp;P and Moody's</li> <li>- Major capex related to Waggaman construction completed in FY16</li> </ul>

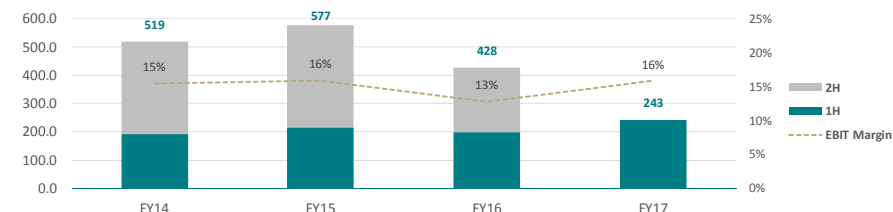
1. Refer slide 11  
 2. Source: CRU as of December 2016; North America comprises US and Canada  
 3. Source: IBIS World Industry Report - Fertiliser Manufacturing in Australia (July 2015)

4. Refer slide 15  
 5. Refer slide 3

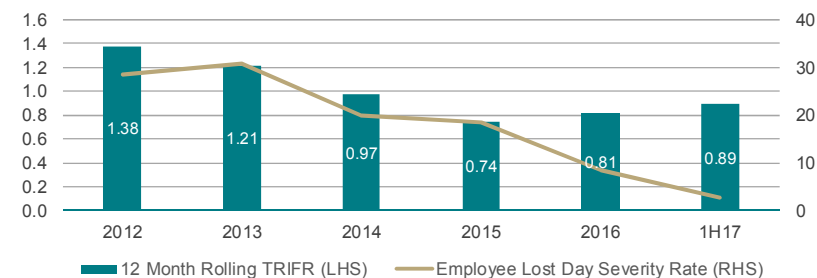
1H17 EBIT by End Market and Region<sup>1</sup>



EBIT and EBIT Margin (A\$m)



Zero Harm<sup>5</sup>





# Commercial Businesses

## IPL's businesses comprise two international brands

- **Dyno Nobel:** Dyno Nobel Americas, Dyno Nobel Asia Pacific
- **Incitec Pivot Fertilisers**

## Both hold a leading position in their primary geography

- **Dyno Nobel:** #2 position in North America and Australia by volume
- **Incitec Pivot Fertilisers:** #1 position in Australia by volume



### Dyno Nobel Americas

US<sup>1</sup>, Canada, Mexico, Chile, South Africa

- Explosives
- Industrial Chemicals
- Fertilisers

### Dyno Nobel Asia Pacific

Australia<sup>1</sup>, Indonesia, PNG, Turkey

- Explosives



### Incitec Pivot Fertilisers

Australia<sup>1</sup>, Southeast Asia, India, Pakistan, Brazil

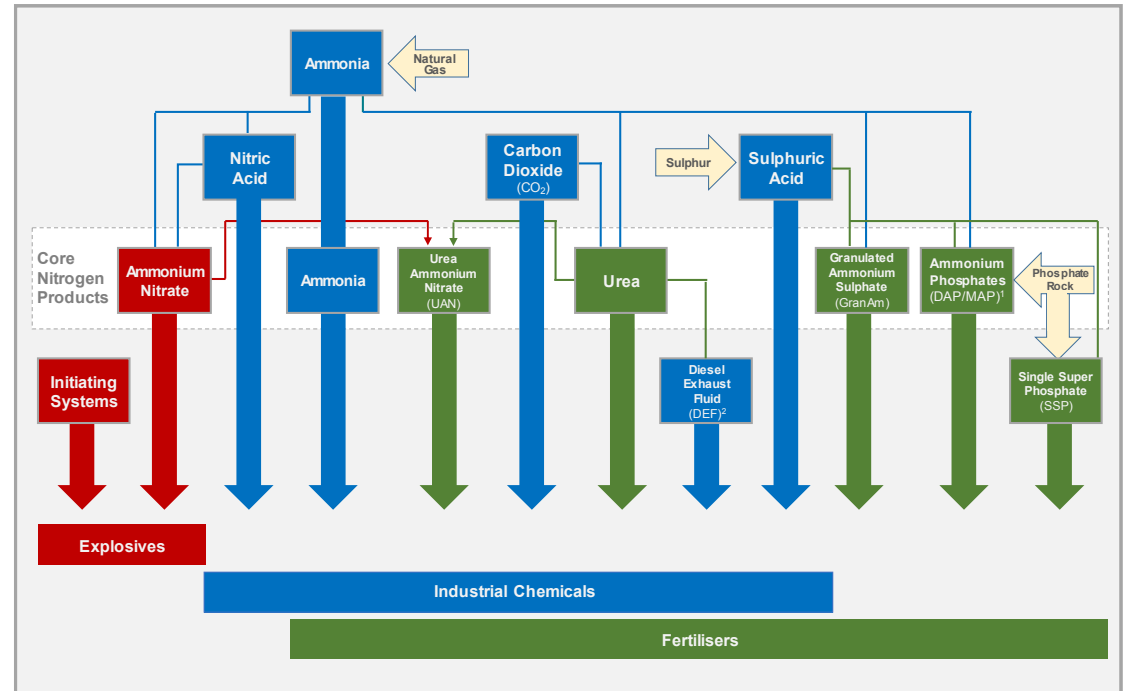
- Fertilisers
- Industrial Chemicals

1. Primary geography

# Nitrogen Chemistry

These businesses primarily supply nitrogen based products

- **Explosives:** Ammonium nitrate based explosives
- **Industrial Chemicals:** Nitrogen related industrial and specialty chemicals
- **Fertilisers:** Nitrogen and phosphorus fertilisers



1. Ammonium phosphates include diammonium phosphate (DAP) and monoammonium phosphate (MAP)

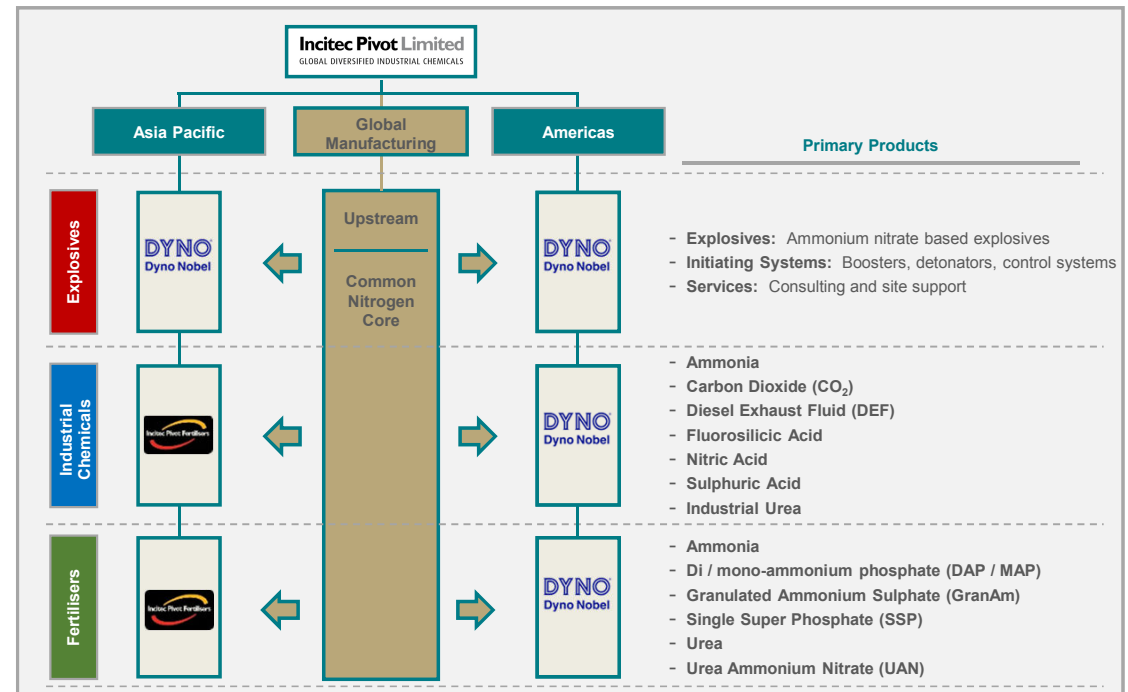
2. DEF: Diesel Exhaust Fluid. DEF is an aqueous urea solution made with urea and deionized water. It is used as a consumable in selective catalytic reduction (SCR) in order to lower NO<sub>x</sub> concentration in exhaust emissions from diesel engines



# Operating Model

IPL's products are manufactured via a common nitrogen core

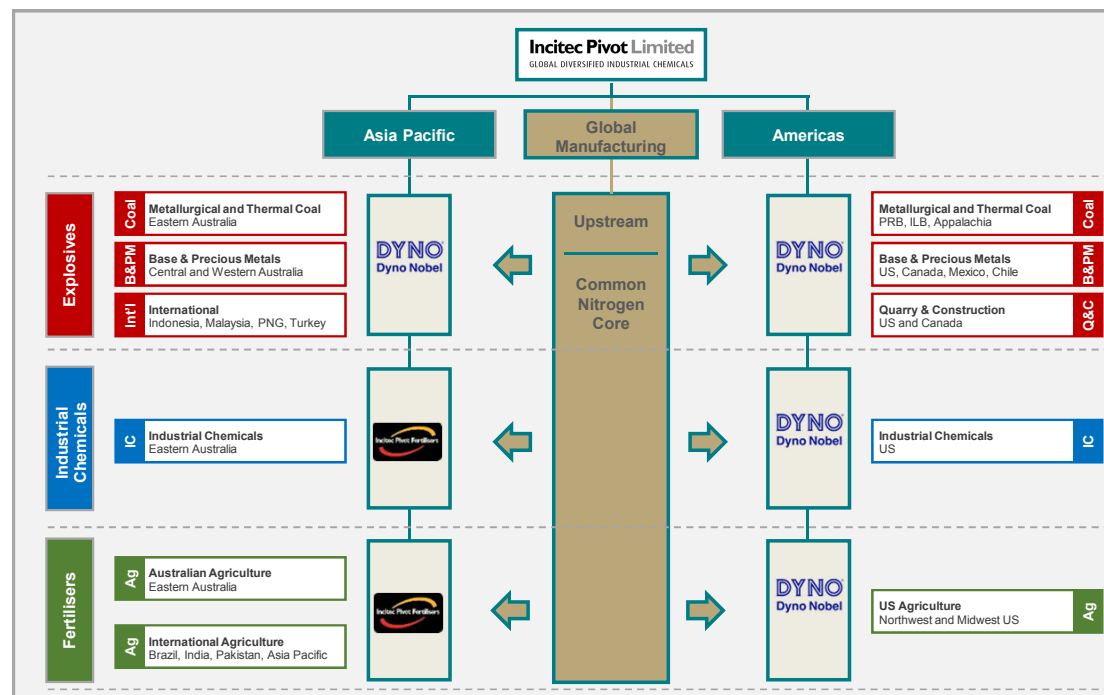
- Forms the basis of IPL's upstream / downstream operating model



# End Markets

These products are supplied to a broad range of end markets

- **Explosives:** Coal, Base & Precious Metals, Quarry & Construction
- **Industrial Chemicals:** Industrial and specialty chemicals
- **Fertilisers:** Agriculture



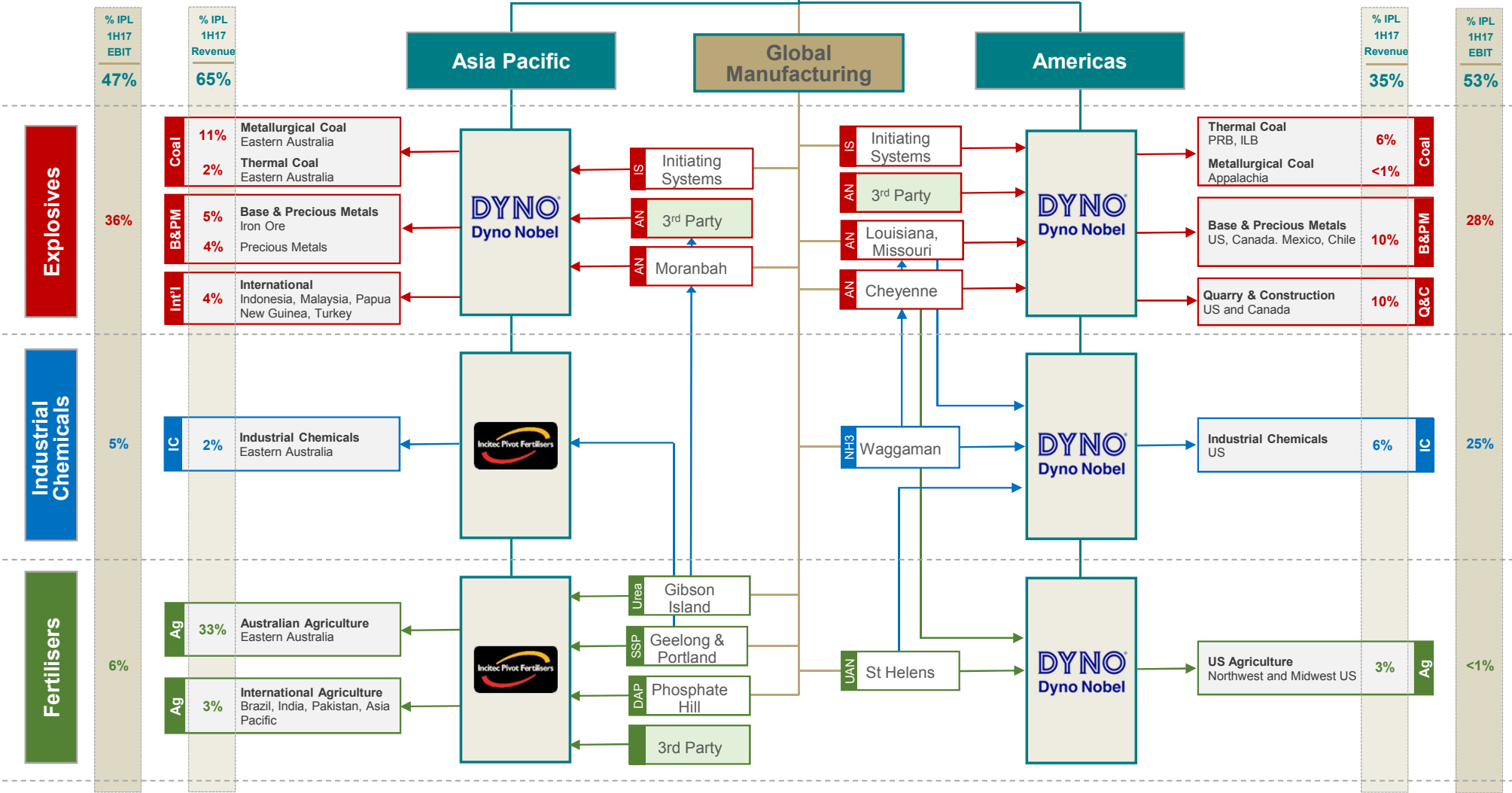
# IPL Today

**Incitec Pivot Limited**  
GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

Legend - excludes corporate elimination

Sector	End Market	Primary Region	Primary Product of Plant	Name of Plant
Coal	Coal	Coal	Coal	Moranbah

AN - Ammonium Nitrate  
NH3 - Ammonia  
DAP - Diammonium Phosphate  
SSP - Single Super Phosphate  
PRB - Powder River Basin  
ILB - Illinois Basin  
IS - Initiating Systems  
B&PM - Base & Precious Metals  
Metals



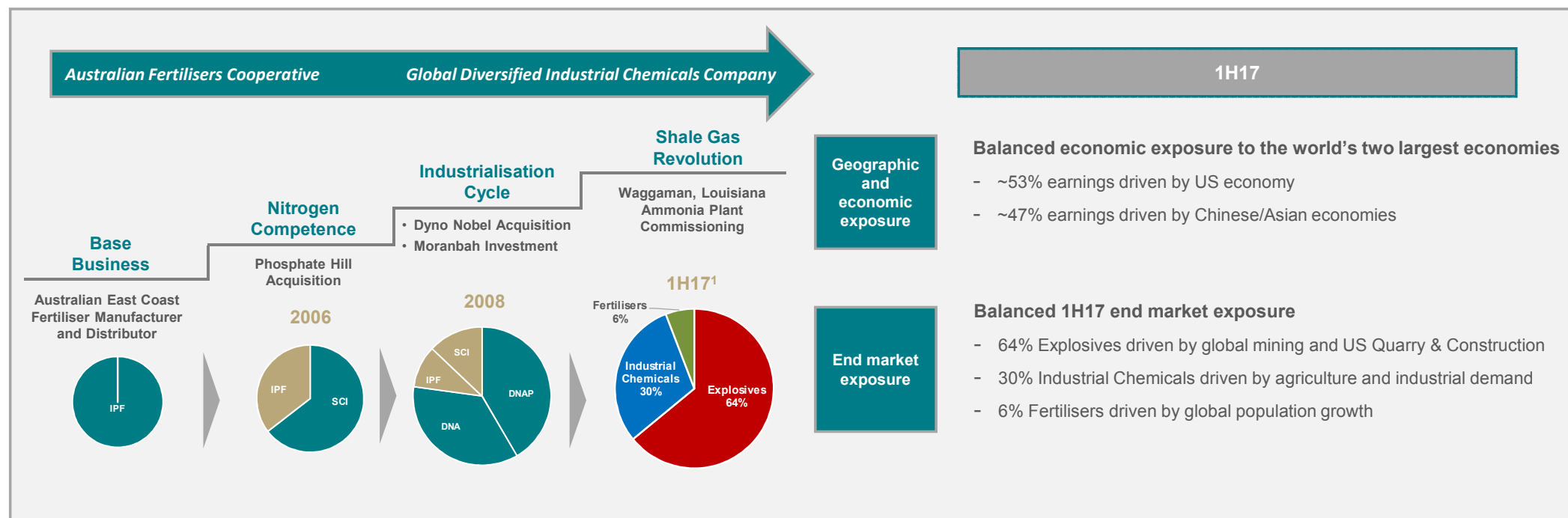
Note: Excludes corporate elimination

# Strategy and Transformation

IPL's transformation to a global diversified industrial chemicals company was underpinned by measured execution of its strategy:

*Align common nitrogen core to address major market dislocations*

2016 commissioning of the world scale Waggaman, Louisiana ammonia plant is an example of the strategy's successful execution



# Key Strengths

## Diversification

### Balanced economic and end market exposure

- Broad geographic and economic exposure to the world's two largest economies, the United States (directly) and China (indirectly)
- Diversified end market exposure
  - **Explosives:** Driven by global mining and US Quarry & Construction
  - **Industrial Chemicals:** Driven by agriculture and industrial demand
  - **Fertilisers:** Driven by global population growth
- Limited customer concentration, with no customer accounting for more than 5% of Group revenue in FY16<sup>1</sup>

## Core nitrogen manufacturing capability

### Scale and operational competency in core nitrogen manufacturing operations

- Cost-competitive positions from proximity to end markets and access to economic feedstock at sites such as Waggaman, Louisiana; Cheyenne, Wyoming and Moranbah, Queensland
- Plants managed centrally through Global Manufacturing unlocking synergies

## Strong market positions

### Strong market positions in Explosives, Industrial Chemicals and Fertilisers

- Incitec Pivot Fertilisers is the largest manufacturer and supplier of fertilisers in Australia by volume
- Dyno Nobel is the second largest industrial explosives distributor in North America and Australia by volume

1. Refer Slide 28



# Key Strengths (cont'd)

## Disciplined Capital Management

### Track record of prudent capital management and financial discipline

- Investment grade credit rating from S&P and Moody's
- Major capex related to Waggaman construction completed in FY16 safely, on time and under budget

## BEx

### Strong focus on business transformation and operational efficiency improvements through BEx

- IPL's Business Excellence ("BEx") program has delivered net productivity benefits of \$226m since its launch in 2012<sup>1</sup>
- Drives sustainable and ongoing business efficiency and productivity through an empowered and engaged workforce

## Experienced board and management

### Experienced leadership

- IPL's Board of Directors possess experience across a diverse range of industries and geographies
- The members of the management team have considerable experience in the industrial explosives and fertiliser industries

1. As at 31 March 2017. After cost inflation of ~A\$45m per annum; refer slide 15

# BEx - Business Excellence

## Continuous improvement and capital discipline are tenets of IPL's strategy

- Both are core competencies underpinned by IPL's culture

## BEx is IPL's business efficiency system

- Launched in 2012
- Embedded throughout organisation
- Historically expected to deliver ~\$25m of net productivity benefits annually

## Based on Toyota Production Systems (TPS) principles

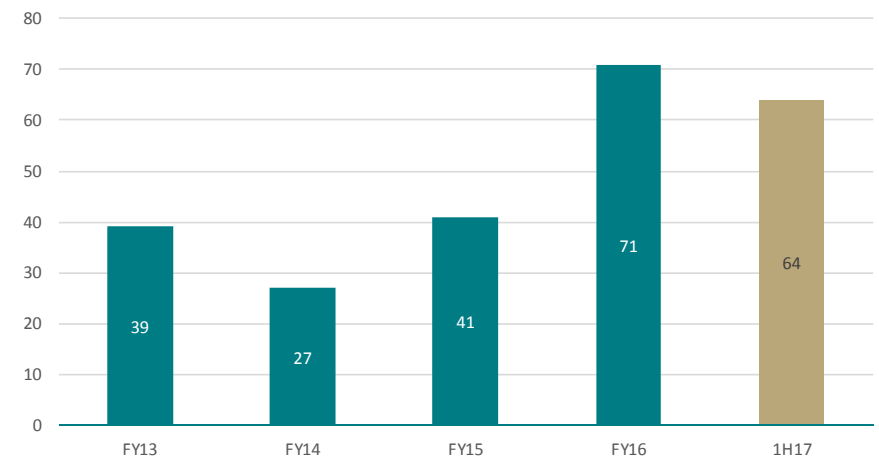
- Designed to optimise asset base

## \$226m of net productivity benefits delivered to date

- After annual cost inflation of ~\$45m per annum

## Net BEx Productivity Benefits

A\$m



# ESG & Diversity

## ESG is a key management focus<sup>1</sup>

- 12% improvement in DJSI rating between 2015 and 2016
- 20% above Chemicals Sector average in 2016

