



2 October 2019

The Manager
Market Announcements Office
Australian Securities Exchange

Dear Manager,

WESCEF INVESTOR BRIEFING AND SITE TOUR

Following is a presentation that will be given at a briefing and operational site tour of the Wesfarmers Chemicals, Energy and Fertilisers business on Thursday 3 October 2019 at 11:00am AWST / 1:00pm AEST.

This briefing will be webcast and accessible via our website at www.wesfarmers.com.au.

Yours faithfully,

A handwritten signature in black ink, appearing to read "A Spaseska".

A Spaseska
Executive General Manager
Company Secretariat & Group Risk



Wesfarmers Chemicals, Energy & Fertilisers
Investor briefing and site tour

To be held on Thursday 3 October 2019

Introduction

David Baxby

Managing Director,
Wesfarmers Industrials Division



Agenda

Item	Presenter	Role	Page
Introduction and Kidman Update	David Baxby	Managing Director, Wesfarmers Industrials	2
Overview of WesCEF	Ian Hansen	Chief Executive Officer, WesCEF	9
Safety, Environment and People	Liane Unewisse	GM HR, HSEQ & Communications	21
Ammonia / Ammonium Nitrate	Ryan Hair	GM Ammonia/AN & Operational Services	25
Sodium Cyanide	Barney Jones	GM Chemical Joint Ventures & AV/Modwood	34
Kleenheat	Mark Gadsby	GM Kleenheat	42
Fertilisers	Ian Hansen	Chief Executive Officer, WesCEF	55
Q&A	All presenters		63



WesCEF position within the Wesfarmers portfolio



Strategic priorities

WesCEF's strategic priorities are to:

- Leverage existing infrastructure and incrementally expand capacity as market conditions allow
- Pursue ongoing operational efficiencies and automation opportunities
- Apply innovation and technology to develop new products and services to meet the needs of our customers
- Assess step-out opportunities to invest in adjacent markets



WesCEF Executive Leadership Team



Ian Hansen
Chief Executive Officer



Ric Colgan
Chief Financial Officer



Ross Martelli
Director
Major Projects



Liane Unewisse
General Manager
Human Resources
HSEQ & Communications



Crispin Collier
General Manager
Business Development



Ryan Hair
General Manager
Ammonia/Ammonium Nitrate
& Operational Services



Barney Jones
General Manager
Chemical Joint Ventures
AV / Modwood



Tanya Rybarczyk
General Manager
Fertilisers



Mark Gadsby
General Manager
Kleenheat



Mussaret Nagree
General Manager
Innovation &
Commercialisation



Acquisition of Kidman Resources

Transaction status

Acquisition of Kidman successfully completed, with WesCEF holding a 50% interest in the Covalent JV and the Mt Holland Lithium Project alongside SQM

Key milestones

Work progressing on the Definitive Feasibility Study, with Final Investment Decision expected to be made in 1H CY20

WesCEF and Kidman

WesCEF is uniquely placed to leverage its existing capabilities to support the successful development of the Mt Holland deposit:

- World class capability in the manufacture of chemicals to high quality specifications
- Long track record of successfully and safely delivering plant developments and expansions, while generating strong returns on capital
- Strong operating capability and knowledge in the Kwinana region to help manage the construction / approvals / ramp-up phase of the refinery
- Strong commercial ability in negotiating long-term contracts and building long-term customer relationships



Overview of Mt Holland Lithium Project

Mine site (Earl Grey Lithium deposit):