## Gender diversity is also a key focus

- Executive Team 33% women from 13% in 2012
- Senior Management 27% women from 16% in 2012<sup>2</sup>
- Management 22% women from 14% in 2012<sup>3</sup>
- Global Workforce 16% women from 14% in 2012

## IPL is a member of a number of leading ESG indices, including:

- DJSI, FTSE4Good, ECPI

## IPL is also rated by a host of industry participants, including:

- ACSI, CAER, CGI Glass Lewis, EcoVadis, MSCI, Sustainalytics, Vigeo EIRIS

1. ESG: Environmental, Social and Governance

2. Executive Team +1

3. Executive Team +1,2,3

## Dow Jones Sustainability Index (DJSI)

Score out of 100; calendar year

IPL Group						
Dimension	2011	2012	2013	2014	2015	2016
Economic	61	59	70	65	67	74
Environmental	50	51	59	60	51	60
Social	45	63	68	67	63	65
<b>IPL</b>	<b>51</b>	<b>58</b>	<b>66</b>	<b>64</b>	<b>60</b>	<b>67</b>
<b>Chemicals Sector Average</b>	<b>57</b>	<b>55</b>	<b>52</b>	<b>55</b>	<b>58</b>	<b>56</b>

**Incitec Pivot Limited**

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

# Financial Overview

July 2017

Bowen Basin, Queensland  
Australia



# Financial Summary

IPL delivered revenue of \$1.5Bn and EBIT of \$242.8m in 1H17

Americas contributed 53% of Group EBIT during the period<sup>1</sup>

- Up from 35% in FY16, in part due to initial Waggaman earnings

Explosives comprised 64% of Group EBIT<sup>1</sup>

- Industrial Chemicals comprised 30% of Group EBIT
- Fertilisers contributed 6% of Group EBIT

## Summary Financials<sup>2</sup>

IPL Group	Half Year Ended 31 March		
	1H17	1H16	% Change
<b>A\$m</b>			
Revenue	1,535.7	1,524.0	0.8 %
EBITDA ex IMIs	373.3	322.6	15.7 %
<b>EBIT ex IMIs</b>	<b>242.8</b>	<b>197.3</b>	<b>23.1 %</b>
<b>NPAT ex IMIs</b>	<b>152.1</b>	<b>137.1</b>	<b>10.9 %</b>
IMIs after tax	-	(105.6)	
<b>NPAT</b>	<b>152.1</b>	<b>31.5</b>	<b>382.9 %</b>
<b>Business EBIT ex IMIs</b>			
Americas	134.0	64.2	108.7 %
Asia Pacific	118.0	142.5	(17.2)%
Elimination and Corporate	(9.2)	(9.4)	2.1 %
<b>Sector EBIT ex IMIs</b>			
Explosives	161.5	146.6	10.2 %
Industrial Chemicals	75.8	15.8	379.7 %
Fertilisers	14.8	44.4	(66.7)%
Elimination and Corporate	(9.2)	(9.4)	2.1 %
<b>Shareholder Returns</b>			
<b>Cents Per Share</b>			
EPS ex IMIs	9.0	8.1	11.1 %
Total Dividends	4.5	4.1	9.8 %
<b>Credit Metrics</b>			
<b>A\$m</b>			
Net Debt <sup>3</sup>	(1,737.6)	(1,739.5)	0.1 %
Interest Cover <sup>4</sup>	7.9x	9.5x	
Net debt / LTM EBITDA ex IMIs	2.4x	2.1x	

1. Refer slide 11; excludes elimination

2. ex IMIs: Excluding Individually Material Items

3. Net Debt aggregates interest bearing liabilities plus the fair value of derivative instruments in place economically to hedge the Group's interest bearing liabilities, less available cash and cash equivalents

4. Interest cover calculated as average LTM EBITDA / net interest expense before accounting adjustments



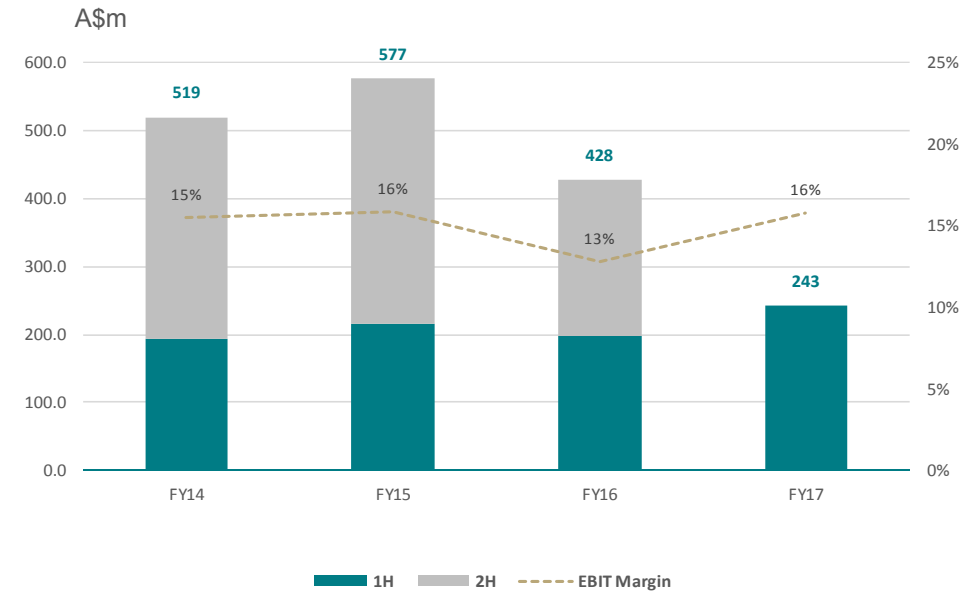
# EBIT Profile

## IPL's EBIT is historically skewed in favour of the second half

- Timing primarily driven by Fertilisers and Quarry & Construction earnings

## EBIT margins are also historically skewed in favour of the second half

## EBIT and EBIT Margin ex IMIs



# EBIT Sensitivities

## IPL's earnings are sensitive to external influences

- Global fertiliser prices and foreign exchange are key factors
- Natural gas and ammonia prices are also important factors

## EBIT Sensitivities

FY16 EBIT Sensitivities	
<b>Americas</b>	
Urea (FOB NOLA) <sup>1</sup>	+/- US\$10/mt = +/- US\$1.7m
Americas ex-Waggaman FX earnings translation <sup>2</sup>	+/- A\$/US\$ 0.01 = +/- A\$2.2m
Waggaman FX earnings translation	EBIT is US\$-denominated and subject to translation movements
Ammonia (CFR Tampa) <sup>3</sup>	+/- US\$10/mt = +/- US\$6.1m
Henry Hub Natural Gas <sup>3</sup>	+/- US\$0.10/mmbtu = +/- US\$2.0m
<b>Asia Pacific</b>	
Urea (FOB Middle East) <sup>4</sup>	+/- US\$10/mt = +/- A\$4.7m
DAP (FOB Tampa) <sup>5</sup>	+/- US\$10/mt = +/- A\$13.8m
FX transactional (DAP / urea) <sup>6</sup>	+/- A\$/US\$ 0.01 = +/- A\$8.0m

1. Based on 165,000mt of urea equivalent sales (St Helens nameplate)

2. Based on actual FY16 Americas EBIT of US\$118.2m and an average realised exchange rate of A\$/US\$ 0.7359

3. Based on 640,000 mt of ammonia sales (80% Waggaman nameplate capacity)

4. Based on 347,000 mt of urea equivalent sales (Gibson Island actual FY16 sales) at FY16 average realised exchange rate of A\$/US\$ 0.7393

5. Based on 1,017,300 mt of ammonium phosphate sales (Fertilisers actual FY16 sales) and FY16 average realised exchange rate of A\$/US\$ 0.7393

6. Based on ammonium phosphate and urea volumes and prices noted in footnotes 4 and 5, excluding impact of hedging

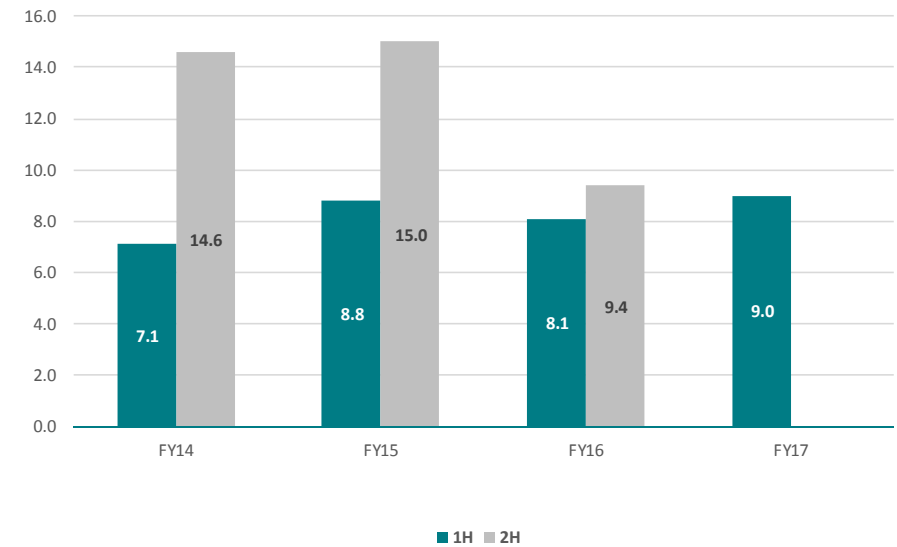
# Earnings Per Share

**IPL's EPS ex IMIs has ranged from 18 to 24 cents per share since 2014**

- Movement largely in tandem with EBIT

## EPS ex IMIs

A\$ cents per share



# Dividends Per Share

**IPL has a dividend payout ratio policy of 30% to 60% of net profit**

- 50% payout ratio over the past four years

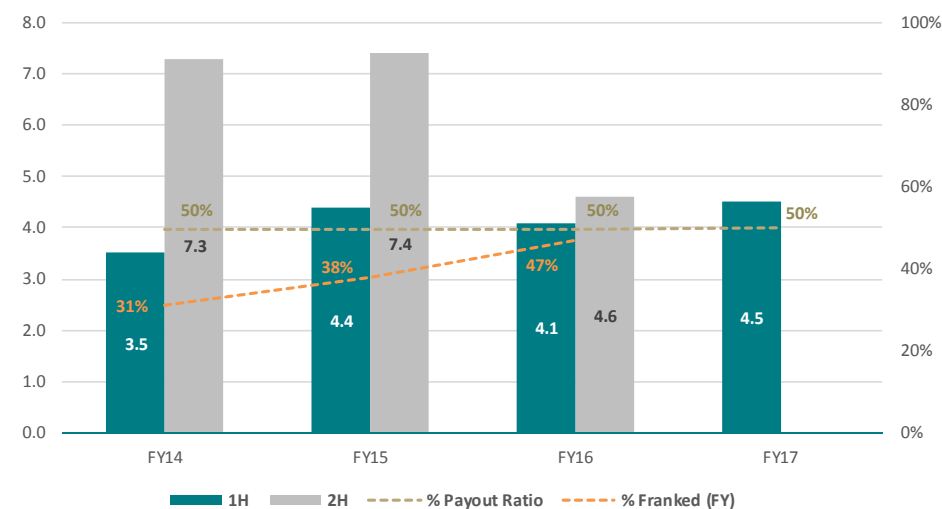
**IPL generally applies all available franking credits to dividends**

**Dividends are historically skewed in favour of the second half**

- Consistent with EBIT and EPS

## Dividend Metrics

A\$ cents per share



# Capital Expenditure

## IPL's capex program is disciplined

- Requests >\$500k presented to panel chaired by CFO and President, Global Manufacturing

## Investment in the Waggaman plant has been a driver over the past four years

## Sustenance capex largely comprises major turnaround activity

- Turnarounds are described in detail on the following slide

## Total capex target for FY17 is ~\$200m

- 2018 target is ~\$180m - \$200m

## Capex Profile

Capital Expenditure	Half Year Ended 31 March		
	1H17	1H16	% Change
<b>A\$m</b>			
<b>Major growth capital</b>	<b>(74.0)</b>	<b>(151.8)</b>	<b>51.3 %</b>
Asia Pacific	(0.8)	(5.9)	86.4 %
Americas	(4.9)	(4.4)	(11.4)%
<b>Minor growth capital</b>	<b>(5.7)</b>	<b>(10.3)</b>	<b>44.7 %</b>
Asia Pacific	(63.0)	(87.8)	28.2 %
Americas	(30.3)	(51.1)	40.7 %
<b>Sustenance</b>	<b>(93.3)</b>	<b>(138.5)</b>	<b>32.6 %</b>
<b>Total</b>	<b>(173.0)</b>	<b>(300.6)</b>	<b>42.4 %</b>

Waggaman Investment	Capitalised		Total
	Capex	Interest	
<b>A\$m</b>			
FY12	(6.0)	-	<b>(6.0)</b>
FY13	(107.3)	(2.0)	<b>(109.3)</b>
FY14	(370.7)	(17.7)	<b>(388.4)</b>
FY15	(218.7)	(37.7)	<b>(256.4)</b>
FY16	(167.2)	(48.0)	<b>(215.2)</b>
1H17	(69.7)	(4.3)	<b>(74.0)</b>
<b>Total</b>	<b>(939.6)</b>	<b>(109.7)</b>	<b>(1,049.3)</b>



# Turnarounds

**A turnaround is a scheduled, multi-week downtime period during which a plant undergoes comprehensive inspection, maintenance and enhancements**

- Sometimes referred to as a 'shutdown' or 'shut'

**Turnarounds help to preserve the useful life and productivity of longterm assets**

- Major turnarounds can range from up to \$50m+ and may have associated loss in production depending on duration
- The period between a turnaround is the plant's 'operating campaign' and varies from 3 to 5 years

**Major turnarounds are scheduled to minimize customer impact and phased where possible to prevent overlap**

- Scheduled for low demand periods where possible

**Cheyenne will undergo a turnaround commencing in the second half of 2017**

- Plant is expected to be offline for 4 to 6 weeks during its turnaround

## Preliminary Schedule of Major Turnarounds

Subject to change

Preliminary Major Turnaround Schedule					
2017		2018		2019	
1H	2H	1H	2H	1H	2H
Moranbah	Cheyenne		Phos Hill	Waggaman	St Helens

# Balance Sheet

## Strong balance sheet maintained through Waggaman spend and cyclical lows

- Net debt flat in 1H17 versus 1H16
- \$804m of undrawn facilities<sup>1</sup>

## Credit metrics inside target ranges<sup>1</sup>

- Net Debt / LTM EBITDA: 2.4x<sup>1,2</sup>
- Interest Cover: 7.9x<sup>1,3</sup>

## Metrics underpin investment grade credit ratings; outlook upgraded since FY16

- **S&P rating:** BBB revised upward to stable outlook on 6 December 2016
- **Moody's rating:** Baa3 revised upward to positive outlook on 19 January 2017

## Free cash flow profile positioning IPL for de-levering and increased returns to shareholders

- Underpinned by Waggaman earnings potential
- Cash flow historically second half biased

## Credit Metrics

As at 31 March 2017

IPL Group				
A\$m	Maturity (CY)	Facility Amount	Drawn Amount	Undrawn Amount
Syndicated Term Loan A	2018	568.0	427.8	140.2
Syndicated Term Loan B	2018	592.7	583.6	9.1
Medium Term Notes	2019	200.0	200.0	0.0
144A/Regulation S Notes	2019	1,046.6	1,046.6	0.0
Syndicated Revolver	2021	654.2	0.0	654.2
<b>Total Debt</b>		<b>3,061.5</b>	<b>2,258.0</b>	<b>803.5</b>
Fair Value and Other Adjustments			5.2	
Loans to JVs, Associates / Other Trade Loans			17.7	
Cash and Cash Equivalents			(90.1)	
Fair Value of Hedges			(453.2)	
<b>Net Debt<sup>1</sup></b>			<b>1,737.6</b>	
LTM EBITDA ex IMIs <sup>2</sup>			723.3	
<b>Net Debt / LTM EBITDA ex IMIs</b>			<b>2.4x</b>	

1. As at 31 March 2017

2. Net Debt aggregates interest bearing liabilities plus the fair value of derivative instruments in place economically to hedge the Group's interest bearing liabilities, less available cash and cash equivalents

3. Interest cover calculated as average LTM EBITDA / net interest expense before accounting adjustments

# Hedging

## **IPL's hedging program generally follows an 'insurance' based approach**

- Biased towards limiting downside risk while preserving participation in favourable market movements

## **Governed by IPL's Board-approved Treasury Policy, IPL undertakes and manages hedging activities to:**

- Provide increased stability of financial performance from which IPL is able to undertake effective business planning; this includes managing FX risk relating to the Australian fertiliser business, gas price risk relating to the explosive business and interest rate risk relating to the Company's operations
- Protect credit metrics, in particular gearing ratio and interest cover through hedging balance sheet exposures including the value of foreign assets and loans
- Protect capital cost of projects

# Tax

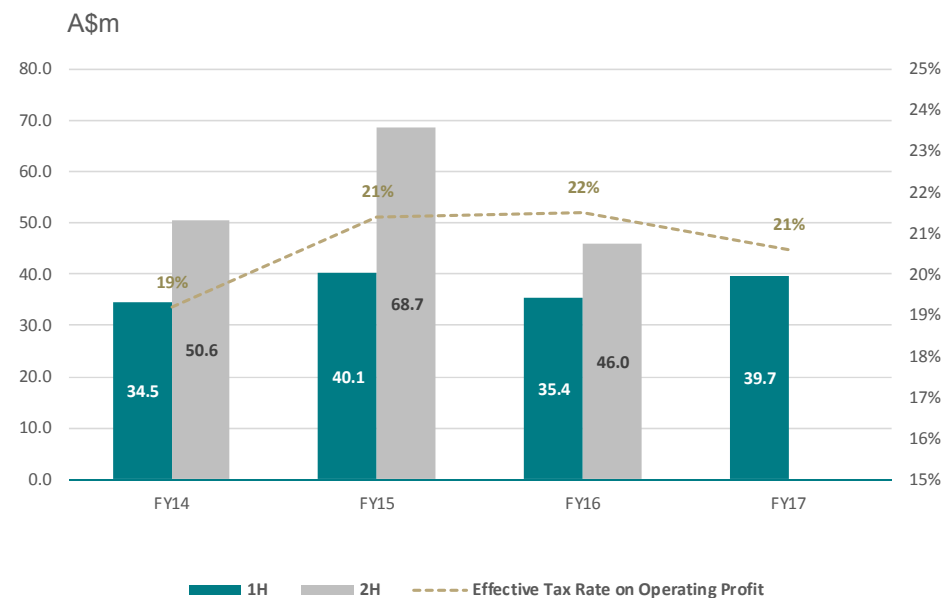
**IPL's effective tax rate on operating profit was 20.6% in 1H17**

- Consistent with 20.5% in 1H16

**Will benefit from accelerated depreciation of the Waggaman plant for cash tax paid purposes**

- Described in greater detail on slide 84

## Tax Expense and Effective Tax Rate on Operating Profit



# Customer Concentration

## IPL's customer profile is diversified across region and end market

- No customer contributed more than 5% of Group revenue in FY16
- IPL's 'top 10' customers comprised 30% of Group revenue in the same period

## IPL Customer Concentration

% of FY16 Group revenue

Top Ten Customers		
Customer	Region	% Group Revenue
Customer A	Asia Pacific	5%
Customer B	Asia Pacific	5%
Customer C	Americas	3%
Customer D	Asia Pacific	3%
Customer E	Americas	3%
Customer F	Asia Pacific	3%
Customer G	Asia Pacific	2%
Customer H	Americas	2%
Customer I	Asia Pacific	2%
Customer J	Asia Pacific	2%
Total in Top 10		30%



# Share Register

**IPL's primary equity listing is on the Australian Stock Exchange (ASX: IPL)**

**IPL also has a sponsored America Depositary Receipt (OTCQX: INCZY)**

- ADR currently comprises IPL's 46<sup>th</sup> largest shareholder<sup>1</sup>

**42% of IPL's register is held in Australia<sup>1</sup>**

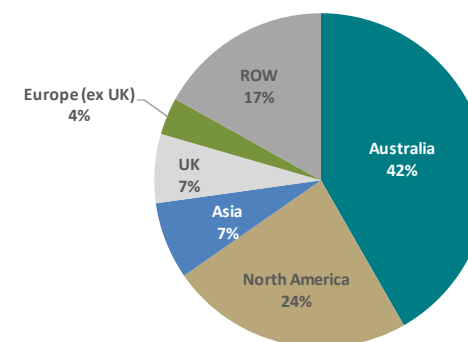
- 24% held in North America (primarily the US)

**IPL had an average daily trading volume of ~9 million shares in 2016<sup>2</sup>**

- Represents ~5% of IPL's 1,687 million shares on issue as of 31 January 2017

**Shareholding by Region<sup>1</sup>**

%



1. Source: Orient Capital as of 28 February 2017; ROW: rest of world

2. Source: Bloomberg

# Incitec Pivot Limited

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

Explosives

## Explosives

July 2017

Bowen Basin  
Australia



# Explosives

Explosives

The commercial explosives industry provides blasting solutions to the mining and infrastructure markets

- **Mining:** Coal, Base & Precious Metals
- **Infrastructure:** Quarry & Construction

## Mining

### Coal

#### Metallurgical and thermal

- Surface mining
- Underground mining

### Base & Precious Metals

#### Iron ore, copper, silver, gold, nickel and other metals

- Surface mining
- Underground mining

## Infrastructure

### Quarry

#### Rock, gravel and cement

- Surface mining
- Underground mining

### Construction

#### Building and infrastructure

- Surface
- Underground

# Dyno Nobel

Explosives

## IPL addresses the explosives industry through Dyno Nobel

- **Dyno Nobel Americas:** US<sup>1</sup>, Canada, Mexico, Chile, South Africa
- **Dyno Nobel Asia Pacific:** Australia<sup>1</sup>, Indonesia, PNG, Turkey