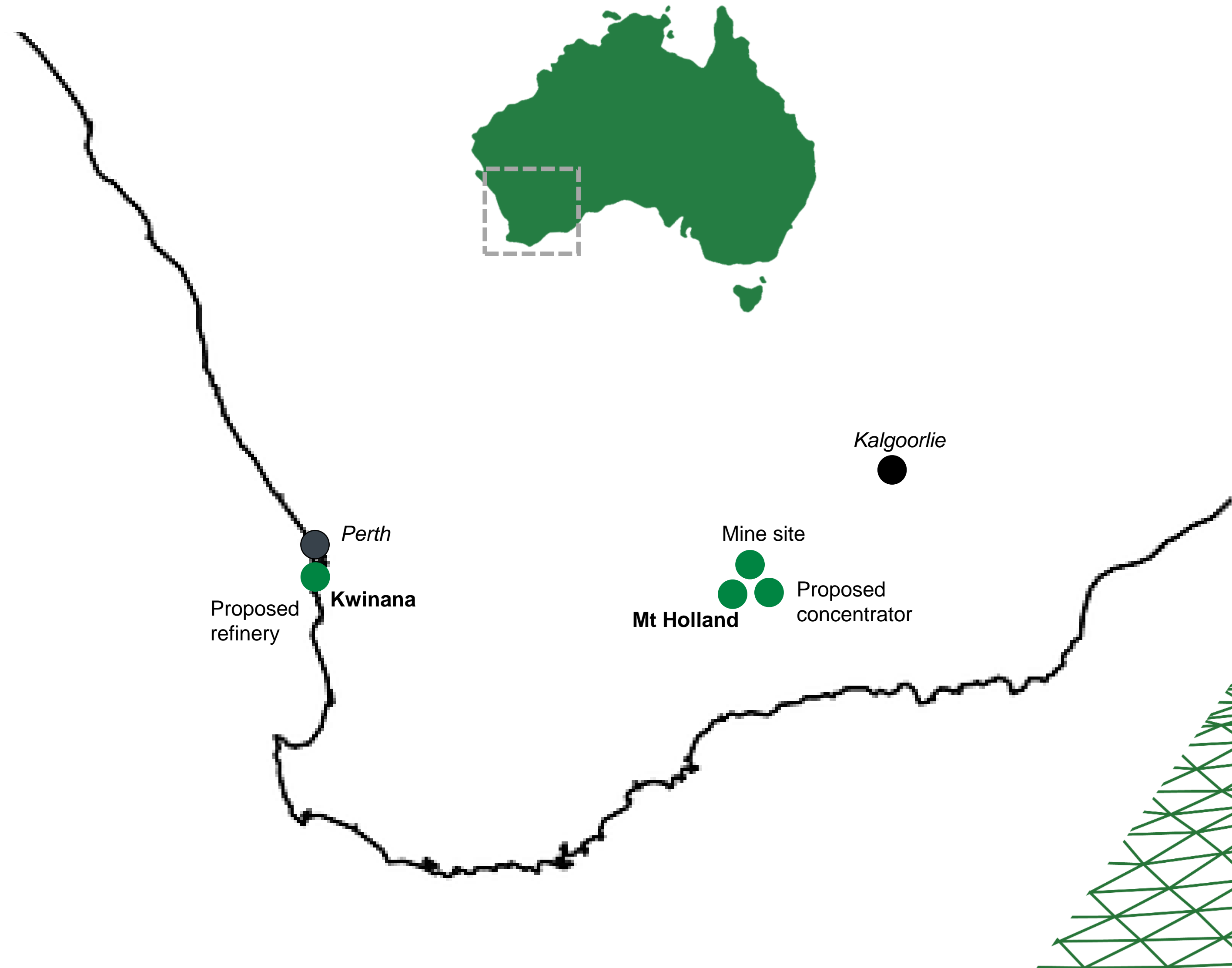
- Resources: 189Mt @ 1.5% Li₂O
(7.0Mt of lithium carbonate equivalent)
- Reserves: 94Mt @ 1.5% Li₂O

Proposed Concentrator:

- 2Mt per annum spodumene concentrator
- To produce spodumene concentrate for use in lithium hydroxide refinery

Proposed Lithium Hydroxide Refinery:

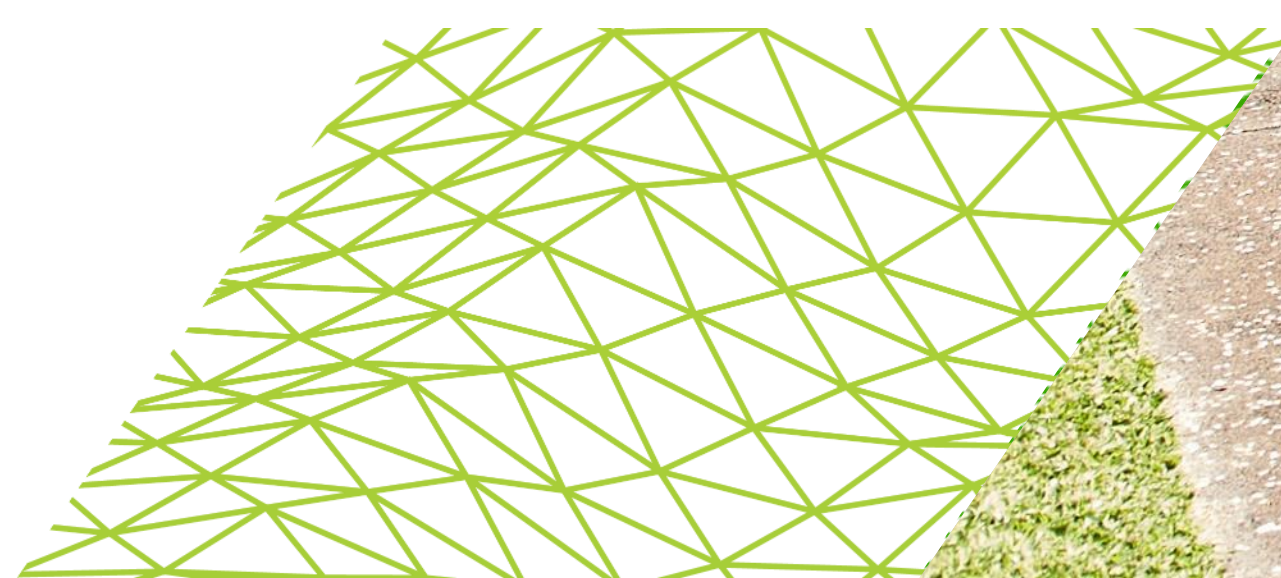
- Located in Kwinana industrial area
- Planned production capacity of ~45kt per annum of lithium hydroxide



Overview of WesCEF

Ian Hansen

Chief Executive Officer,
WesCEF



Operating Model

Ammonia/AN

To be a leader in chemical and mining solutions



Sodium Cyanide

To contribute to the success of our customers with an uncompromising focus on people, safety and the environment