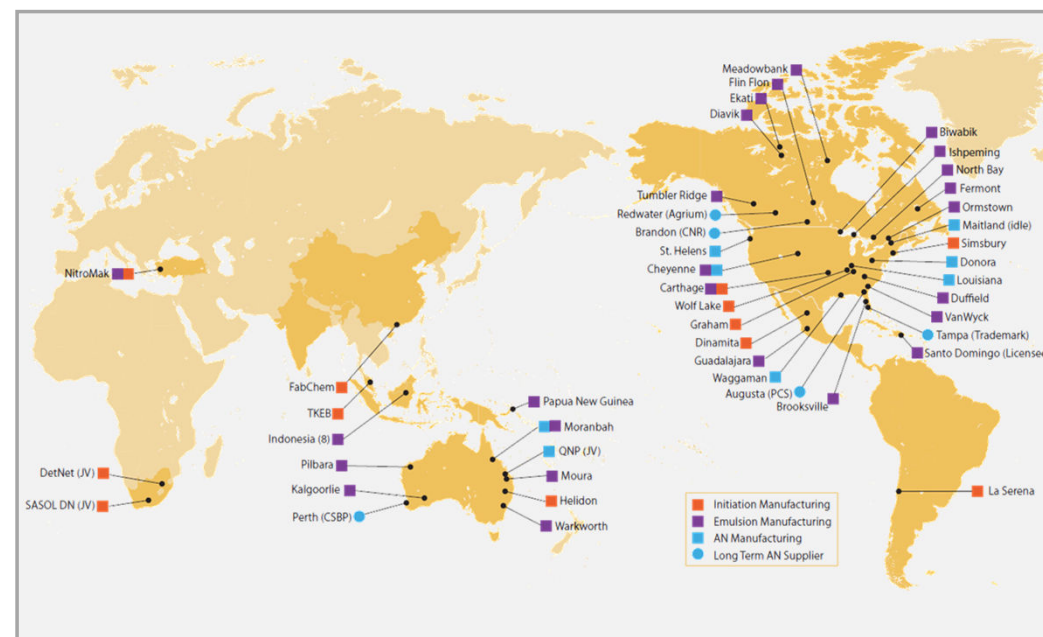
## Maintains a leading market position in its core geographies

- #2 in North America by volume; major participants include Orica and Austin Powder
- #2 in Asia Pacific by volume; Orica is other primary participant

## Operates directly and via joint ventures in North America

- It operates a direct model in Asia Pacific

## Dyno Nobel Global Operations



1. Core geography

# Value Chain

Explosives

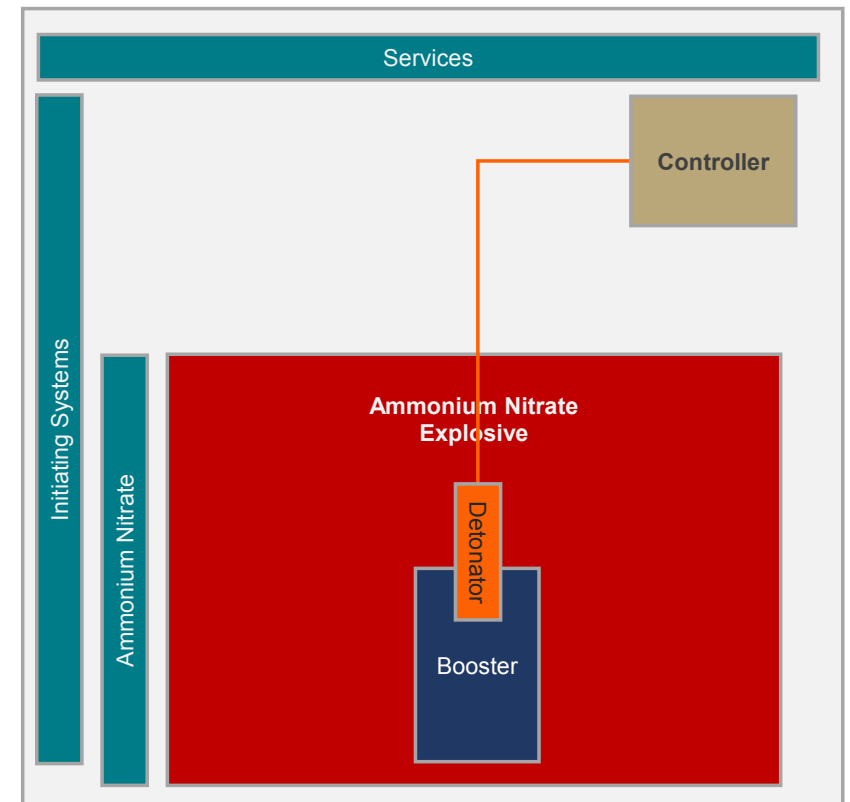
Dyno Nobel participates in all stages of the explosives value chain

- Ammonium Nitrate
- Initiating Systems
- Services

**DYNO**  
Dyno Nobel

- Hazardous material handling and logistics are also core competencies

## Explosives Value Chain



**Incitec Pivot Limited**

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 33

# Ammonium Nitrate

Explosives

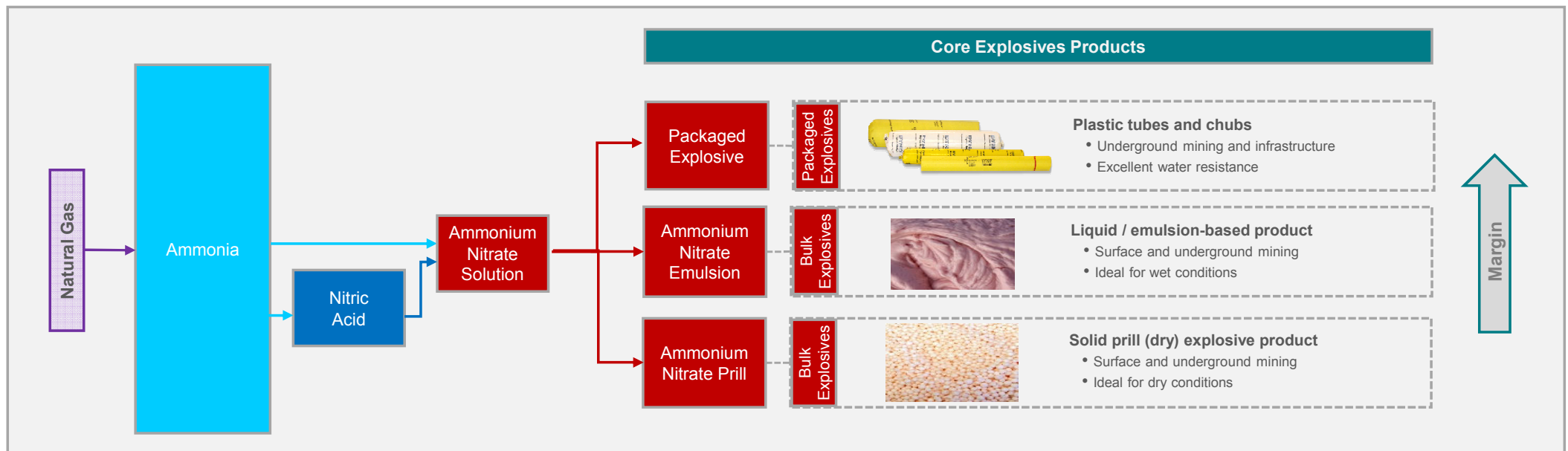
- Ammonium Nitrate
- Initiating Systems
- Services

**DYNO**  
Dyno Nobel

**Ammonium nitrate is the core chemical component of bulk explosive mixtures**

- Generally stable in nature; requires energy from an initiating system for detonation
- Manufacture entails the acid-base reaction of ammonia with nitric acid

**Primarily distributed in prill (dry), semi-liquid or packaged form**



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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 34

# Initiating Systems

Explosives

- Ammonium Nitrate
- **Initiating Systems**
- Services

**DYNO**  
Dyno Nobel

**Blasts are generally triggered by an initiating system comprising detonating cord, detonators and boosters**

- Initiating systems are vital to triggering and controlling the sequencing and timing of an explosion

**Detonators receive a command through either a detonating cord or shock tube, or electric signal**

- Detonators in turn trigger the booster, which in turn triggers the ammonium nitrate
- The timing of an initiation is controlled by a pyrotechnic or electronic timer



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# Services

Explosives

- Ammonium Nitrate
- Initiating Systems
- Services

**DYNO**  
Dyno Nobel

## Consulting and on-site services help customers design and implement controlled blasts

- **Consulting:** Blast design based on customer needs and geological environment
- **Mine Site:** Full on-site support offering including plant and loading equipment

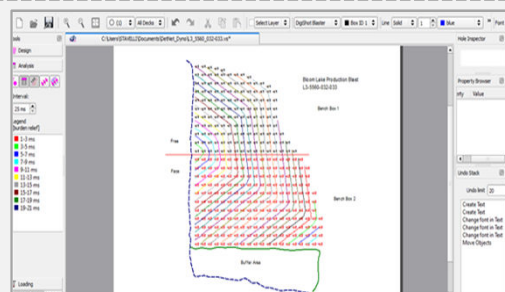
## Blasting optimisation can significantly improve costs across the mining value chain

- It is an important differentiator particularly for the Quarry & Construction end market

### DynoConsult

#### Customer profitability optimised via blast patterns

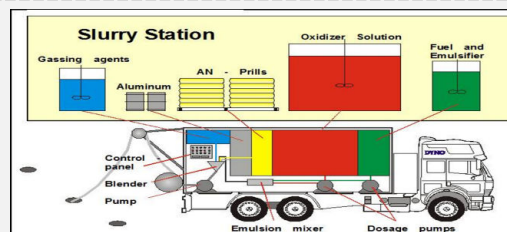
- Fragmentation analysis and control
- Cast blasting optimisation
- Vibration analysis and control
- Ore dilution control
- Final wall and over-break control
- Blasting education
- Safety training



### On-site services

#### Full suite of blast site assistance

- Blast design
- Bore hole drilling and filling
- Initiating System rigging and operations
- Plant and loading equipment



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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 36



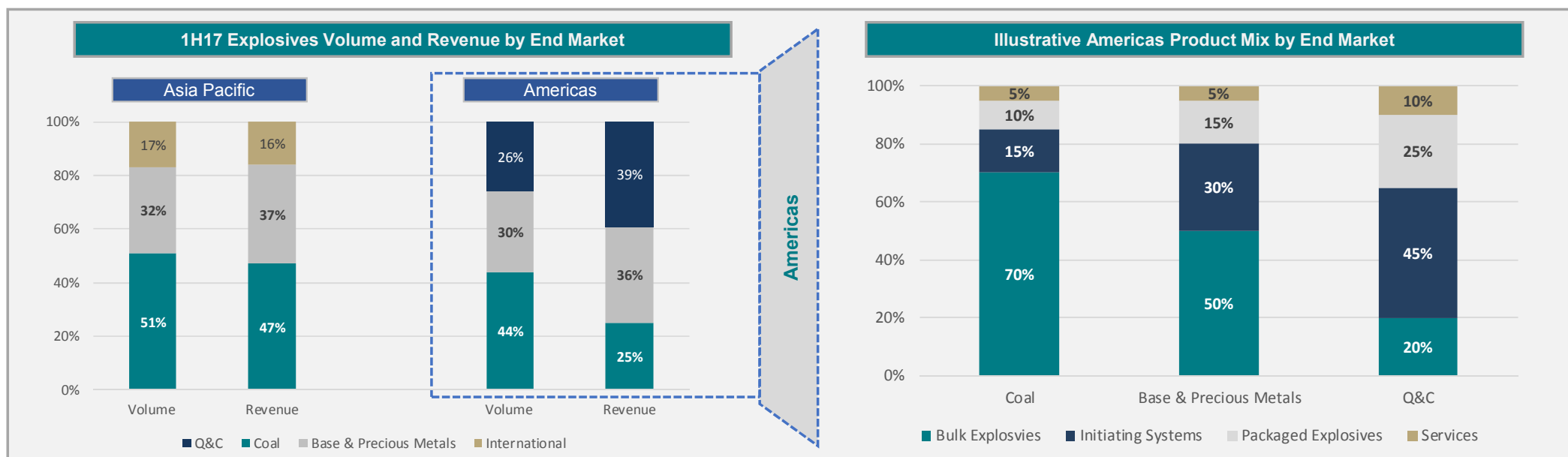
# End Markets

Explosives

**Dyno Nobel primarily supplies explosives to the Coal, Base & Precious Metals and Quarry & Construction end markets**

- Quarry & Construction activity is generally limited to North America
- In Asia Pacific, the 'International' end market primarily consists of Coal and Base & Precious Metals activity

**Quarry & Construction revenue is generally greatest on a per tonne of ammonium nitrate basis largely due to product mix**



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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 37

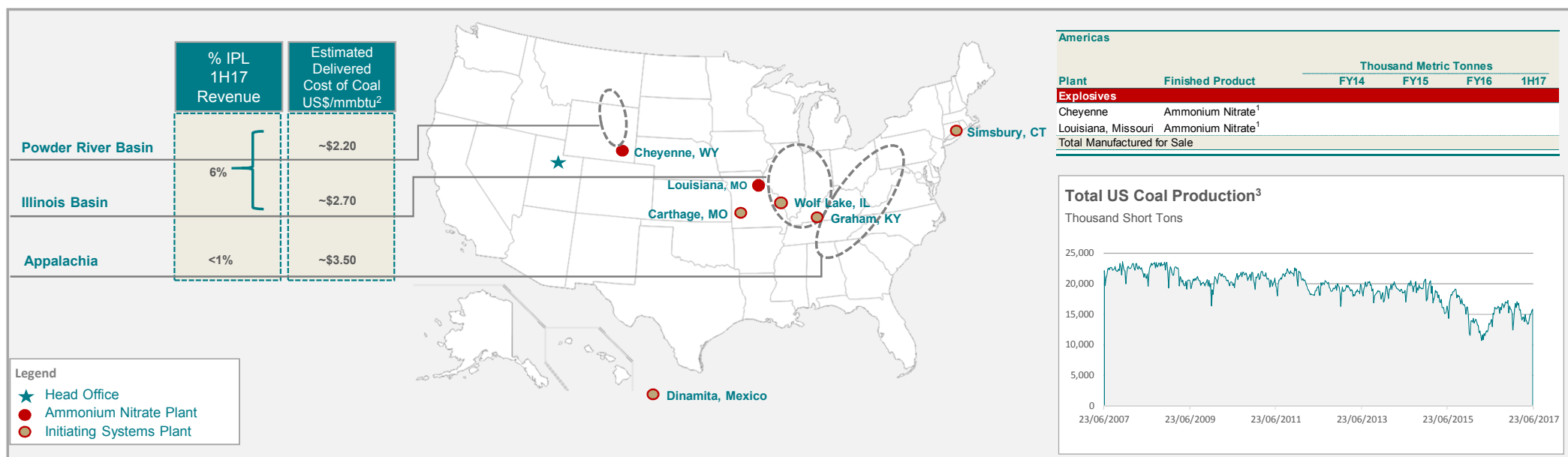
# Americas - Coal

Explosives

**Dyno Nobel primarily supplies explosives to the Powder River Basin, North America's most profitable thermal coal mining region**

- **Cost of Production and Delivery:** Proximity and access to economic gas make Dyno Nobel's Cheyenne ammonium nitrate among the region's most cost efficient
- **Economic Coal:** Powder River Basin coal is North America's most profitable; its delivered cost is currently less than that of natural gas

**Dyno Nobel's Louisiana, Missouri plant has competitive logistics into the Illinois River Basin via river, rail and road**



1. Americas ammonium nitrate volume not disclosed

2. Source: Wood Mackenzie

3. Source: Bloomberg

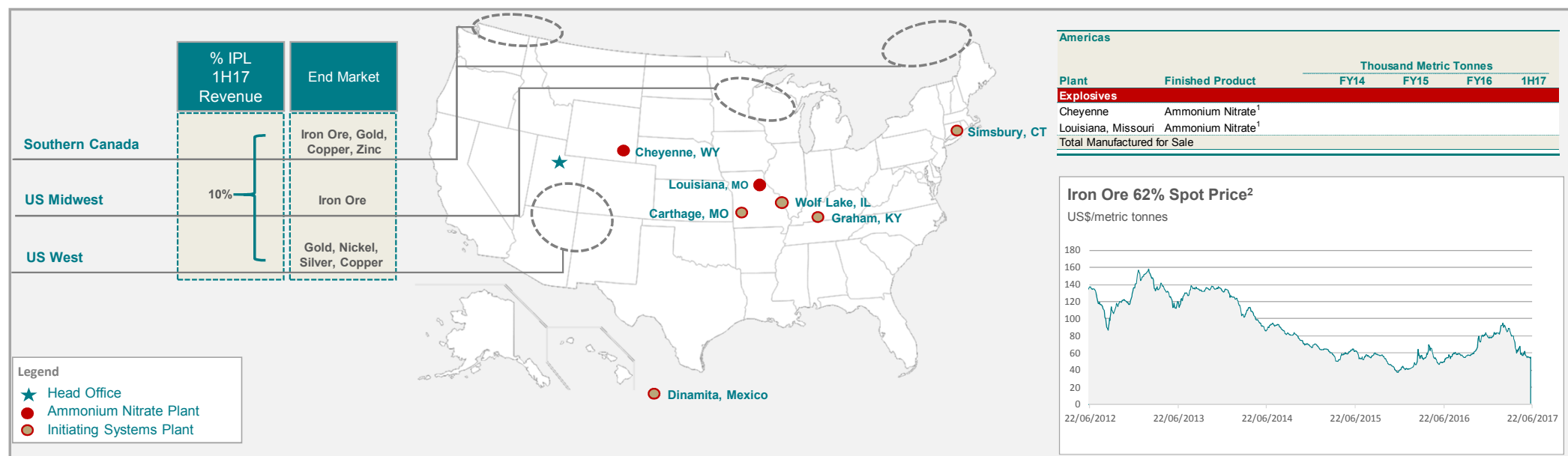
# Americas - Base & Precious Metals

Explosives

Dyno Nobel supplies explosives to iron ore, copper, gold, nickel, silver and zinc mines primarily in the US Midwest and southern Canada

- **US Midwest:** Predominantly iron ore mines in Minnesota and Michigan
- **US West:** Primarily gold, nickel, silver and copper primarily in Arizona, New Mexico, Nevada and Colorado
- **Southern Canada:** Iron ore in eastern Canada (Labrador); gold, copper and zinc in eastern Canada

US iron ore production is expected to benefit from steel import tariffs implemented in 2016



1. Americas ammonium nitrate volume not disclosed

2. Source: Bloomberg

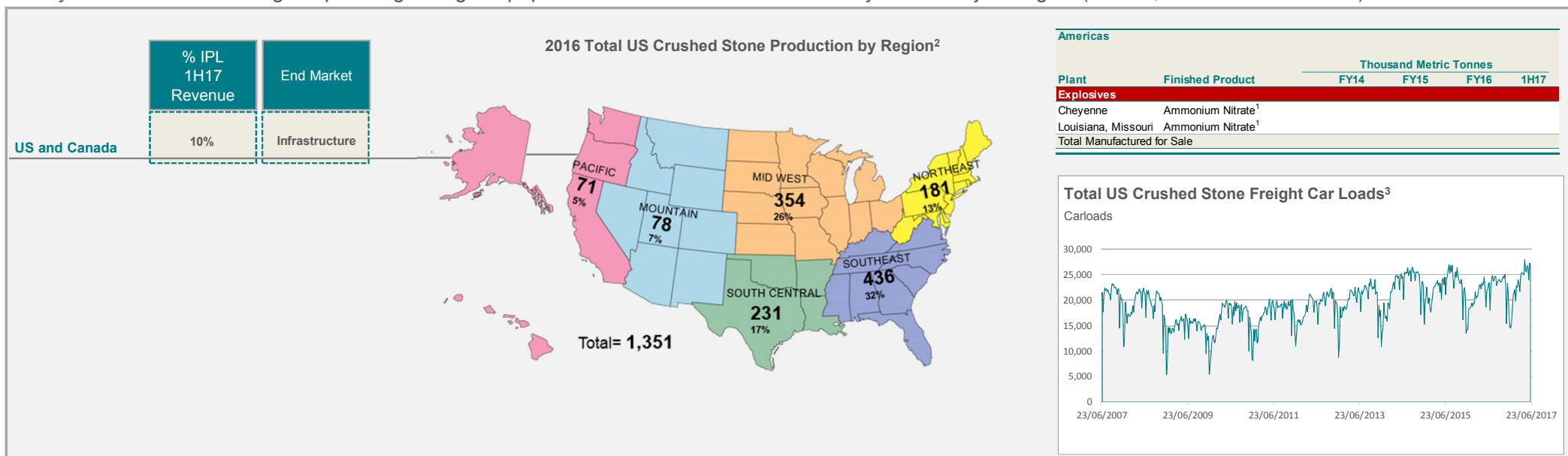
# Americas - Quarry & Construction (1 of 3)

Explosives

Dyno Nobel provides specialised blasting solutions to the Quarry & Construction market in North America

US crushed stone production forecast by McGraw-Hill to grow at 3-5% in 2017; follows 3% growth in 2016<sup>2</sup>

- **Non-Government:** ~50% of sector; growth driven by residential and non-residential construction
- **Government:** ~50% of sector; recent growth has been modest but expected to benefit from a multi-year US\$305Bn highway spending bill passed in December 2015
- Dyno Nobel has a leading footprint in growing US population centres where sector activity is currently strongest (Florida, Texas and Northeast)



1. Americas ammonium nitrate volume not disclosed

2. Source: USGS as of March 2017 (in short tons)

3. Source: Bloomberg

# Americas - Quarry & Construction (2 of 3)

Explosives

## 1.4Bn short tons of crushed stone was produced in the US in 2016<sup>1</sup>

- Total value of US\$15.2Bn<sup>1</sup>

## The US crushed stone production market is highly fragmented

- ~1,430 companies operated ~3,700 quarries and ~82 underground mines in 2016<sup>1</sup>

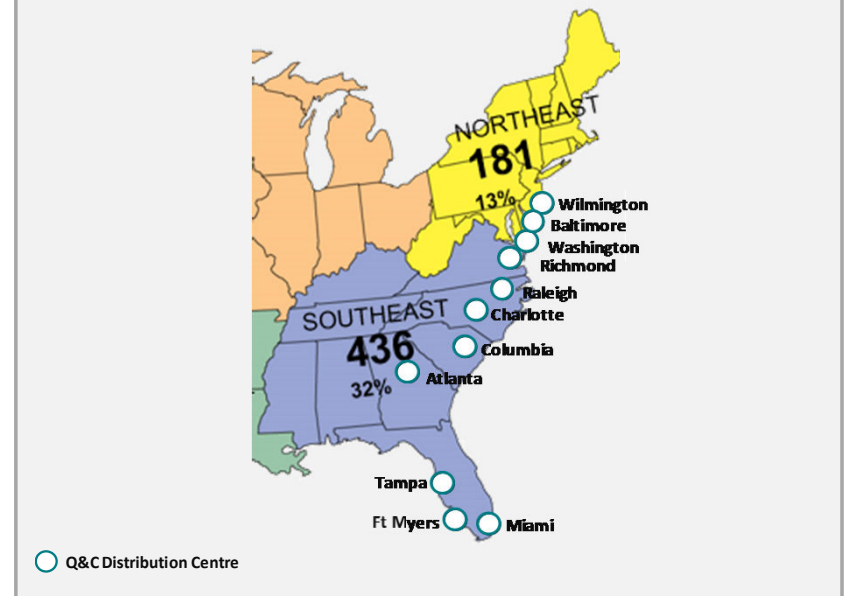
## Top 10 producers accounted for ~40% of US production

- Top 100 producers accounted for ~80%
- Vulcan and Martin Marietta are the two largest participants

## Proximity to population centres is an industry growth driver

- The five leading States in terms of 2016 crushed stone output in descending order were Texas, Pennsylvania, Florida, Ohio and Missouri<sup>1</sup>
- Dyno Nobel's US Southeast footprint is demonstrated in the adjacent exhibit

### Dyno Nobel Q&C Footprint – US Southeast<sup>1</sup>



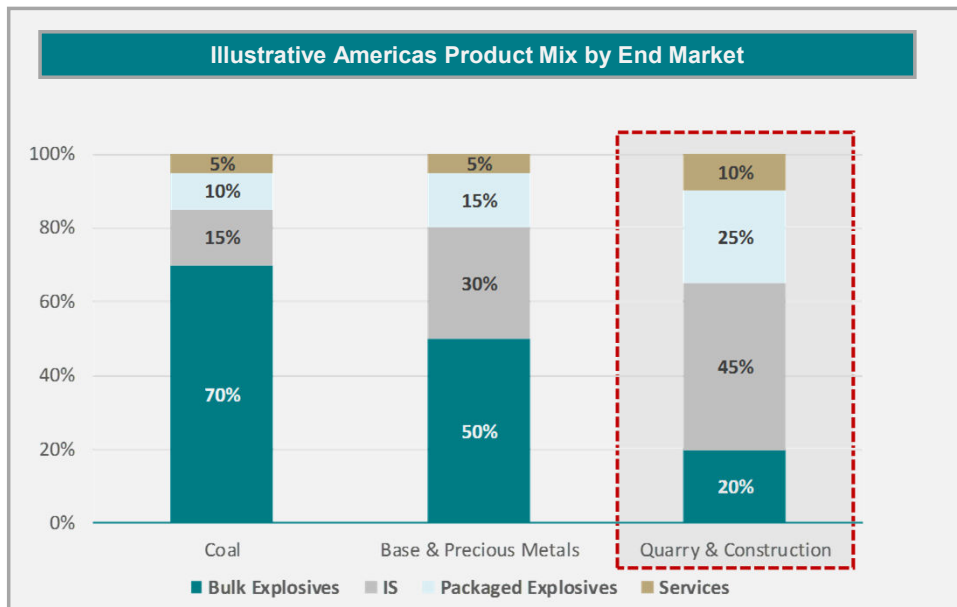
1. Source: USGS as of March 2017 (in short tons)

# Americas - Quarry & Construction (3 of 3)

Explosives

## Proximity to population centres also drives product mix

- Need to minimize vibration increases initiating systems intensity
- Also increases need for blast pattern analysis and on-site services



## White Rock Quarry – Near Miami, Florida (US Southeast)



Quarry

Residences

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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 42

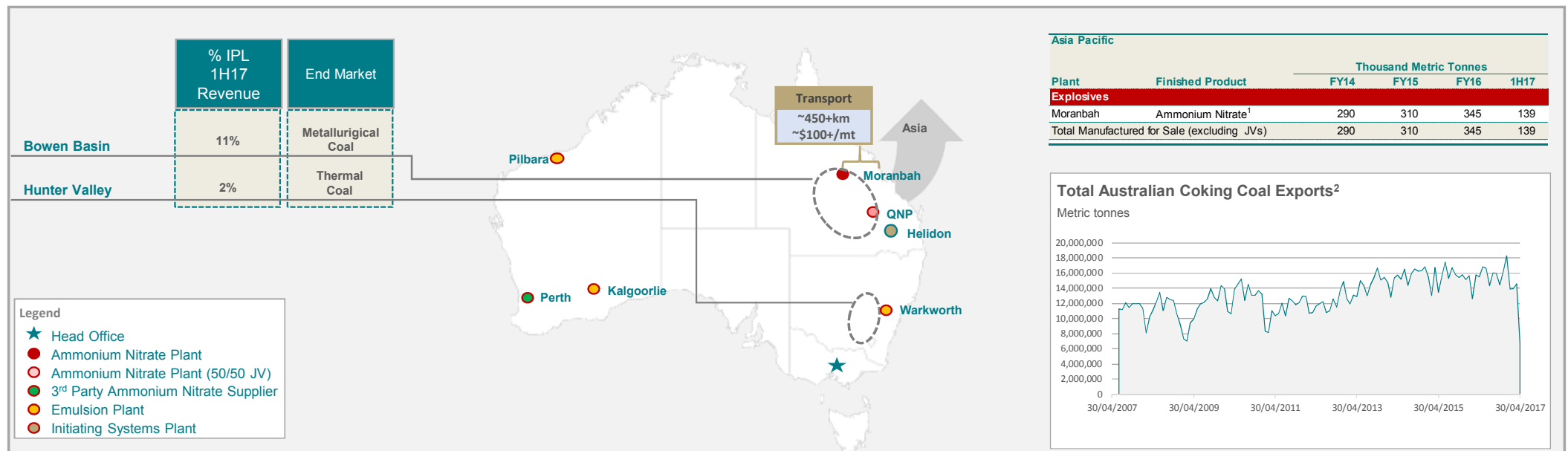
# Asia Pacific - Coal

Explosives

Dyno Nobel's Moranbah plant is adjacent to the Bowen Basin, the world's premier metallurgical coal mining region

- **Cost of Production and Delivery:** Proximity to mine site and access to economic gas make Moranbah's ammonium nitrate among the region's most cost efficient
- **Utilisation:** The Moranbah plant was fully utilized in FY16 underpinned by long term 'take-or-pay' or 'all of requirements' contracts

Demand for Bowen Basin metallurgical coal is driven by resilient China and Asia steel demand



1. Ammonium nitrate equivalents expressed as 100% ammonium nitrate solution

2. Source: Bloomberg

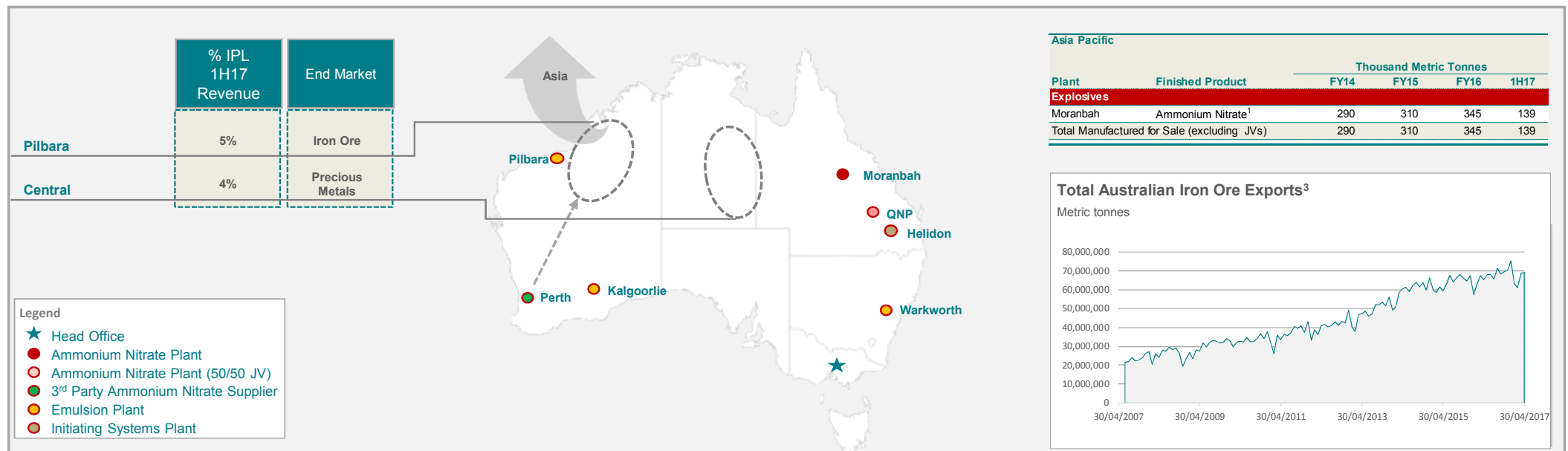
# Asia Pacific - Base & Precious Metals

Explosives

**Dyno Nobel sources and delivers 3<sup>rd</sup> party ammonium nitrate in Western Australia under long term contracts with quality counterparties**

- Does not have ammonium nitrate manufacturing capability in Western Australia, but does have two emulsion plants; also provides initiating systems and services<sup>2</sup>
- Ammonium nitrate supplied to central Australia is generally sourced from Moranbah or QNP (50/50 JV)

**Demand for Pilbara iron ore also underpinned by resilient China and Asia steel production requirements**



1. Ammonium nitrate equivalents expressed as 100% ammonium nitrate solution

2. Emulsion plants generally transform dry bulk ammonium nitrate into an emulsified mixture (refer to slide 34); in North America, Dyno Nobel can emulsify ammonium nitrate on a customer's site

3. Source: Bloomberg



# Industry Competencies and Characteristics

Explosives

## Industry competencies include:

- Nitrogen and Initiating Systems manufacturing capability
- Nitrogen and Initiating Systems manufacturing cost competitiveness
- Access to economic feedstock, particularly natural gas
- Product stewardship and regulatory compliance
- Product performance, reliability and reputation
- Mine site proximity, particularly given explosive nature of product
- Initiating Systems intellectual property
- Sustained R&D investment

## Industry Characteristics

### IBIS World Assessment<sup>1</sup>

#### July 2015

Competition	Medium
Concentration	High
Life Cycle Stage	Growth
Capital Intensity	Medium
Technology Change	Medium
Regulation & Policy	Heavy
Industry Assistance	Low
<b>Level &amp; Trend</b>	<b>High and Steady</b>

1. Source: IBIS World - Explosive Manufacturing in Australia (July 2015)

**Incitec Pivot Limited**

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

Industrial  
Chemicals

# Industrial Chemicals

July 2017

Mt Isa  
Australia



# Industrial Chemicals

IPL participates in the North America and Asia Pacific industrial chemicals markets

IPL addresses the North America market through Dyno Nobel

- The Waggaman ammonia plant is Dyno Nobel's primary Industrial Chemicals asset
- Also supplies products from the Cheyenne, St Helens and Louisiana, Missouri plants

IPL addresses the Asia Pacific market through Incitec Pivot Fertilisers

Industrial  
Chemicals



## North America

### Waggaman

- Ammonia

### Cheyenne

- Ammonium Nitrate Solution (AnSol)
- CO<sub>2</sub>
- DEF
- Nitric Acid

### Louisiana, Missouri

- AnSol
- Nitric Acid

### St Helens

- Ammonia
- CO<sub>2</sub>
- DEF
- Nitric Acid
- Urea



## Asia Pacific

### Gibson Island

- Ammonia
- CO<sub>2</sub>
- DEF
- Urea

### Portland & Geelong

- Specialty Chemicals

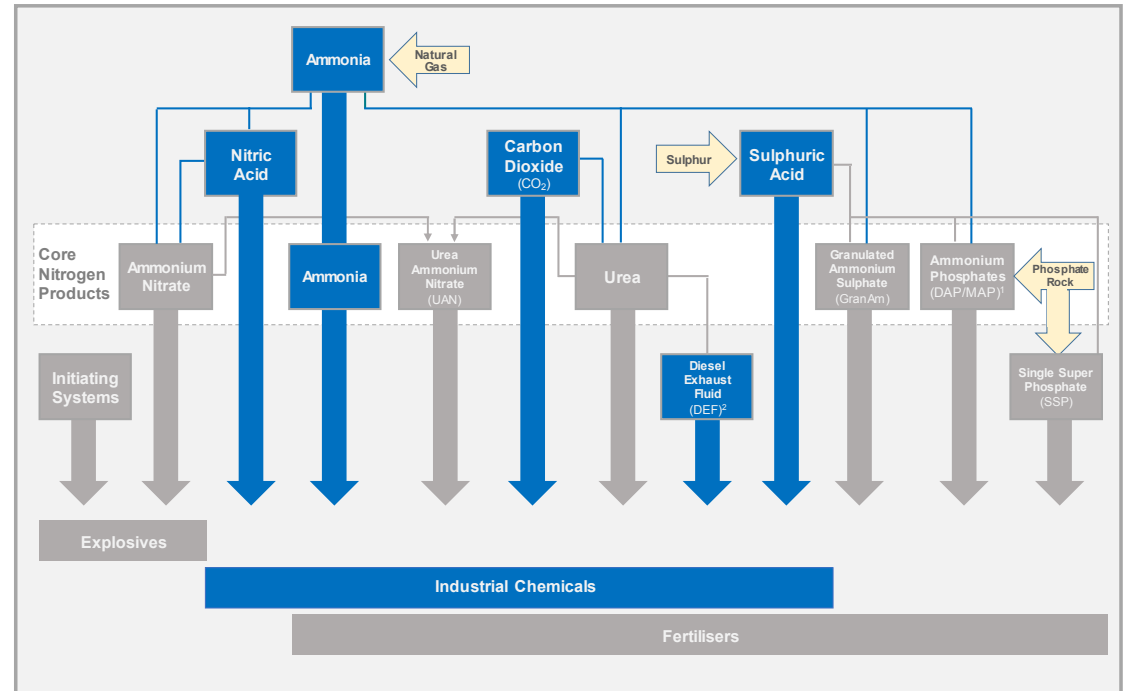
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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 47

# Ammonia

## Ammonia is at the heart of IPL's industrial chemicals universe

- Key intermediate ingredient in nitrogen and phosphate fertiliser production
- Key intermediate ingredient in ammonium nitrate production



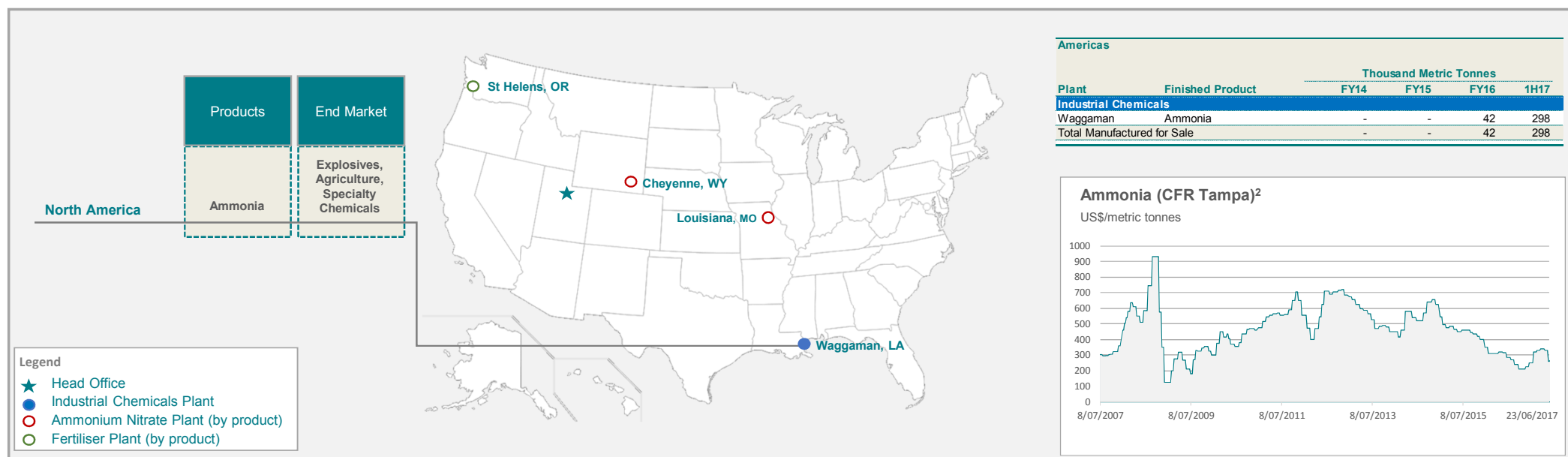
# Americas

## Dyno Nobel's Waggaman ammonia plant is IPL's primary industrial chemicals asset

- Also manufactures and distributes industrial chemicals in North America from its Cheyenne; Louisiana, Missouri and St Helens plants

## Waggaman is expected to be a major contributor to IPL's earnings through the manufacture and sale of ammonia

- The plant is expected to contribute ~3.4% of total North American consumption in 2017<sup>1</sup>



1. Source: CRU and IPL as of March 2017 ; North America comprises US and Canada; based on nameplate capacity

2. Source: Bloomberg

# Ammonia - Industry

## Ammonia is manufactured globally with China the dominant producer

- Russia, India and the US are distant secondary producers

## Generally used to create other nitrogen products onsite during production

- ~80% of ammonia produced globally in 2015 was consumed by the fertiliser market; includes anhydrous ammonia, nitrogen and phosphorus fertilisers<sup>1</sup>
- ~15% used in specialty chemical processes; includes melamine, cleaning products, refrigerants, antimicrobial agents, DEF, fuel
- ~5% consumed by the explosives industry

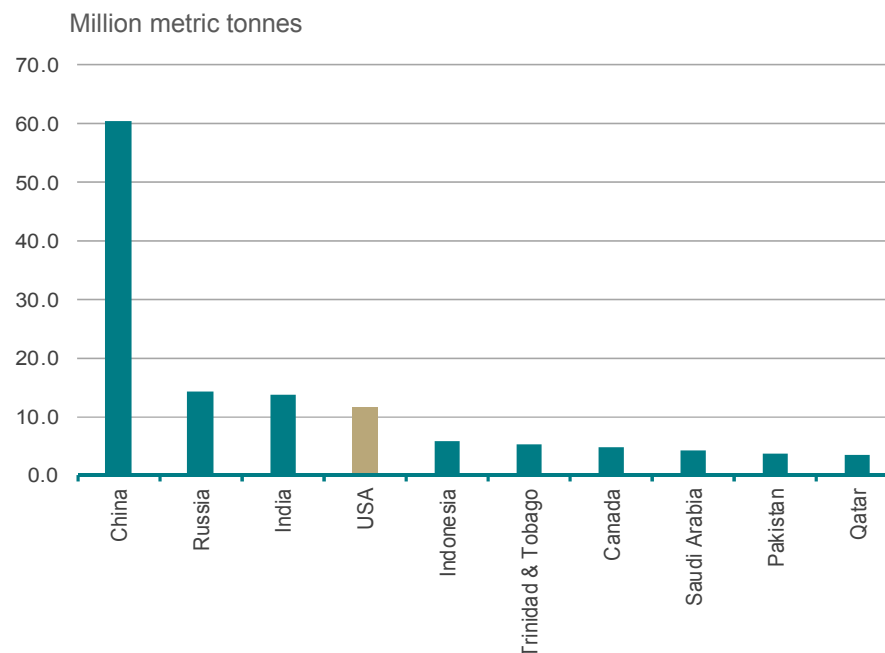
## Only 11% of the ammonia produced globally in 2015 was traded<sup>2</sup>

- Chinese product primarily consumed domestically (refer slide 53)

## Traded ammonia is primarily consumed locally given its gaseous state

- Can be transported via rail, road and sea, though logistics can be challenging

## 2015 global ammonia production<sup>2</sup>



1. Source: International Fertilizer Association

2. Source: CRU as of June 2016 in calendar years

# Ammonia - Global Consumption

Industrial  
Chemicals

## Global ammonia consumption is expected to increase by 13% through 2021<sup>1</sup>

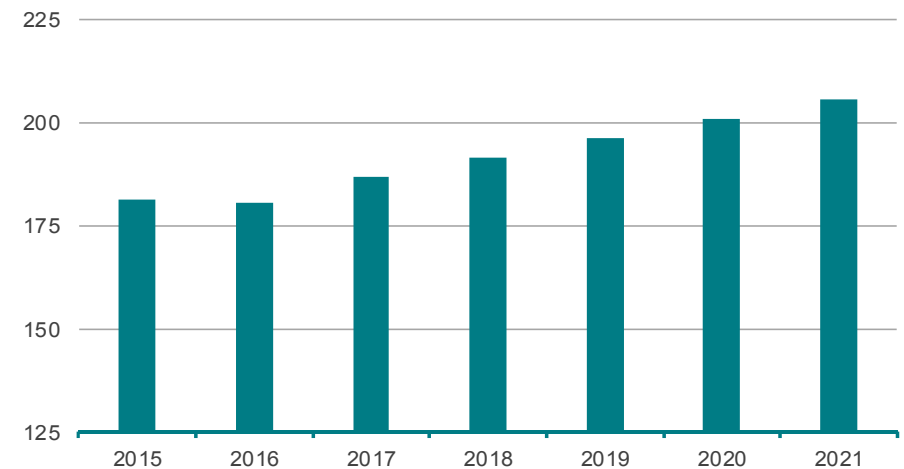
- 181 million metric tonnes consumed in 2015, increasing to 206 million metric tonnes in 2021<sup>1</sup>

### Macro drivers include:

- Global food consumption growth trends (fertilisers)
- Global industrial chemicals demand growth (plastics, air conditioning)

## Global ammonia consumption<sup>1</sup>

Million metric tonnes



1. Source: CRU as of March 2017 in calendar years

# Ammonia - North America

## North America consumption accounts for 13% of global consumption<sup>1</sup>

- Primary manufacturers and distributors include Agrium, CF Industries, Koch Industries, Trammo and Yara

## Consumption is expected to grow 12% from 2016 to 2021<sup>1</sup>

- 22.0m metric tonnes consumed in 2016, increasing to 24.7m metric tonnes in 2021<sup>1</sup>