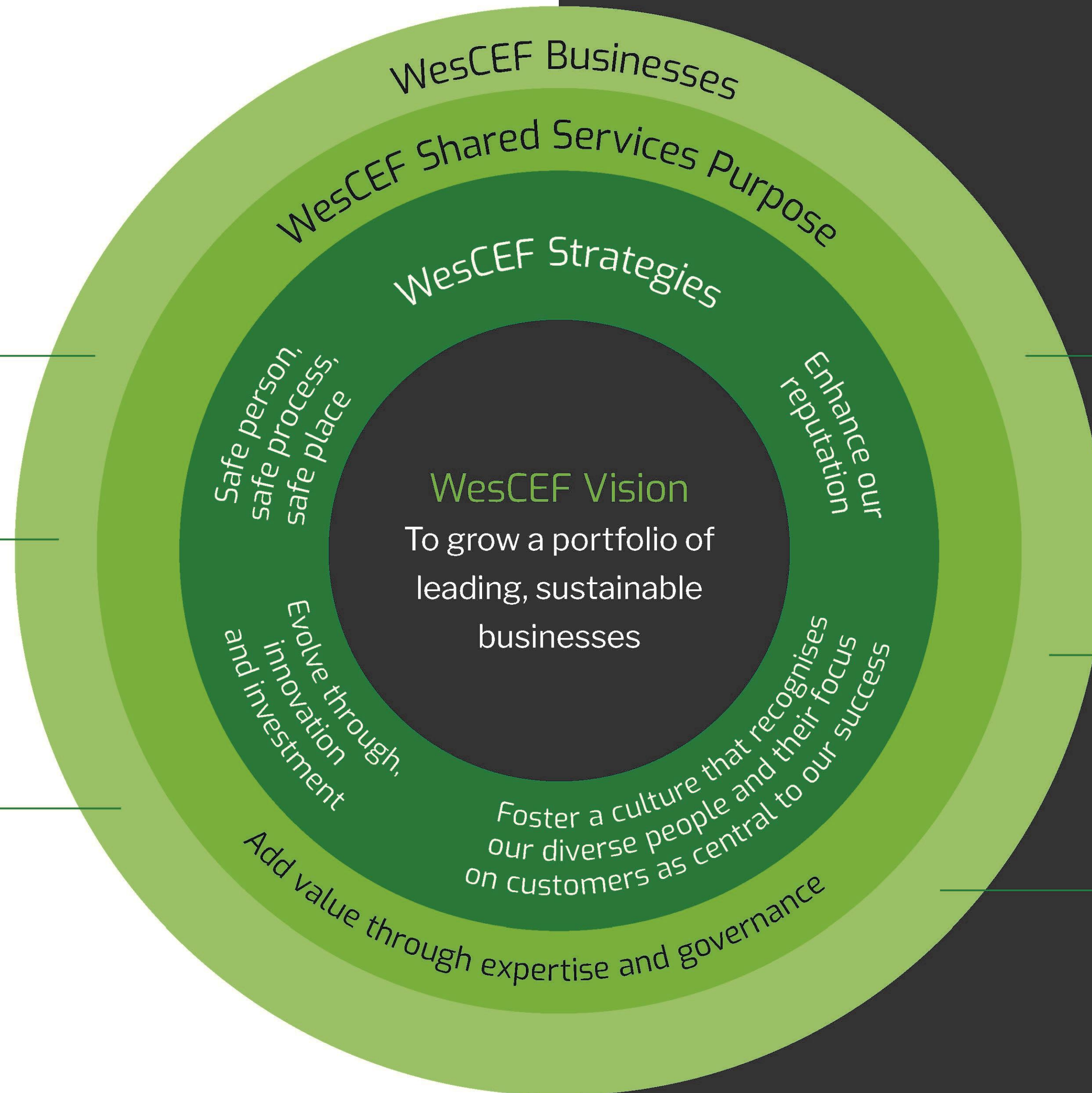


Fertilisers

Trusted to deliver the best for growers



The Operating Model defines WesCEF's vision and how it adds value to Wesfarmers. It also outlines the role shared services play in enabling WesCEF business success.



Kleenheat

Kleenheat
To be the energy solutions provider of choice.






Modwood/Australian Vinyls
Identify growth opportunities in respective businesses



Decipher
Accelerate the responsible, sustainable and productive management of Earth's resources to meet the needs of a modern customer











Strategic position and focus

	Chemicals	Energy	Fertilisers
			
Description	Production, sales & distribution of Ammonia, AN ¹ , Sodium Cyanide & specialty products	Production, sales & distribution of LPG & LNG, retailer of natural gas & electricity	Import, production, sales & distribution of fertilisers & agricultural services
Competitive position	<ul style="list-style-type: none"> • #1 WA AN¹ • #1 Australia Sodium Cyanide • #1 Australia PVC distribution 	<ul style="list-style-type: none"> • #1 WA LPG • #1 WA LNG • #2 WA NG² Retail 	<ul style="list-style-type: none"> • #1 WA Fertiliser
Competitive advantage	<ul style="list-style-type: none"> • Operational excellence delivering reliable supply • Suite of contracts with high quality customers with raw material pass through protection 	<ul style="list-style-type: none"> • Trusted local brand • Customer service • NG wholesale position with well supplied WA market supported by domestic reservation policy 	<ul style="list-style-type: none"> • Expertise-based value add services • High capacity infrastructure • Local manufacturing
Strategic focus	<ul style="list-style-type: none"> • Consider opportunities to leverage existing infrastructure & expand capacity • Continued assessment of automation & data analytics opportunities 	<ul style="list-style-type: none"> • Continued focus on brand management, strong local customer service & enhanced customer experiences • LNG expansion options being assessed 	<ul style="list-style-type: none"> • Leverage & invest in infrastructure to meet growers' needs • Invest in product & service offerings

1. Ammonium Nitrate
2. Natural Gas



Key customers

Business	Product	Geography	Sector	Key Customers
	Ammonia	WA	Nickel	BHP, Minara, internal
	Ammonium Nitrate	WA	Iron Ore/other Mining/Fertilisers (internal)	Orica, Dyno Nobel, Rio Tinto, Downer
	Ammonium Nitrate	QLD	Coal	BMA, Curragh
	Sodium Cyanide	WA / Global	Gold	Newmont, KCGM, Anglo, Goldfields
	PVC resin/specialty chemicals	Australia	Construction	Iplex, Vinidex and Pipemakers
	Wood/plastic/composite	Australia	Construction	ITI Australia
 	LPG & LNG production / distribution & retailing Electricity retailing	WA / NT	Residential, business, industrial, transport	Households, resources, commercial, industrial, leisure, power generation
	Fertilisers	WA	Agriculture	WA growers
	Decipher	WA / Global	Agriculture, mining	Agronomists and growers, mining sector

WesCEF's national footprint

- 1,300+ employees
- 16 manufacturing plants
- 5 major hazard facilities
- 300 chemical customers
- 4,300+ fertiliser customers
- ~265,000+ energy customers
- Strong community engagement



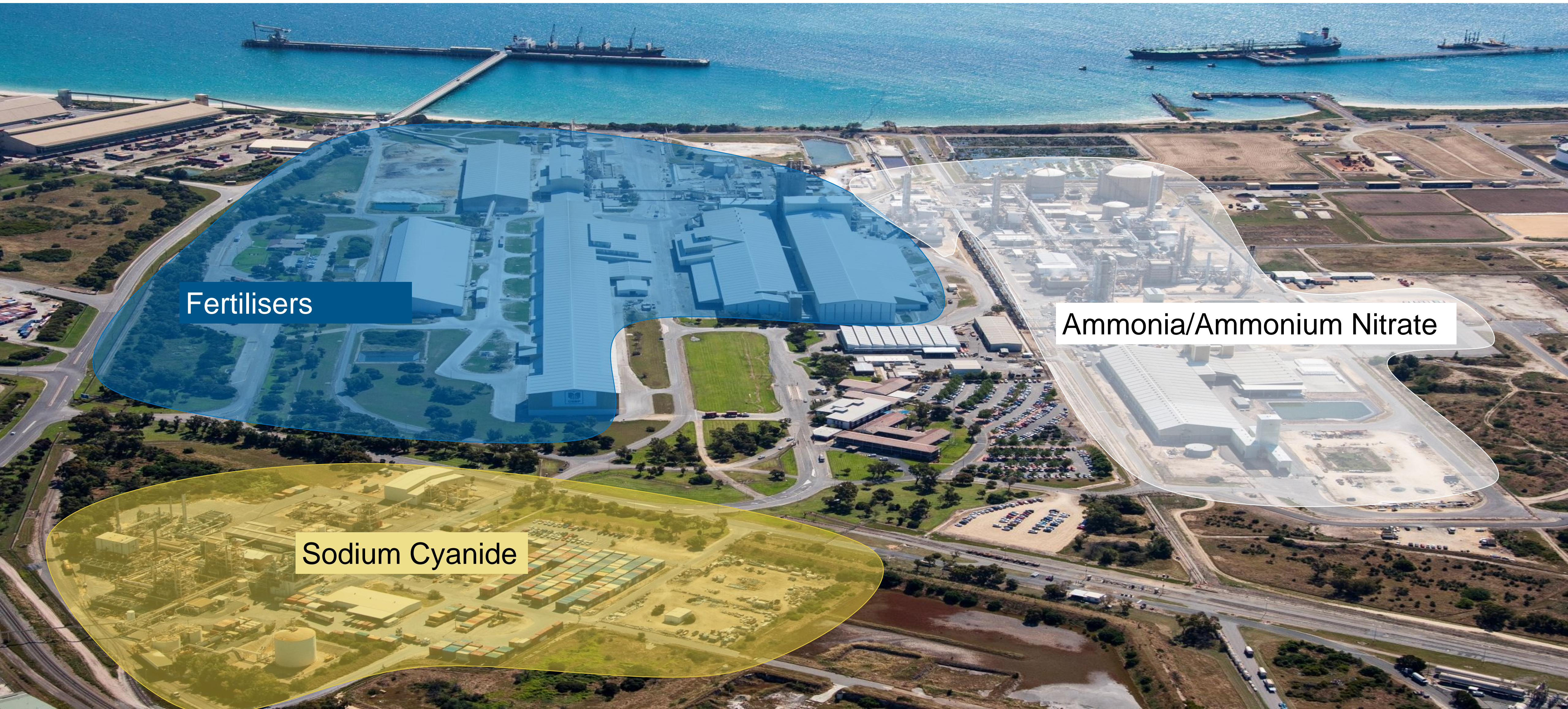
- 1 Murdoch – WesCEF Corporate Office, Kleenheat Corporate Office & Customer Service Centre
- 2 Kwinana Operations – CSBP (Chemicals & Fertilisers), Kleenheat
- 3 Kleenheat (Darwin Operations)
- 4 QNP
- 5 Australian Vinyls & Modwood
- 6 Mt Holland