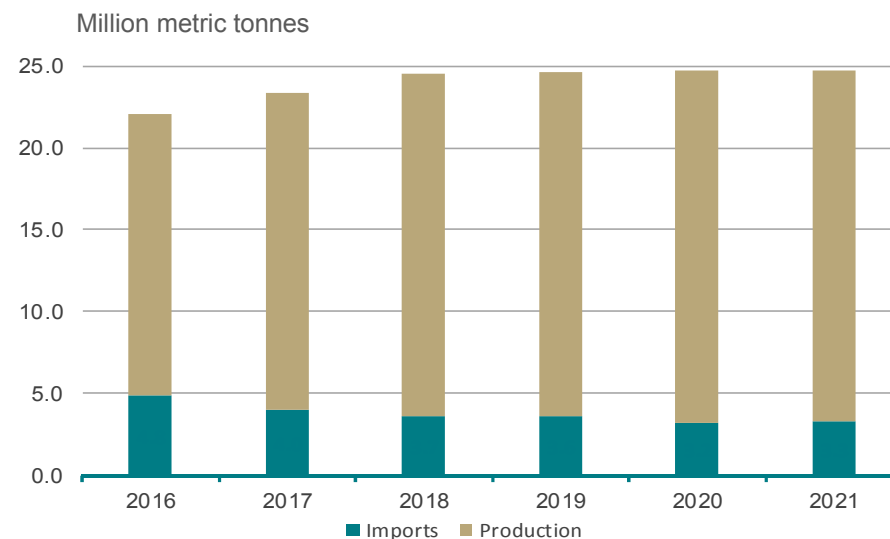
## North America is expected to import ~3.3m metric tonnes in 2021<sup>1</sup>

- Expected new capacity increases net production to 21.4m metric tonnes<sup>1</sup>

## Imported product is sourced primarily from Trinidad and Tobago<sup>1</sup>

- Other major suppliers: Canada, Venezuela, Algeria, Russia<sup>1</sup>

## North America ammonia industry profile<sup>1</sup>



1. Source: CRU as of March 2017 in calendar years; North America comprises US and Canada



# Ammonia - Product Flow

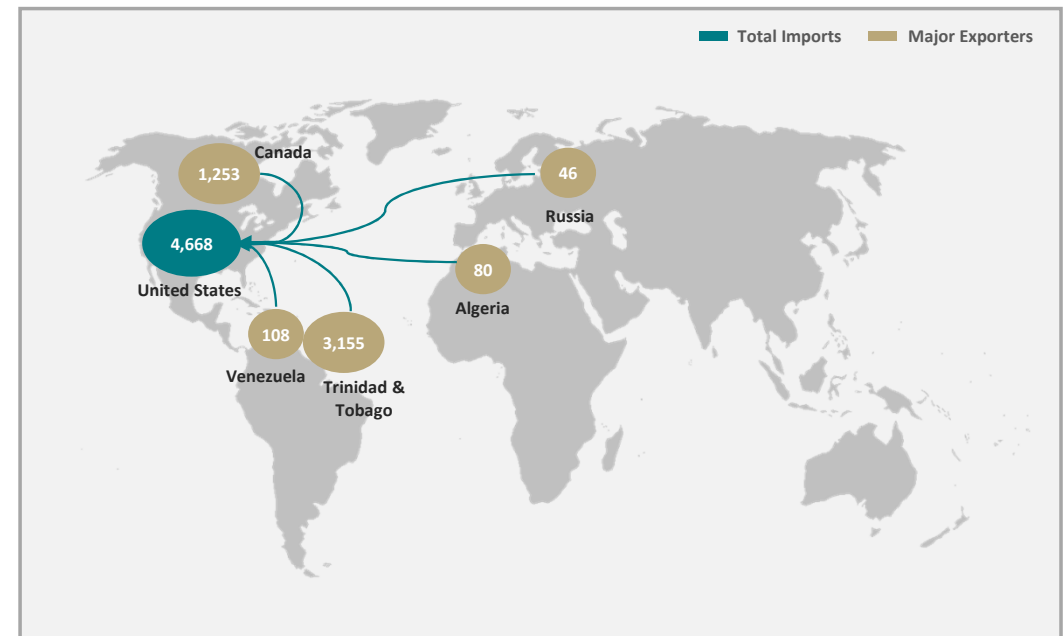
**US imported product is sourced primarily from Trinidad and Tobago<sup>1</sup>**

- Other major suppliers: Canada, Venezuela, Algeria, Russia

**Trinidad diversified its exports in 2016 as US requirements decreased<sup>1</sup>**

- This included an increase in exports to the Moroccan and the Indian markets

**US Imports: 2016<sup>1</sup>**



1. Source: CRU as of March 2017 in calendar years

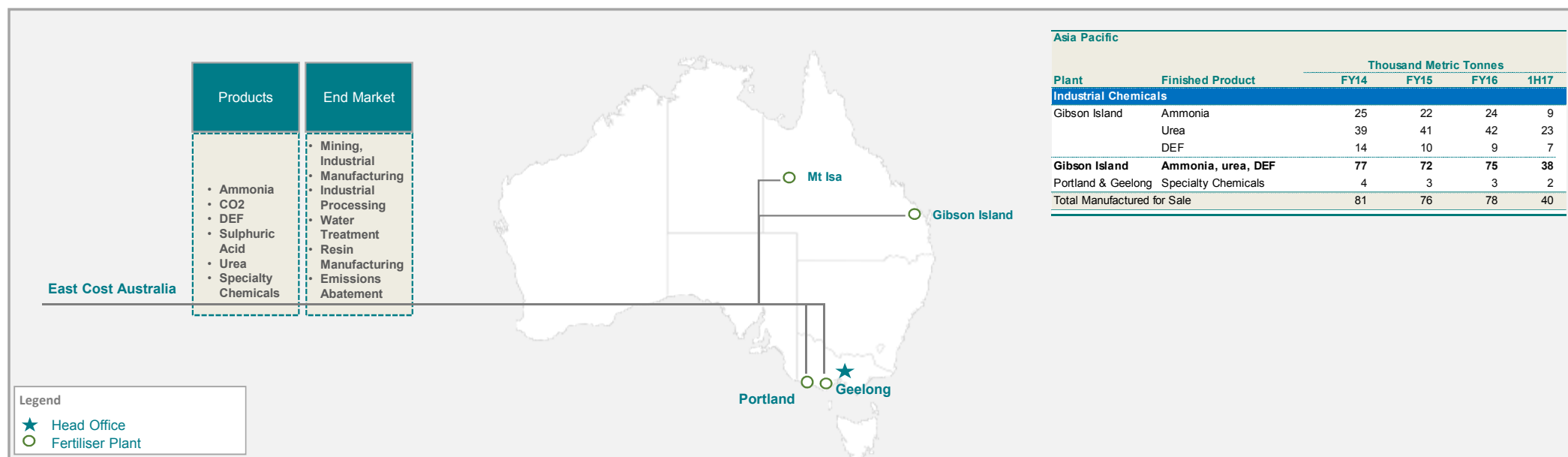
# Asia Pacific

**In Asia Pacific, industrial chemicals are generally produced as a raw material or finished product of the Gibson Island fertiliser plant**

- A small amount of industrial chemicals are sold as a raw material or byproduct of the Mt Isa, Portland and Geelong plants

**Asia Pacific industrial chemicals contributed 5% of group EBIT in 1H17**

- Sold under the Incitec Pivot Fertilisers Brand



# Incitec Pivot Limited

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

Fertilisers

## Fertilisers

July 2017

Queensland  
Australia



# Fertilisers

## Fertilisers

Fertilisers are essential plant nutrients that are applied to crops to achieve optimal yield and quality

There are three main plant nutrients, commonly referred to as 'NPK'

- N Nitrogen: Main constituent of proteins essential for growth and development**
  - Supply of nitrogen determines a plant's growth, vigour, colour and yield
  - Wide application use particularly in broadacre crops, cotton and sugar cane
- P Phosphorus: Vital for adequate root development and ability to resist drought**
  - Also important for plant growth and development, such as ripening of seed and fruit
  - Used in broadacre crops and pasture
- K Potassium: Central to the translocation of photosynthesis within plants**
  - Potassium helps improve crop resistance to lodging, disease and drought

### Phosphate Hill Chemistry



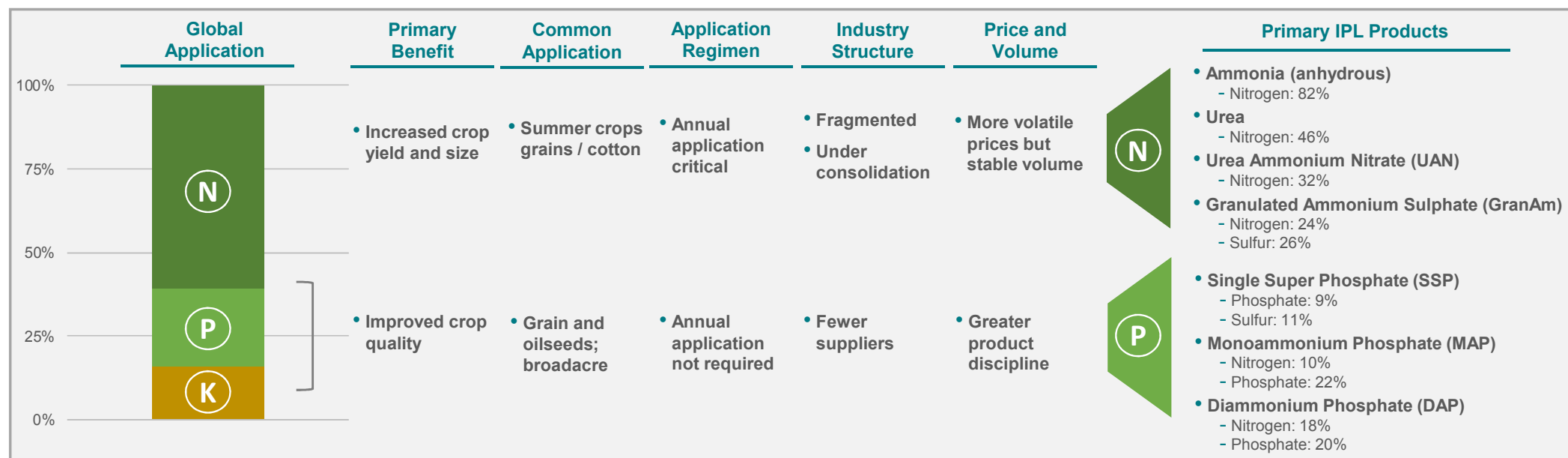
# NPK Nutrient Characteristics

Fertilisers

**Nitrogen fertilisers are the most broadly used globally, representing more than 60% of annual application**

- Nitrogen is a plant's most important and commonly lacking nutrient
- Immediately taken up by plants

**Phosphorus fertilisers are the second most broadly used globally, representing more than 20% of annual application**



Source: International Fertilizer Association, Yara Fertilizer Industry Handbook, Incitec Pivot Fertilisers

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# Australian Fertiliser Market - Application

Fertilisers

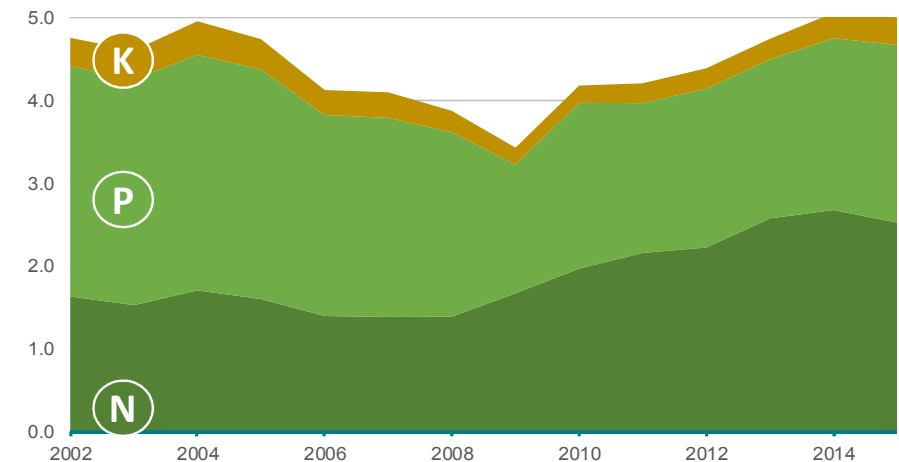
The Australian fertiliser market primarily applies nitrogen and phosphorus

- **Nitrogen:** 50% of 2015 sales volume
- **Phosphorus:** 43% of 2015 sales volume
- **Potassium:** 7% of 2015 sales volume

Domestic nitrogen consumption in Australia has increased since 2002

Australian fertiliser sales volume<sup>1</sup>

Million metric tonnes of finished product



1. Source: Fertiliser Australia in calendar years

# Australian Fertiliser Market - Supply & Demand

Fertilisers

## The Australian fertiliser market reported ~\$5.0Bn of sales in 2015<sup>1</sup>

- 6.4% CAGR since 2009 underpinned by increased Asian demand for Australian produce<sup>2</sup>
- Eastern Australia comprised ~72% of all fertiliser sold by volume in 2015<sup>1</sup>

## ~38% of volume sold in Australia in 2015 was produced domestically<sup>1</sup>

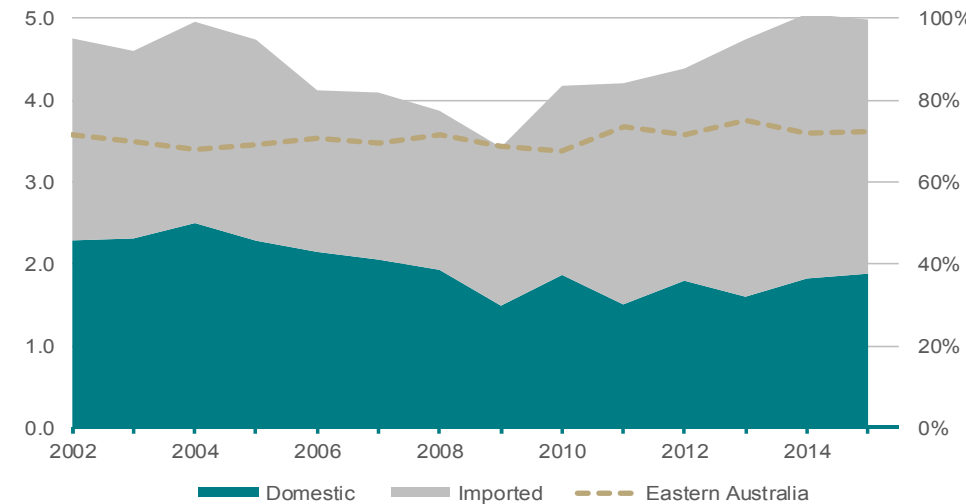
- Steady decrease in domestic market share largely due to limited sources of competitively manufactured product

## Domestic natural gas costs is a limiting factor

- **Nitrogen:** ~50-70% of manufacturing costs in Australia
- **Ammonium Phosphate:** ~15-30% of manufacturing costs in Australia

## Australian fertiliser sales volume by source and region<sup>1</sup>

Source in million metric tonnes (LHS); Eastern Australia as % of total (RHS)



1. Source: Fertiliser Australia in calendar years

2. CAGR: Compound annual growth rate



# Asia Pacific - IPF

Fertilisers

IPF manufactures, distributes and trades nitrogen and phosphorus fertilisers

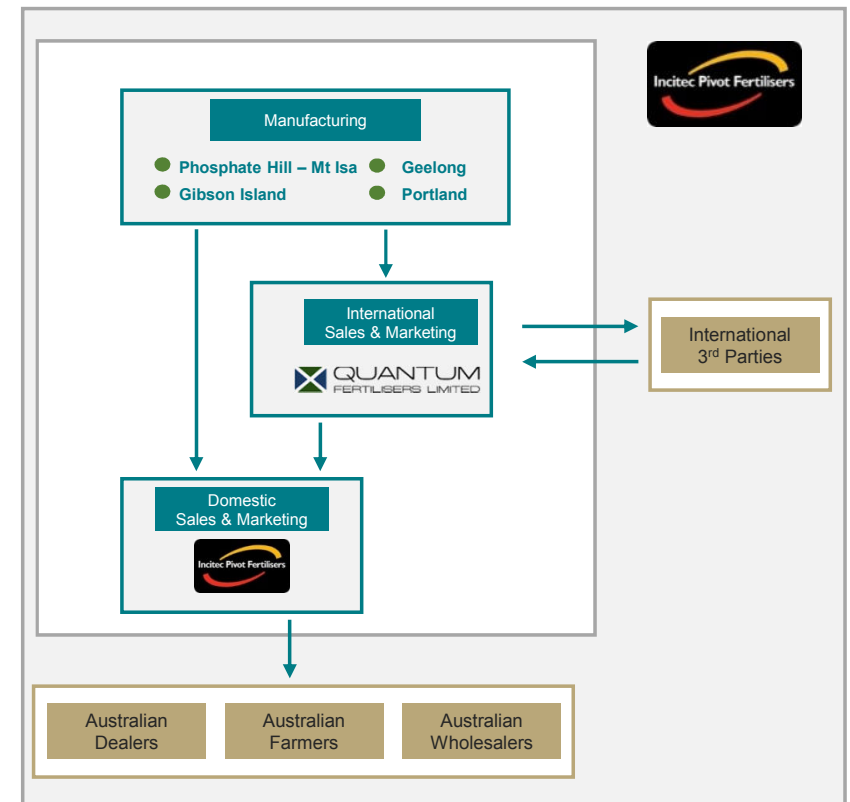
**N** Nitrogen: Ammonia, urea, GranAm

**P** Phosphorus: DAP, MAP, SSP

IPF's business model comprises three functions:



Business model





# IPF- Manufacturing

## Fertilisers

- **Manufacturing**
- Domestic Sales & Marketing
- International Sales & Marketing



## IPF is Australia's largest manufacturer of fertilisers

- Produces the vast majority of all domestically manufactured product

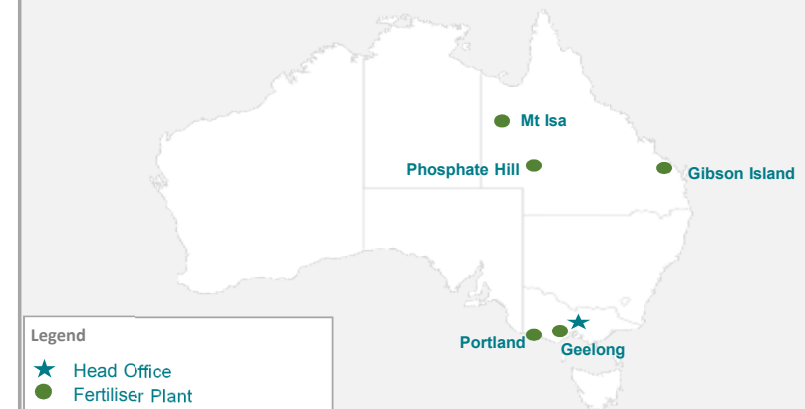
**N Urea:** Produced 97k metric tonnes at Gibson Island in 1H17

**P DAP / MAP:** Produced 442k metric tonnes at Phosphate Hill in 1H17

**SSP:** Produced 159k metric tonnes at Geelong and Portland in 1H17

## Australia fertiliser production

Asia Pacific		Thousand Metric Tonnes			
Plant	Finished Product	FY14	FY15	FY16	1H17
<b>Fertilisers</b>					
Phosphate Hill	DAP / MAP	772	1,043	1,010	442
Gibson Island	Ammonia	70	74	77	33
Gibson Island	GranAm	163	164	187	105
Gibson Island	Urea	235	178	173	97
<b>Gibson Island</b>	<b>Ammonia, GranAm, urea</b>	<b>469</b>	<b>415</b>	<b>437</b>	<b>235</b>
Portland & Geelong	SSP	334	349	386	159
Total Manufactured for Sale		1,575	1,808	1,832	837
Total Sold		2,401	2,599	2,561	1,084



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GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 61

# IPF- Domestic Sales & Marketing

## IPF is also Australia's largest distributor of fertilisers

- ~41% domestic market share in 2015<sup>1</sup>
- Other participants include CSBP (~15%), Dreyfus, Koch Industries, Ameropa and Wengfu<sup>1</sup>

## IPF has ~50+% market share in Eastern Australia<sup>2</sup>

- Australia's largest and fastest growing fertiliser market
- Comprises New South Wales, Victoria, Queensland, South Australia and Tasmania

## Product sold under the Incitec Pivot Fertilisers brand

- Distributed directly to farmers and through a network of more than 200 dealers and agents

## Value-add services include:

- Agronomic analysis
- Blending
- Packaging
- Storage
- Transportation
- Application of fungicides and herbicides

## Fertilisers

- Manufacturing
- **Domestic Sales & Marketing**
- International Sales & Marketing



## Distribution Footprint



1. Source: IBIS World - Fertiliser Manufacturing in Australia (July 2015)

2. Source: ABS, ABARES; comprises South Australia, New South Wales, Victoria and Queensland

# IPF- International Sales & Marketing

Fertilisers

- Manufacturing
- Domestic Sales & Marketing
- **International Sales & Marketing**



## Internationally, IPF sells to major offshore agricultural markets

- Primary markets include Asia Pacific, India, Pakistan and Brazil

## IPF also procures from overseas to meet seasonal domestic peaks

- As demonstrated in the adjacently exhibit

## International Sales & Marketing activity is primarily conducted through Quantum Fertilisers

- Hong Kong based joint venture

## Seasonality of Australia fertiliser demand



**Incitec Pivot Limited**

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS 63

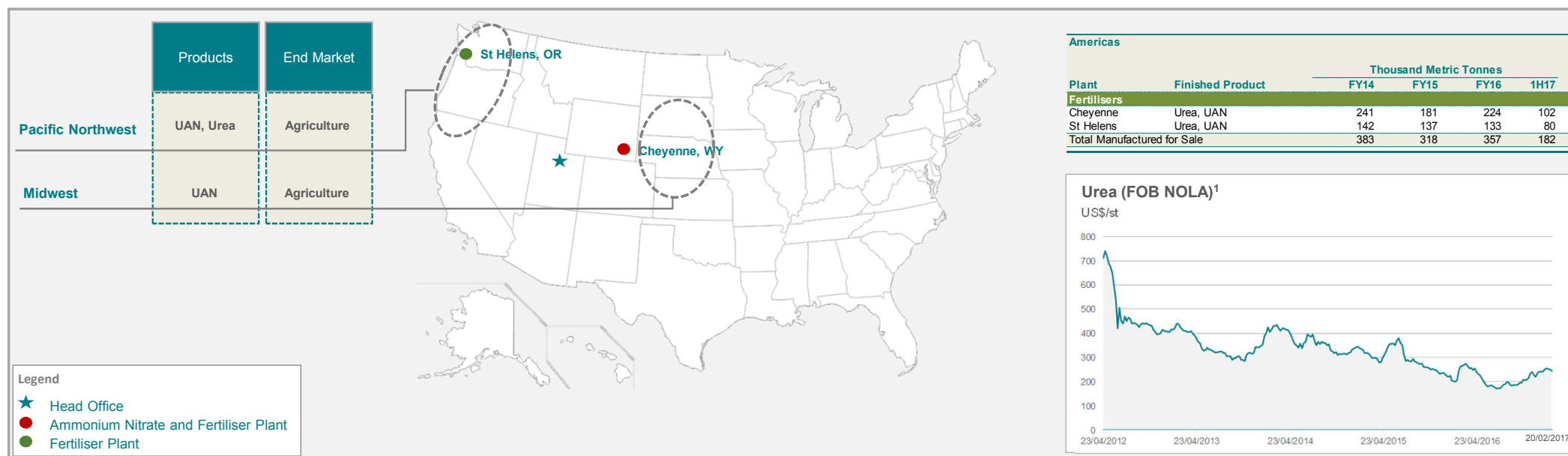
# Americas - Dyno Nobel

Fertilisers

In North America, Dyno Nobel manufactures and distributes UAN and urea

- Product primarily sold in the Pacific Northwest and Midwest
- Manufactured at the St Helens, Oregon and Cheyenne, Wyoming plants

Americas fertilisers represented ~1% of group EBIT in 2016



1. Source: Bloomberg

# Industry Competencies and Characteristics

Fertilisers

## Industry competencies include:

- Capital requirements
- Manufacturing scale
- Trading scale
- Regulatory compliance
- Product performance, reliability and reputation

## Industry Characteristics

### IBIS World Assessment<sup>1</sup>

#### July 2015

Competition	High
Concentration	Medium
Life Cycle Stage	Decline
Capital Intensity	High
Technology Change	Medium
Regulation & Policy	Medium
Industry Assistance	Low
<b>Level &amp; Trend</b>	<b>Medium and Decreasing</b>

1. Source: IBIS World- Fertiliser Manufacturing in Australia (July 2015)

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# Global Manufacturing

July 2017



Moranbah  
Australia

# Global Manufacturing

## IPL operates 7 major nitrogen facilities

### Explosives

- Moranbah (slide 68)
- Cheyenne (slide 71)
- Louisiana, Missouri (slide 74)

### Industrial Chemicals

- Waggaman (slide 79)

### Fertilisers

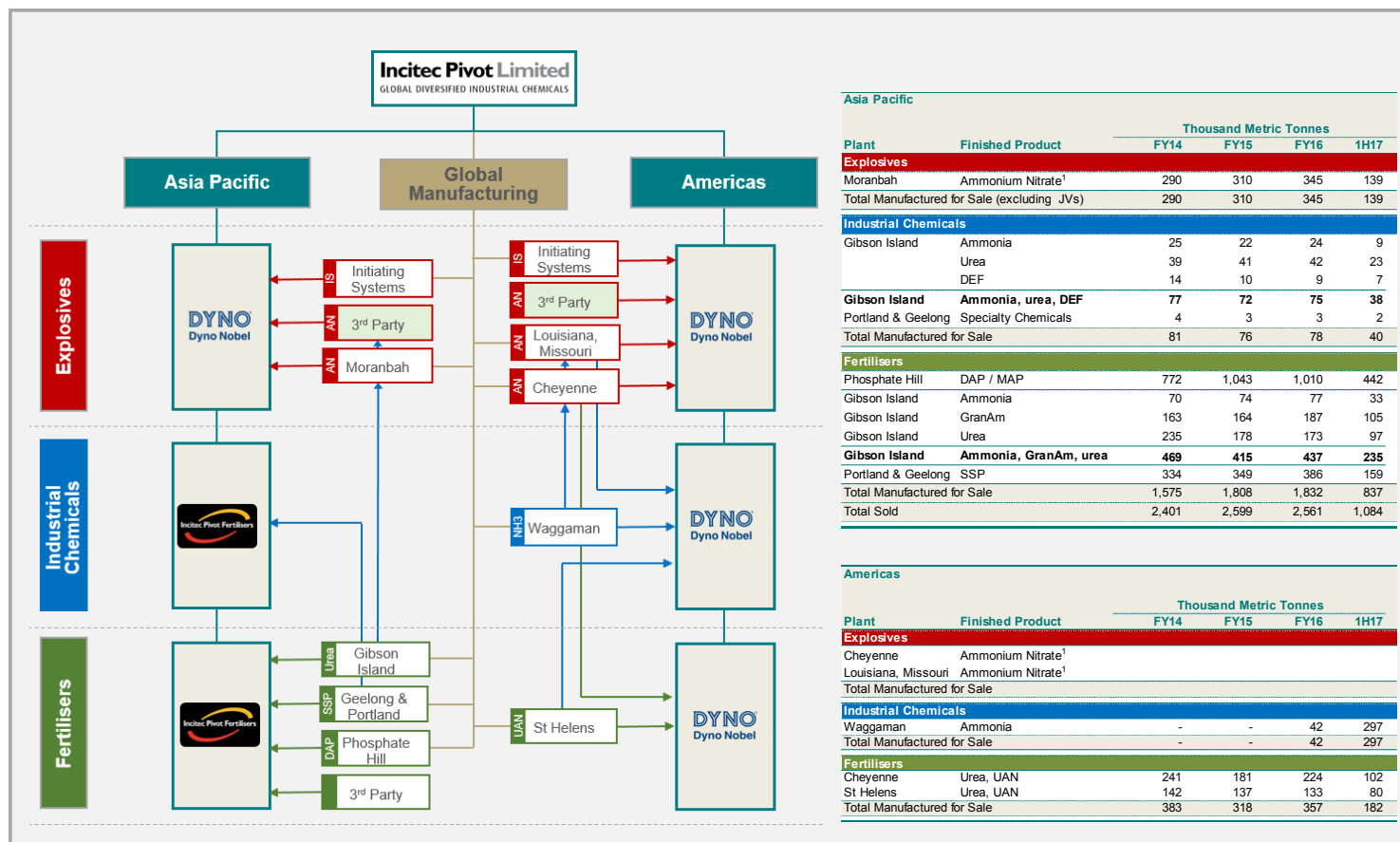
- Phosphate Hill (slide 86)
- Gibson Island (slide 90)
- St Helens (slide 93)

## Operates 7 Initiating Systems plants

- Simsbury, CT, USA
- Wolf Lake, IL, USA
- Graham, KY, USA
- Carthage, MO, USA
- Helidon, Australia
- Dinamita, Mexico
- La Serena, Chile

## Plants are managed centrally through Global Manufacturing

- Global headquarters in Brisbane
- US headquarters in Salt Lake City



1. Ammonium nitrate equivalents expressed as 100% ammonium nitrate solution. Americas ammonium nitrate volume not disclosed



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Explosives

## Moranbah

Queensland, Australia

**Ammonium Nitrate Plant**





# Moranbah

Explosives

## Moranbah produces explosives for Australia's metallurgical coal industry

- **Explosives:** Ammonium nitrate prill, ammonium nitrate emulsion

## Adjacent to the Bowen Basin, the world's premier hard coking coal region

- Demand underpinned by resilient China and Asia steel production demand

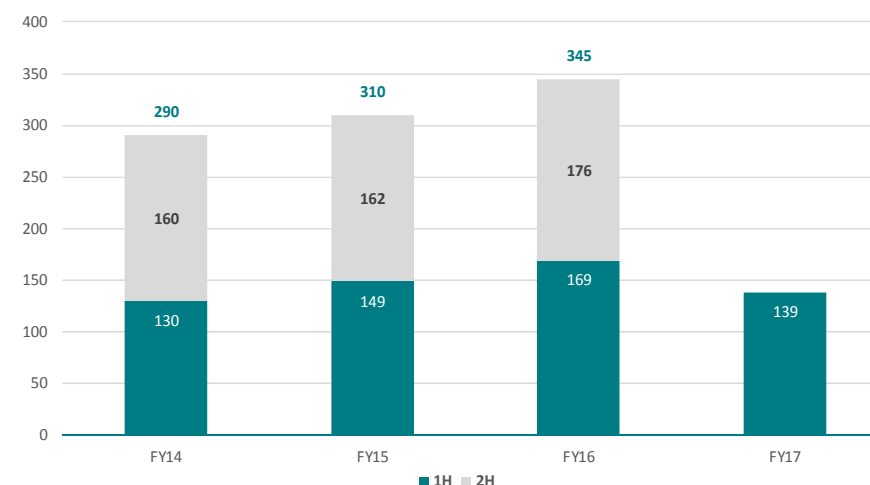
## Moranbah's ammonium nitrate is among the region's most cost efficient

- Benefits from proximity to mines and access to economic gas

## Produced 345k metric tonnes of ammonium nitrate in 2016

## Moranbah production

Ammonium nitrate in thousand metric tonnes<sup>1</sup>



Asia Pacific					
Plant	Finished Product	Thousand Metric Tonnes			
		FY14	FY15	FY16	1H17
Explosives					
Moranbah	Ammonium Nitrate <sup>1</sup>	290	310	345	139

1. Ammonium nitrate equivalents expressed as 100% ammonium nitrate solution

# Moranbah - Value Chain

Explosives

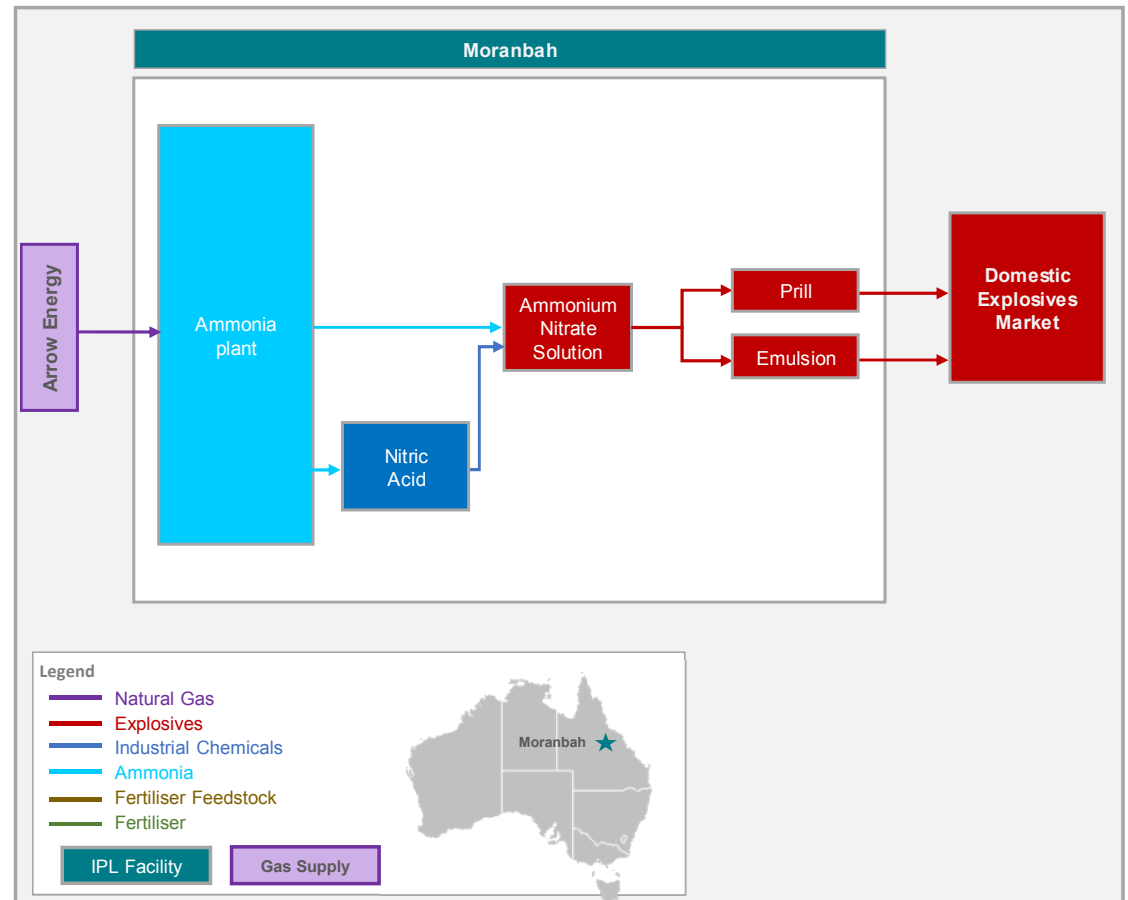
## Core ammonia production backed-to-gas

- Gas requirement of ~34GJ per metric tonne of ammonia<sup>1</sup>

## Long term gas contract with Arrow Energy runs through 2025

## Located in Moranbah, Queensland

- ~120 employees and contractors
- Road infrastructure supports efficient freight movement
- ~200km from Mackay



1. Gas required for ammonia conversion

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Explosives

## Cheyenne

Wyoming, USA

Ammonium Nitrate Plant



# Cheyenne

Explosives

## The Cheyenne plant produces explosives, industrial chemicals and fertilisers

- **Explosives:** Ammonium nitrate prill, ammonium nitrate emulsion
- **Industrial Chemicals:** Ammonium nitrate solution, CO<sub>2</sub>, DEF, nitric acid
- **Fertilisers:** UAN, urea

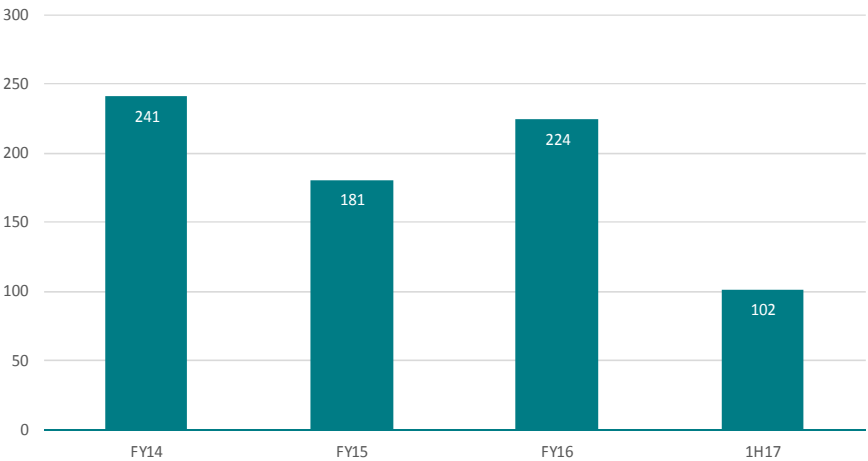
## Products primarily sold to the North American explosives market

- **Coal:** Primarily Powder River Basin
- **Metals & Mining:** Primarily Midwest and Canada
- **Quarry & Construction:** US and Canada

## Produced 224k metric tonnes of urea and UAN in FY16

## Cheyenne fertiliser production

Urea and UAN in thousand metric tonnes



Americas					
Plant	Finished Product	Thousand Metric Tonnes			
		FY14	FY15	FY16	1H17
Explosives					
Cheyenne	Ammonium Nitrate <sup>1</sup>				
Fertilisers					
Cheyenne	Urea, UAN	241	181	224	102

1. Ammonium nitrate volume not disclosed

# Cheyenne - Value Chain

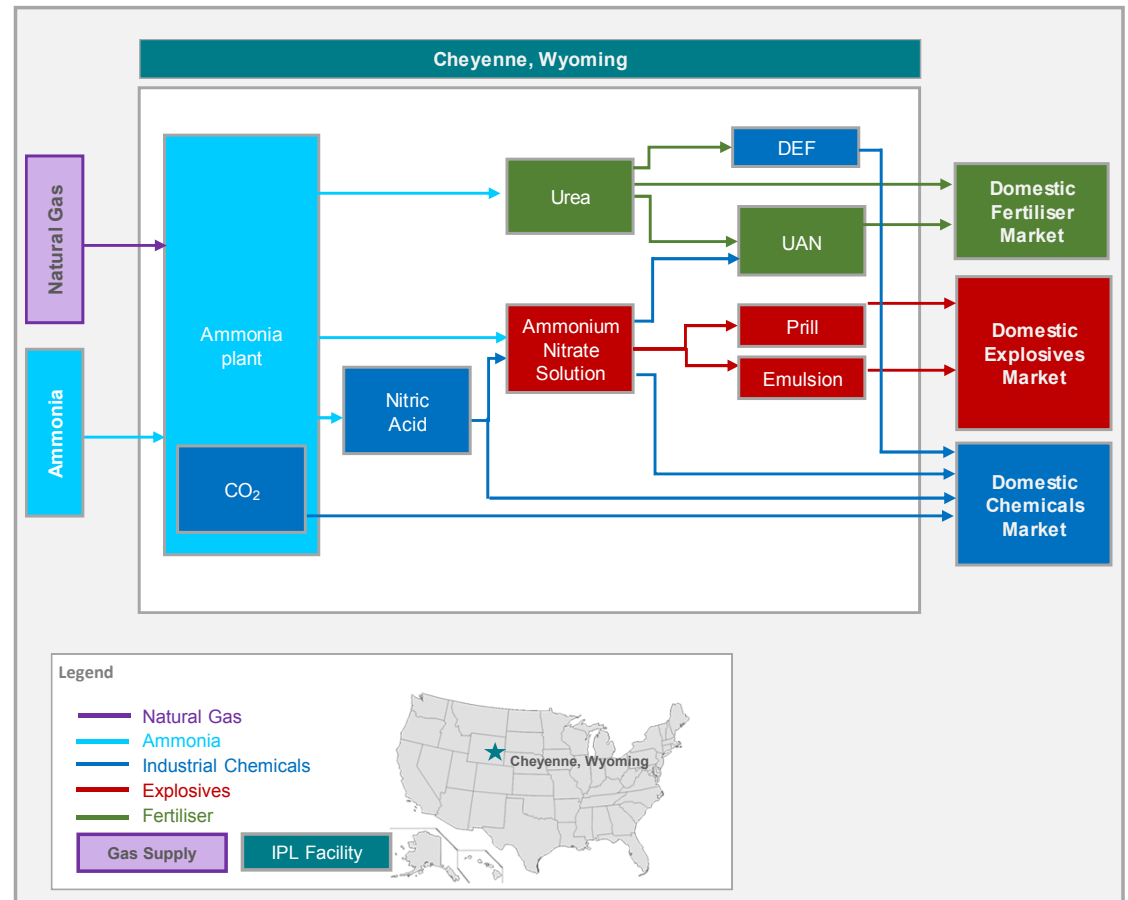
Explosives

## Core ammonia production backed-to-gas

- Majority of gas resourced locally
- Some ammonia supplied from Waggaman via 3<sup>rd</sup> party swaps

## Located in Cheyenne, Wyoming

- ~170 employees and contractors
- Supported by rail and road infrastructure



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Explosives

## Louisiana, Missouri

Missouri, USA

Ammonium Nitrate Plant



# Louisiana, Missouri

Explosives

**The Louisiana, Missouri plant produces explosives and industrial chemicals**

- **Explosives:** Ammonium nitrate prill
- **Industrial Chemicals:** Nitric acid, ammonium nitrate solution

**Products primarily sold to the North American explosives market**

- **Coal:** Primarily to Appalachia and Illinois River Basin
- **Quarry & Construction:** US southwest, particularly Texas and Florida

# Louisiana, Missouri - Value Chain

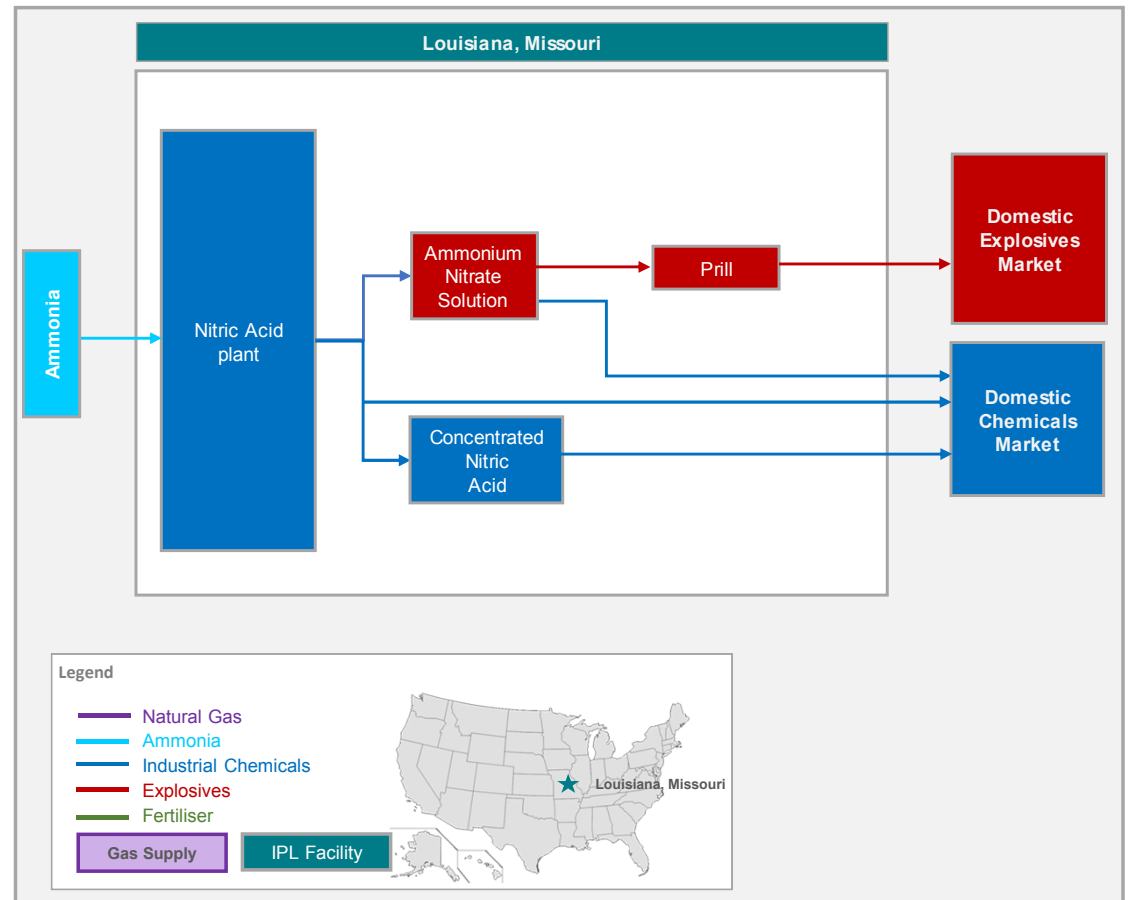
Explosives

## Ammonium nitrate production backed-to-ammonia

- Primarily supplied from Waggaman ammonia plant via pipeline

## Located in Louisiana, Missouri

- Situated adjacent to Mississippi River
- ~70 employees and contractors
- Supported by rail, barge, pipeline and road infrastructure



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**Explosives**

# Initiating Systems



# Initiating Systems

Explosives

## IPL operates seven Initiating Systems manufacturing plants globally

- Plants are generally adjacent to mining regions and ammonium nitrate manufacturing facilities
- IPL also participates in two international Initiating Systems JV operations

## Facilities conduct full suite of development, manufacturing and assembly of detonators, boosters and controllers



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# Incitec Pivot Limited

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Industrial  
Chemicals

## Waggaman<sup>1</sup>

Louisiana, USA  
Ammonia Plant



1. Interchangeably referred to as Waggaman and WALA

# Waggaman

Industrial  
Chemicals

## The Waggaman plant manufactures industrial chemicals for the US market

- **Industrial Chemicals:** Ammonia, CO<sub>2</sub>

## World scale plant in an under supplied domestic market

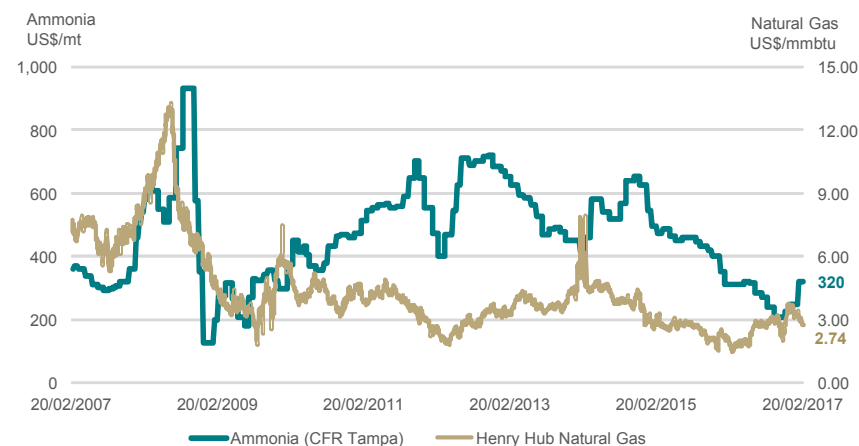
- 800,000 metric tonnes annual name plate capacity
- Expected to contribute ~3.4% of total North American consumption in 2017<sup>1</sup>
- North American market expected to import of 3.3m metric tonnes in 2021<sup>1</sup>

## Strong investment and returns profile

- 1st quartile of cost curve on US delivered basis
- Direct access to abundant supply of cheap US natural gas
- Production fully contracted or committed under long term agreements with strong counterparties

## Henry Hub Natural Gas vs. Ammonia (CFR Tampa)

Last 10 years<sup>2</sup>



1. Source: CRU as of March 2017; North America comprises US and Canada; based on nameplate capacity

2. Source: Bloomberg

# Waggaman - Construction

Industrial  
Chemicals

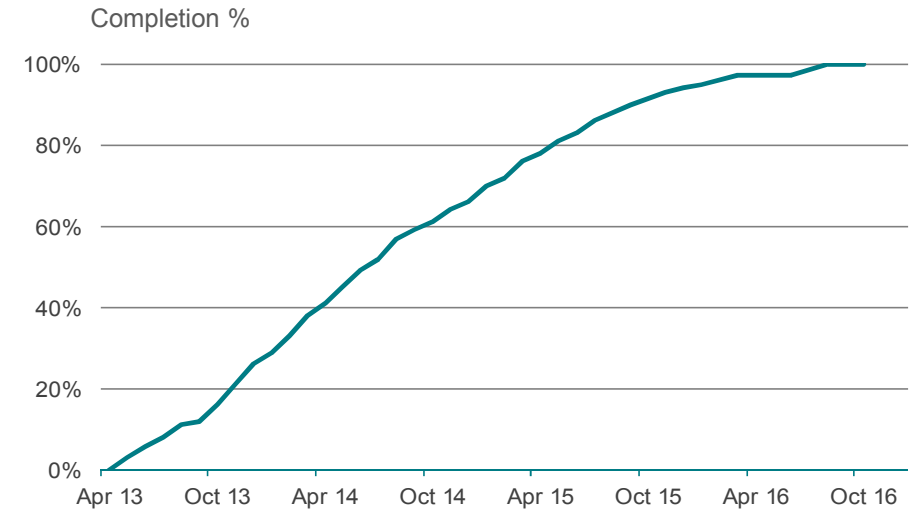
## Plant was commissioned in October 2016, on time and below budget

- **Benchmark Safety:** Five million hours worked over three year construction without an LTI
- **Below Budget:** Predicted final cost <US\$850m

## Demonstrated ability to run at nameplate output and nameplate efficiency

- 83% uptime achieved in 1H17

## Louisiana project progress curve



# Waggaman - Value Chain

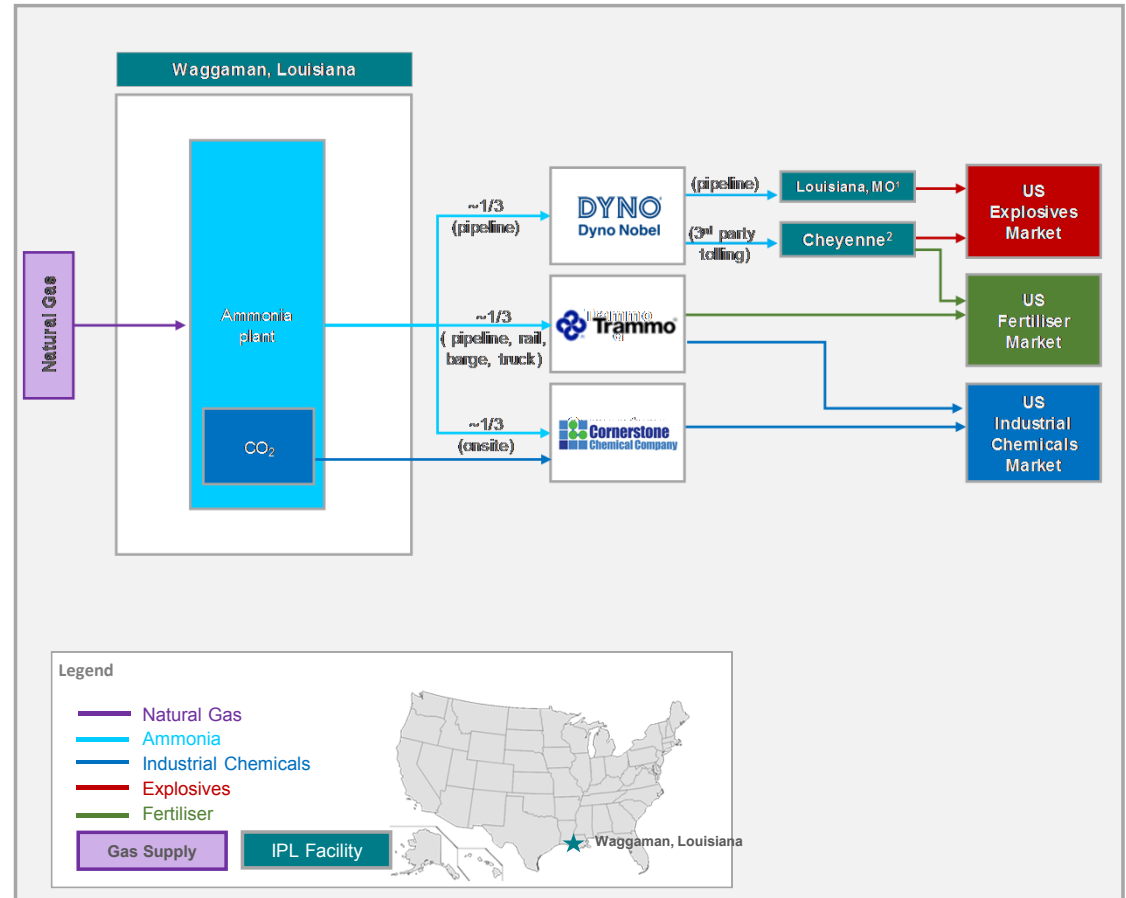
Industrial  
Chemicals

## Located on the mouth of the Mississippi near New Orleans

- **Supply:** Pipeline access to key inputs including natural gas
- **Offtake:** Onsite and via pipeline, barge, rail and truck

## Core ammonia production backed-to-gas

- Natural gas requirement of ~32mmbtu per metric tonne
- Provided via pipeline under medium term contracts



1. IPL's Louisiana, Missouri ammonium nitrate plant; refer slide 74

2. Cheyenne: IPL's Cheyenne, Wyoming ammonium nitrate plant; refer slide 71

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# Waggaman - Contract Profile

Industrial  
Chemicals

## Plant's long term production is fully contracted or committed

- Under long term agreements with strong counterparties

### Contract Profile

#### ~1/3 to Trammo via pipeline, rail, truck and barge

- ~10 year contract
- Primarily for US agriculture and industrial chemicals

#### ~1/3 to Cornerstone via onsite pipeline

- ~25 year contract
- Primarily for specialty chemical applications

#### ~1/3 transferred internally to Dyno Nobel

- Louisiana, Missouri plant through pipeline
- Cheyenne, Wyoming plant through 3<sup>rd</sup> party swap arrangements

In aggregate, product sold at slight discount to Tampa



### Trammo, Inc<sup>1</sup>

*Trammo trades, markets and distributes ammonia, energy products, fertilizers, raw materials, chemicals and other commodities worldwide*

#### Privately held since 1965

- Head Office: New York, NY
- 2015 revenue: US\$9.4Bn
- 2015 trade volume: 63 million metric tonnes
- 470+ employees
- 35 nations



### Cornerstone Chemical Company<sup>2</sup>

*Cornerstone Chemicals manufactures high quality products shipped around the globe, including acrylonitrile, melamine and sulphuric acid/oleum*

#### H.I.G. Capital portfolio company

- Head Office: Waggaman, LA
- Acquired by H.I.G. Capital in 2012 from Cytec Industries
- 450+ employees

1. Source: Trammo, Inc website: <http://www.trammo.com/en/about-us/mission-vision-values>; refer footnotes therein

2. Source: Cornerstone Chemical Company <https://www.cornerstonechemco.com/>; refer footnotes therein

# Waggaman - Illustrative Metrics

## Illustrative production metrics are set out in the adjacent table

- Includes estimated full year accelerated tax depreciation rates
- Impacts cash flow profile by reducing Americas cash tax paid profile

## Illustrative production metrics

<b>Name plate production capacity:</b>	800,000 metric tonnes per annum
<b>Expected 2017 production uptime:</b>	~80% as plant moves to full production
<b>Natural gas requirement:</b>	~32mmbtu per metric tonne
<b>Natural gas pricing index:</b>	Henry Hub
<b>Natural gas delivery fee:</b>	~US\$0.15 per mmbtu
<b>Gas hedging:</b>	Weighted average Floor and Cap of US\$3.13 to US\$4.50/mmbtu <sup>1</sup> : <ul style="list-style-type: none"><li>- 2017: ~15.1%</li><li>- 2018: ~5.9%</li><li>- 2019: ~0.4%</li></ul>
<b>Fixed conversion cost:</b>	~US\$47.00/metric tonne based on name plate production
<b>Offtake arrangements:</b>	<ul style="list-style-type: none"><li>- ~1/3 of production transferred internally to Dyno Nobel</li><li>- ~2/3 sold to counterparties</li><li>- In aggregate, product transferred at slight (~5%) discount to Tampa CFR</li></ul>
<b>Asset value:</b>	Sum of total cash spend and capitalised interest <ul style="list-style-type: none"><li>- Cash spend: US\$804.9m spent as of 31 March 2017</li><li>- Capitalised interest: US\$86.2m as of 31 March 2017</li></ul>
<b>Tax depreciation:</b>	Accelerated depreciation over 6 years as estimated below <sup>2</sup> : <ul style="list-style-type: none"><li>- 2016: ~4%</li><li>- 2017: ~29%</li><li>- 2018: ~20%</li><li>- 2019: ~16%</li><li>- 2020: ~16%</li><li>- 2021: ~14%</li></ul>
<b>Accounting depreciation:</b>	Average asset life estimated of ~35 years
<b>Annual sustenance capex in first three years:</b>	~US\$10m

1. Percent of expected natural gas requirement per financial year based on nameplate capacity

2. Estimated financial year US federal and state tax based on current asset allocation; subject to change; as at 30 September 2016



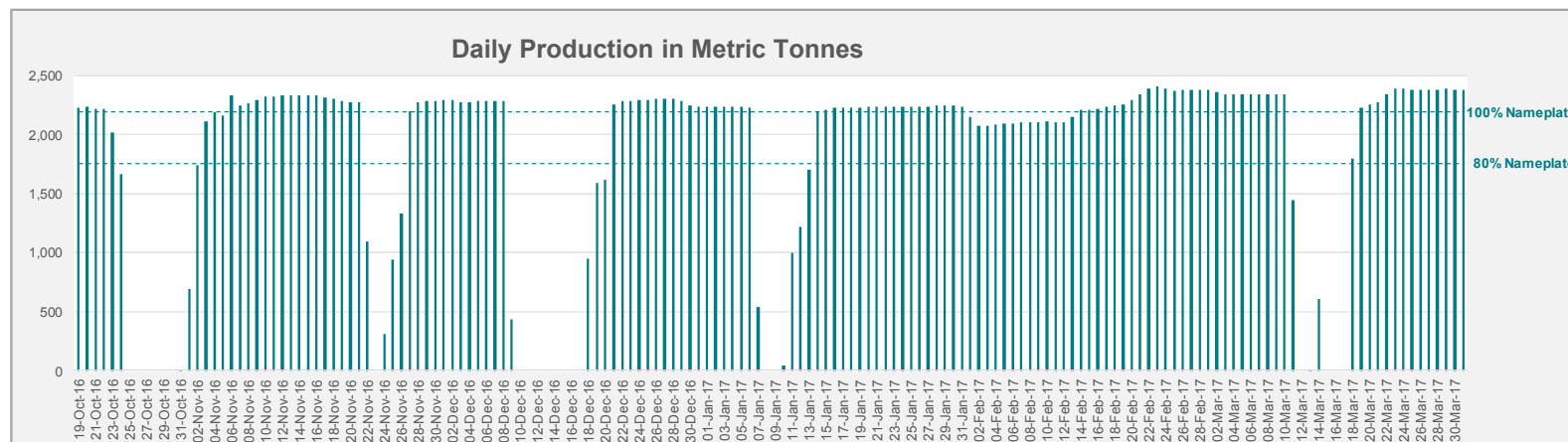
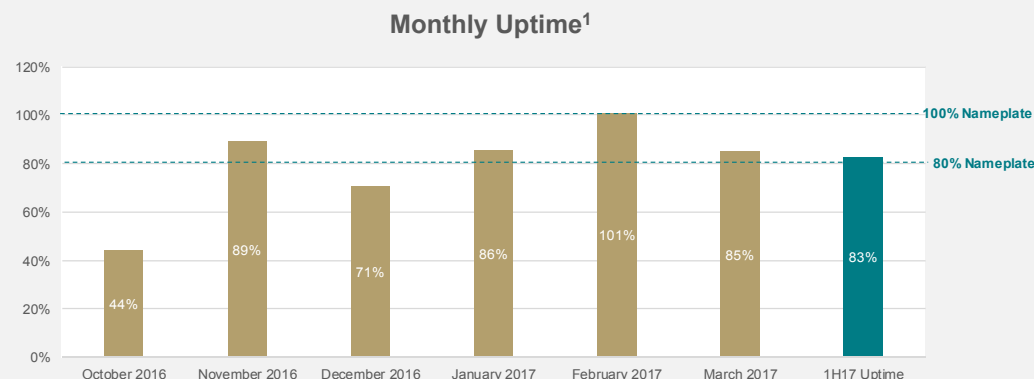
# Waggaman Production

Industrial  
Chemicals

## 83% uptime achieved in 1H17<sup>1</sup>

- Frequency and duration of outages improving as plant matures

WALA Production			
Month	Production (mt)	Nameplate (mt)	Uptime (%)
October 2016	12,591	28,493	44.2%
November 2016	58,515	65,753	89.0%
December 2016	47,954	67,945	70.6%
January 2017	58,118	67,945	85.5%
February 2017	62,052	61,370	101.1%
March 2017	57,857	67,945	85.2%
<b>1H17 Uptime</b>	<b>297,088</b>	<b>359,452</b>	<b>82.7%</b>



1. Uptime calculated against an 800,000 metric tonne (mt) per annum (pa) nameplate capacity; from plant handover on 19 October 2016

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# Incitec Pivot Limited

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Fertilisers

## Phosphate Hill

Queensland, Australia

Ammonium Phosphates Plant



# Phosphate Hill

Fertilisers

The Phosphate Hill plant produces fertilisers for the Australian and international markets

- **Fertilisers:** DAP / MAP

Acquired as part of Southern Cross Fertilisers in 2006 from BHP Billiton Ltd for \$165m

- Delivered EBIT of \$200.9m in 2007
- First step in evolution to global diversified industrial chemicals company (refer slide 12)

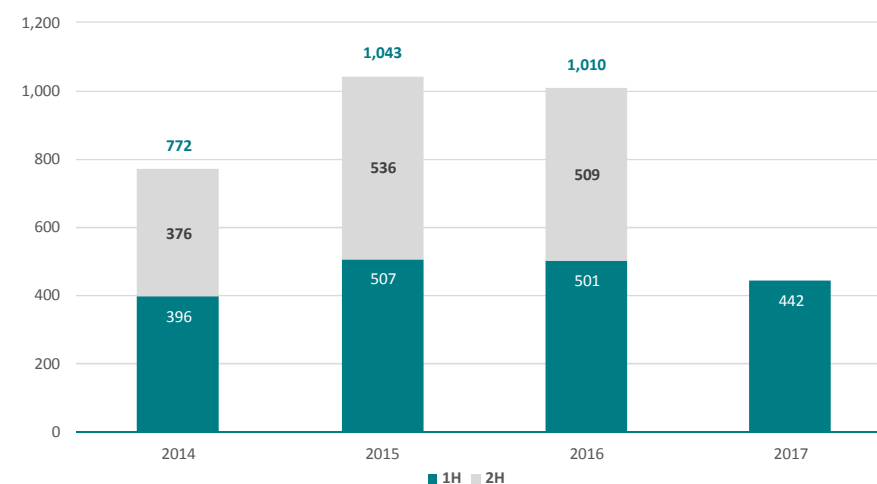
Product sold in Australia and international markets

- End market distribution seasonally skewed as plant generally run at full capacity year round

Produced 442k metric tonnes of DAP / MAP in 1H17

## Phosphate Hill production

Ammonium phosphates (DAP/MAP) in thousand metric tonnes



Asia Pacific					
Plant	Finished Product	Thousand Metric Tonnes			
		FY14	FY15	FY16	1H17
Fertilisers					
Phosphate Hill	DAP / MAP	772	1,043	1,010	442

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# Phosphate Hill - Value Chain

Fertilisers

## Core ammonia production backed-to-gas

- Gas requirement of ~36GJ per metric tonne of ammonia<sup>1</sup>

## Situated on substantial resource of phosphate rock

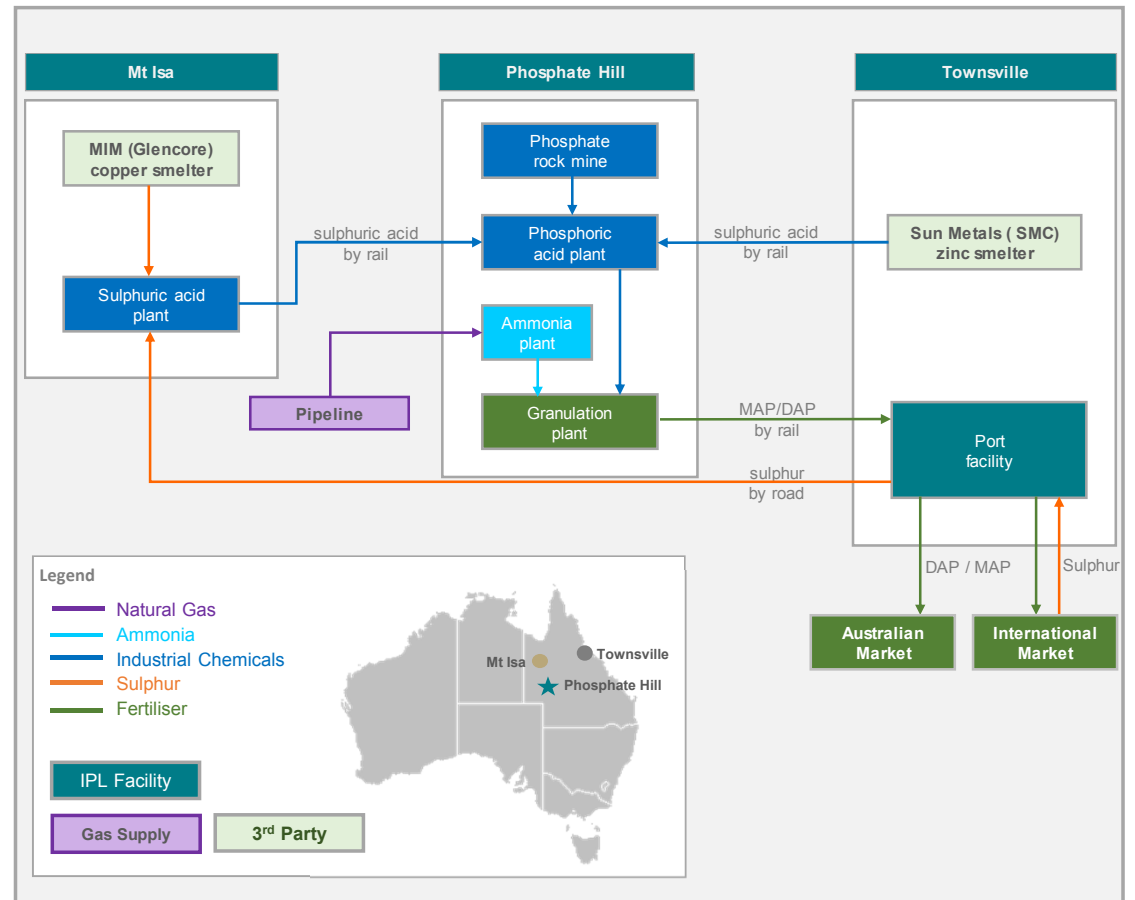
- Phosphate rock resource: >100 million tonnes
- Typical P2O5 content: ~23.5%

## Sulphuric acid primarily supplied from IPL's Mt Isa plant

- ~75% manufactured at IPL's Mt Isa facility, the majority of which is generated from waste metallurgical gas from Glencore's Mt Isa Mines (MIM) copper smelter
- ~25% supplied by Sun Metals zinc smelter

## Located 950km from Townsville

- Supported by rail, road and air infrastructure
- ~440 FIFO employees and contractors



1. Gas required for ammonia conversion

# Phosphate Hill - Cost Metrics

Fertilisers

## Phosphate Hill produced DAP/MAP at ~A\$460 metric tonne in 1H17

- Gas comprised ~25-30% of production costs

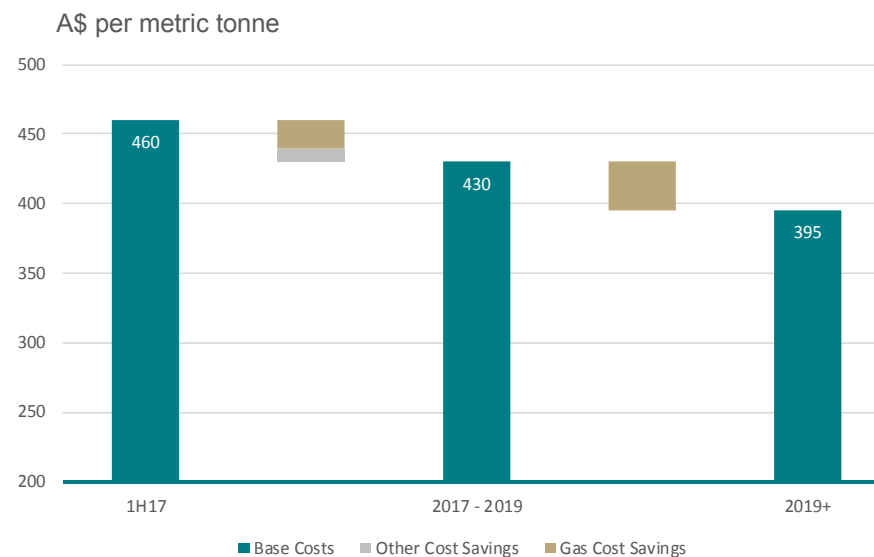
## Production costs to benefit from recent gas and supply contracts

- QGC contract to reduce gas costs by ~\$20m per year from 2017<sup>1</sup>
- PWC contract to reduce gas costs by a further ~\$35m per year from 2019<sup>1,2</sup>
- Completed / progressing contracts to further reduce costs by ~\$10m per year from 2017

## Moving towards IPL's initial A\$400 per metric tonne target

- Would position Phosphate Hill in 3<sup>rd</sup> quartile of global cost curve<sup>3</sup>

## Illustrative Phosphate Hill cost per tonne metrics



1. Gas supply agreement with Walloons Coal Seam Gas Company Pty Ltd, a Shell-owned QGC business; as compared to costs at time of announcement

2. Gas supply agreement with Power and Water Corporation (PWC) a Northern Territory Government owned corporation; as compared to costs at time of announcement

3. Assuming an A\$/US\$ exchange rate of 0.70

# Incitec Pivot Limited

GLOBAL DIVERSIFIED INDUSTRIAL CHEMICALS

Fertilisers

## Gibson Island

Queensland, Australia

Urea Plant



# Gibson Island

## Fertilisers

### The Gibson Island plant produces fertilisers and industrial chemicals

- **Fertilisers:** Ammonia, GranAm, urea
- **Industrial Chemicals:** Ammonia, CO<sub>2</sub>, DEF, urea

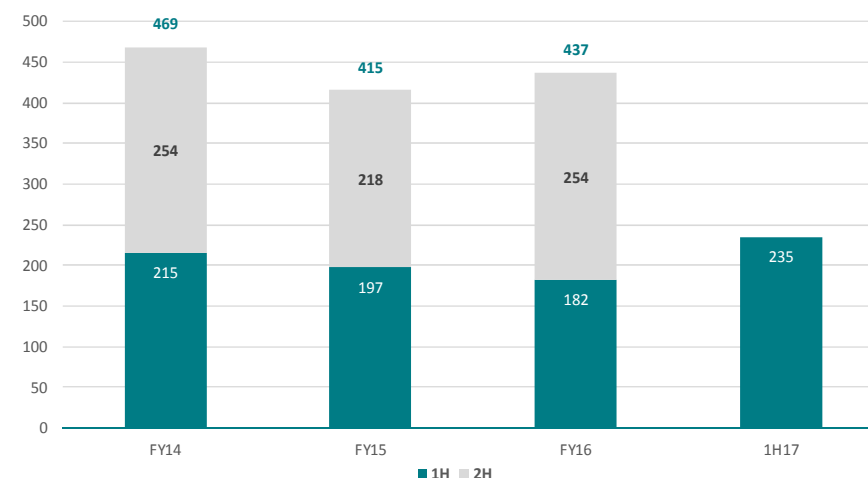
### Products sold in the Australian and international markets

- Urea and GranAm exported based on seasonal demand
- Some ammonia product supplied internally to Moranbah
- Ammonia also provided to 50/50 QNP JV

### Manufactured 512k metric tonnes of finished product in FY16

### Gibson Island fertiliser production

Urea, ammonia and GranAm in thousand metric tonnes



Asia Pacific					
Plant	Finished Product	Thousand Metric Tonnes			
		FY14	FY15	FY16	1H17
Industrial Chemicals					
Gibson Island	Ammonia	25	22	24	9
	Urea	39	41	42	23
	DEF	14	10	9	7
Fertilisers					
Gibson Island	Ammonia	70	74	77	33
Gibson Island	GranAm	163	164	187	105
Gibson Island	Urea	235	178	173	97

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# Gibson Island - Value Chain

Fertilisers

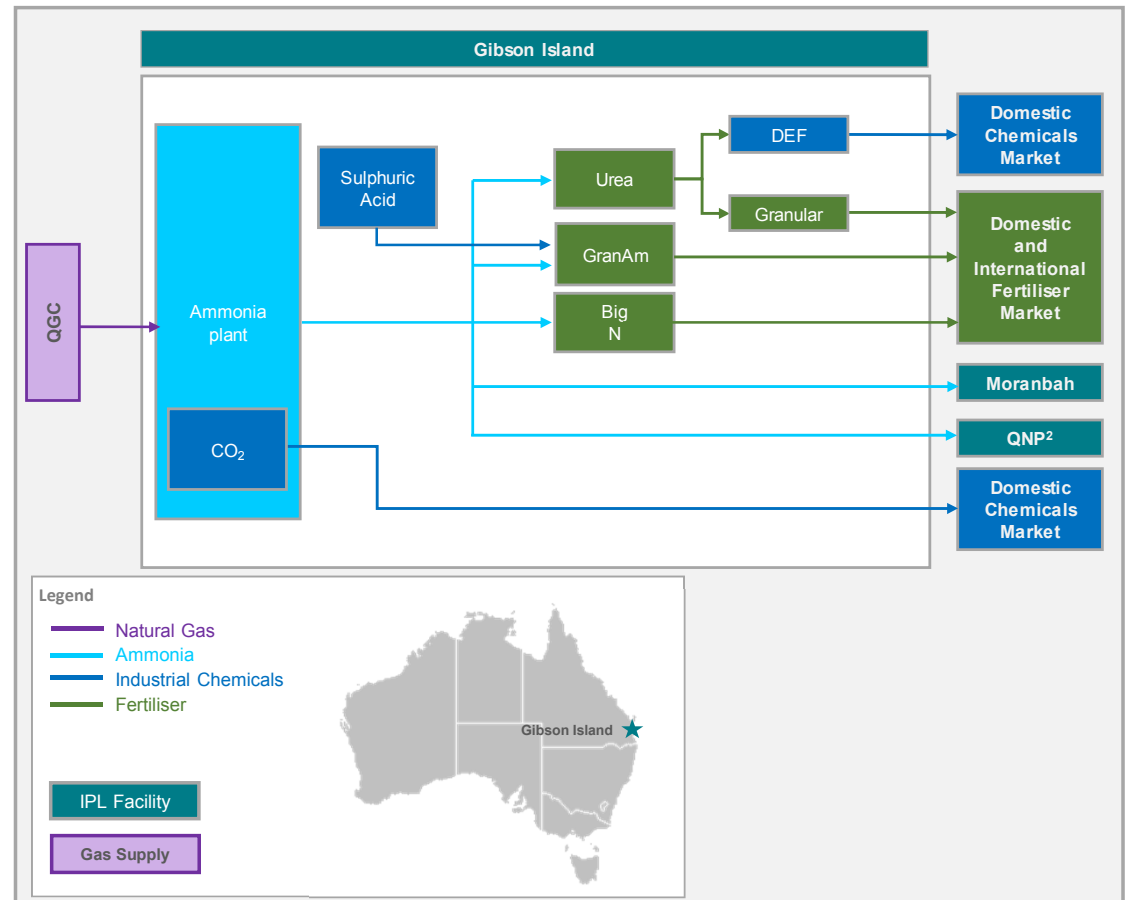
## Core ammonia production backed-to-gas

- Gas requirement of ~40GJ per metric tonne per tonne of ammonia<sup>1</sup>
- Gas currently comprises ~50% of production costs

## Current gas contracts expire in 2018

## Located in Brisbane, Queensland

- ~450 employees and contractors
- Supported by rail, port and road infrastructure



1. Gas required for ammonia manufacture

2. QNP: Queensland Nitrate Pty Ltd; 50/50 joint venture



## St Helens

Oregon, USA

UAN and Urea Plant



# St Helens

Fertilisers

The St Helens plant produces fertilisers and industrial chemicals

- **Fertilisers:** Urea, UAN
- **Industrial Chemicals:** Ammonia, CO<sub>2</sub>, DEF, urea, nitric acid

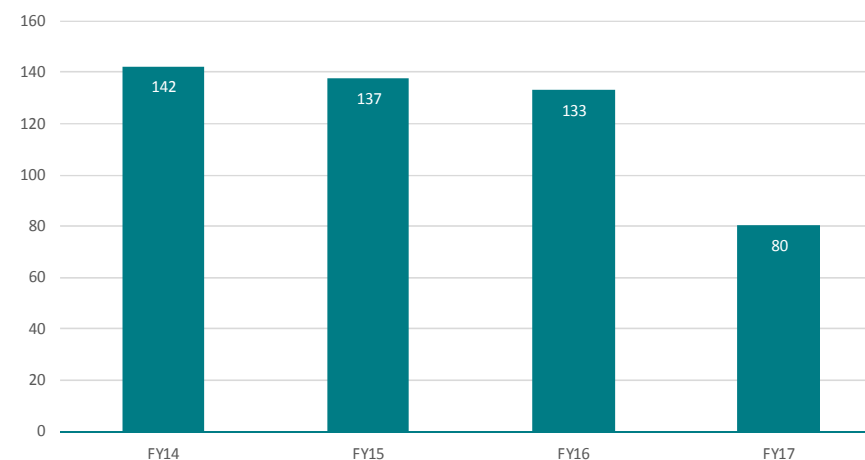
Products primarily sold in the US Pacific Northwest region

- Some product also distributed more broadly

Produced 133k metric tonnes of urea and UAN in FY16

## St Helens production

Urea and UAN in thousand metric tonnes



### Americas

Plant	Finished Product	Thousand Metric Tonnes			
		FY14	FY15	FY16	1H17
Fertilisers					
St Helens	Urea, UAN	142	137	133	80

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# St Helens - Value Chain

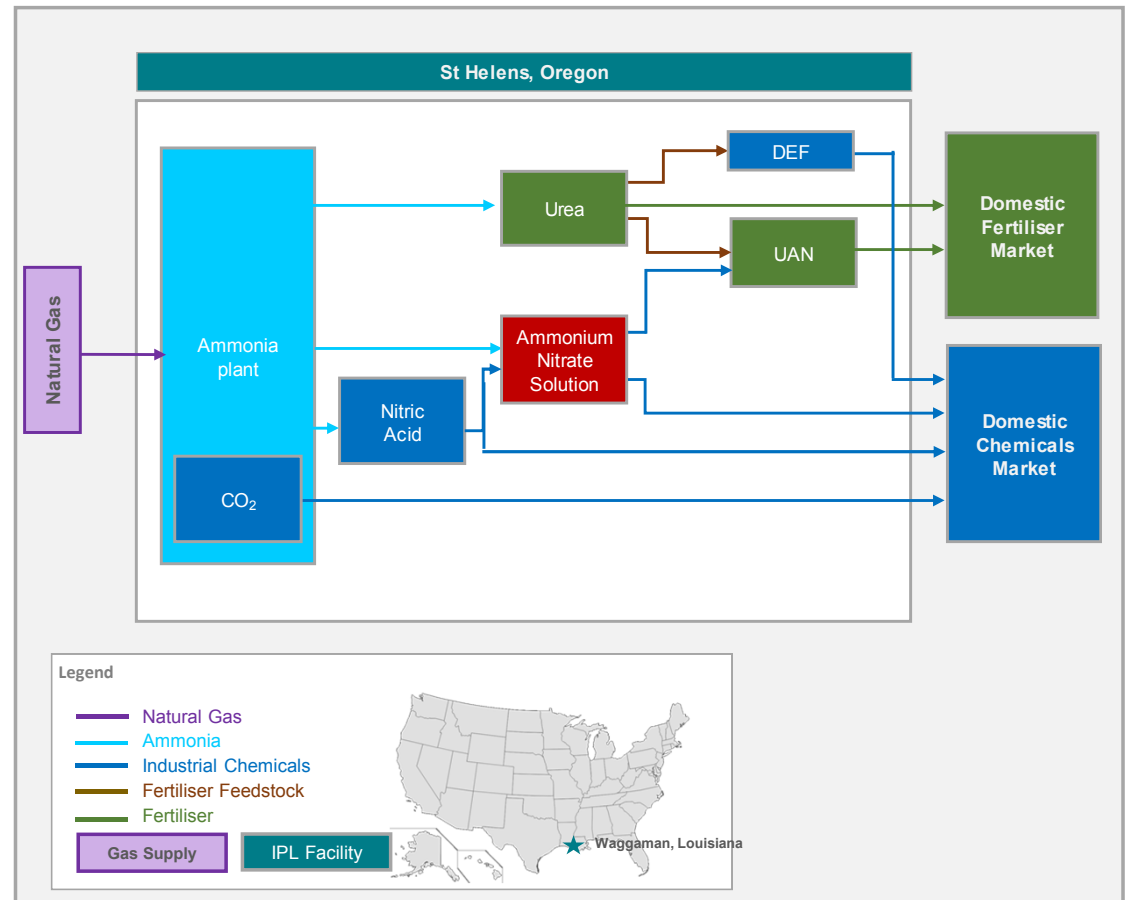
Fertilisers

## Core ammonia production backed-to-gas

- Majority of gas resourced locally

## Located in St Helens, Oregon

- ~75 employees and contractors
- Supported by rail, port and road infrastructure



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# Appendix

July 2017



White Rock Quarry  
Miami, Florida  
USA

# Bloomberg

Bloomberg				
	Definition	Unit	Primary Business	Bloomberg Entry
<b>Equities</b>				
IPL	Incitec Pivot Limited Equity	A\$/share	IPL	IPL AU Equity
ADR	American Depository Receipt	US\$/share	IPL	INCZY US Equity
<b>Commodities Prices</b>				
Ammonia	US Tampa Ammonia CFR Spot	US\$/mt	Americas	GCFPAMTP Index
DAP	US Gulf NOLA DAP Export Spot	US\$/mt	Americas	GCFPDAGE Index
Urea	US Gulf NOLA Urea Granular Spot	US\$/st	Americas	GCFPURGB Index
Urea	Middle East Urea Granular Spot	US\$/mt	Asia Pacific	GCFPURMG Index
Natural Gas	Henry Hub Natural Gas Spot	US\$/mmbtu	Americas	NGUSHHUB Index
Natural Gas	Generis 1st Natural Gas Future	US\$/mmbtu	Americas	NG1 Index
Oil	Brent Crude Oil Spot	US/bbl	Asia Pacific	CO1 Comdty
Corn	S&P GSCI Wheat Index Spot	US\$/bushel	Asia Pacific	SPGSCN Index
Wheat	S&P GSCI Corn Index Spot	US\$/bushel	Asia Pacific	SPGSWHP Index
Iron Ore	Iron Ore - 62% Import Fine Ore Spot	US\$/mt	Asia Pacific	ISIX62IU Index
Australia Met Coal	Hard Coking Coal Australia Export (FOB East Coast)	US\$/mt	Asia Pacific	TSIPHCAE Index
Australia Premium Met Coal	Premium Hard Coking Coal Australia Export (FOB East Coast)	US\$/mt	Asia Pacific	TSIPPCAIE Index
Australia Thermal Coal	Australia Newcastle Port Thermal Coal 5500 kcal/kg FOB Spot	US\$/mt	Asia Pacific	COASNE55 Index
<b>Commodities Statistics</b>				
US Coal Production	US DOE Coal Production Total	st	Americas	DOEFTOTL Index
US Coal Inventories at Electrical Generators	US End of Period Inventories Electric Power Sector	st	Americas	ST23IE
US Heating Degree Days	NOAA Week Ending Thursday Natural Gas Heating Degree Days	Degree Days	Americas	NOHTAUST
US Crushed Stone Carloads	Crushed Stone Freight Carloads	Carloads	Americas	RAILSTON Index
US Iron Ore Production	USGS US Iron Ore Production Total	mt	Americas	USPOPROT Index
Austrian Iron Ore Exports	Australia Iron Ore Exports Volume - Total	mt	Asia Pacific	AUITIROV Index
Austrian Met Coal Exports	Total Australia Coaking Coal Exports Volume - Total	mt	Asia Pacific	AUITCCV Index

**Note: 1 short ton (st) = 0.907185 metric tonnes (mt)**

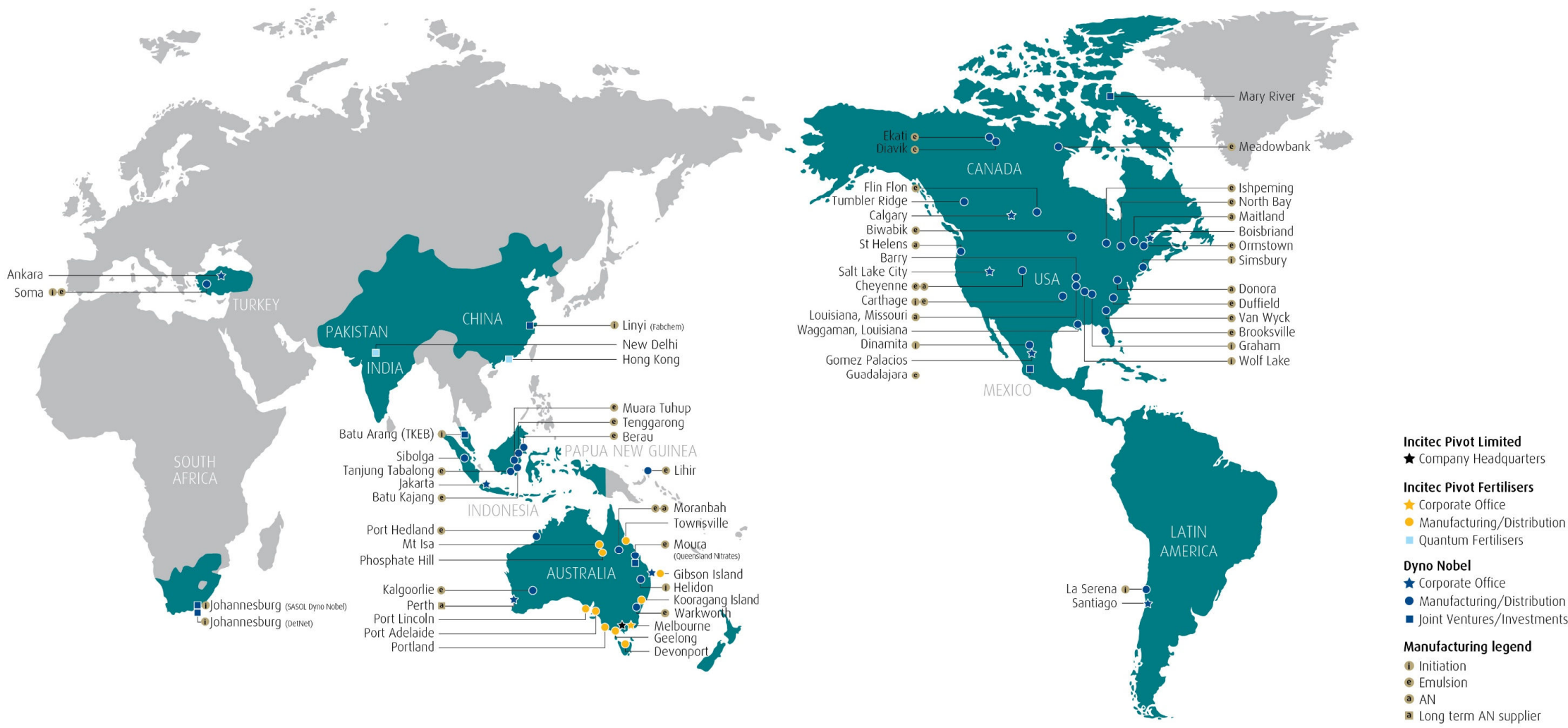
Source: Bloomberg.

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