Kwinana location

- 50 years of continuous WesCEF operations
- Strategically located industrial complex with access to:
 - Dampier to Bunbury natural gas pipeline (DBNGP)
 - Rail corridor
 - Priority berthing rights
 - Water & electricity infrastructure
 - Highly skilled workforce
 - Reagents produced by neighbouring chemical plants



CSBP Kwinana Site Overview



Fertilisers

Ammonia/Ammonium Nitrate

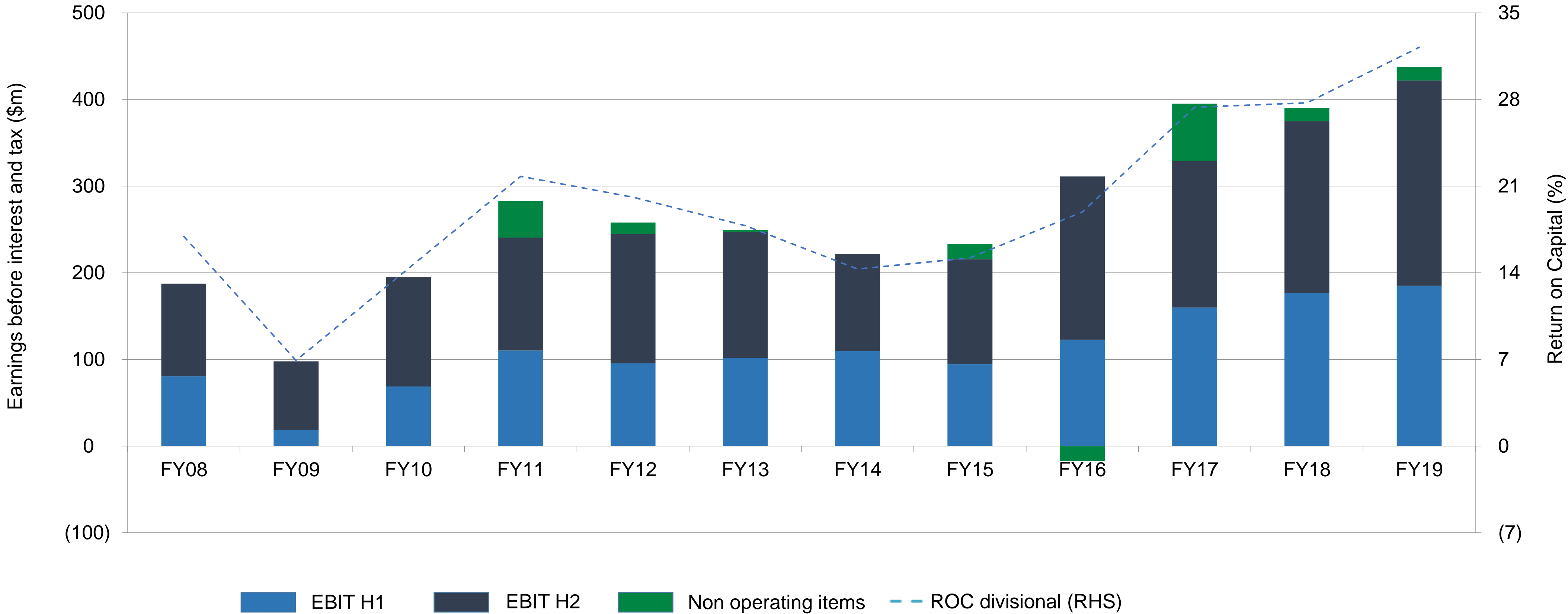
Sodium Cyanide

Kleenheat Kwinana Production Facility



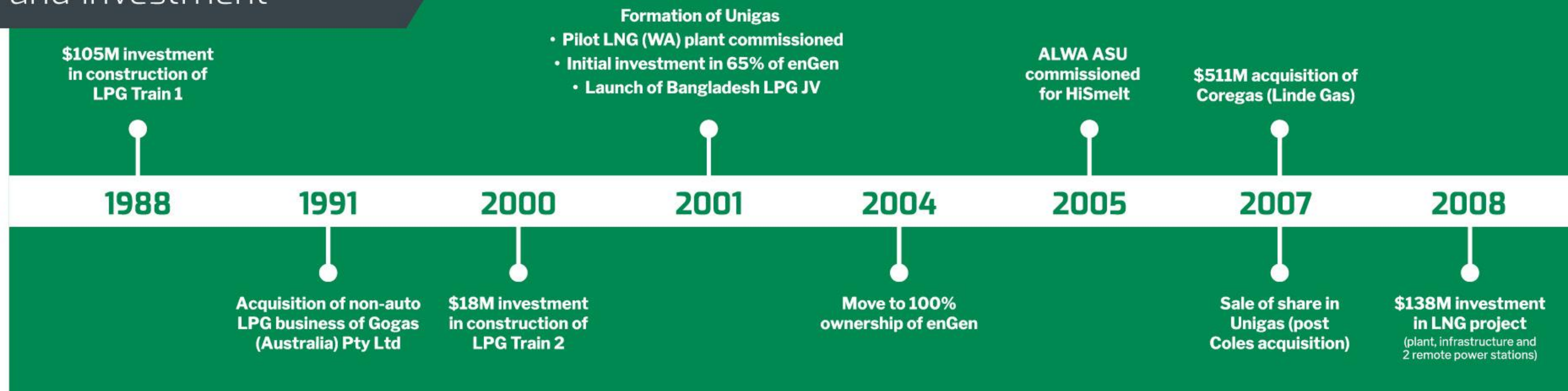
WesCEF Financial Performance

Divisional EBIT and ROC

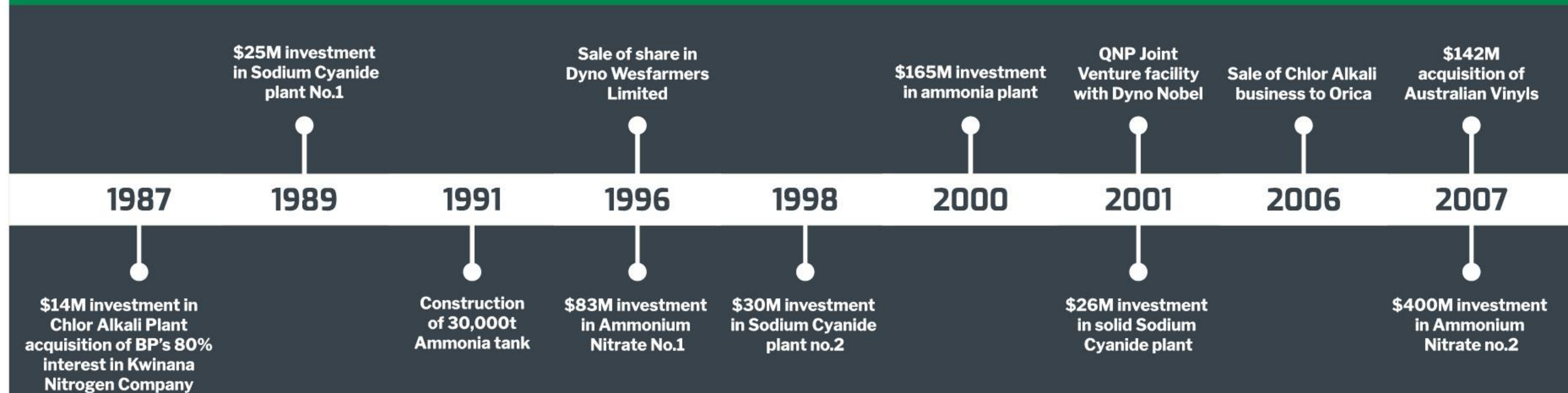


Portfolio Management and Investment

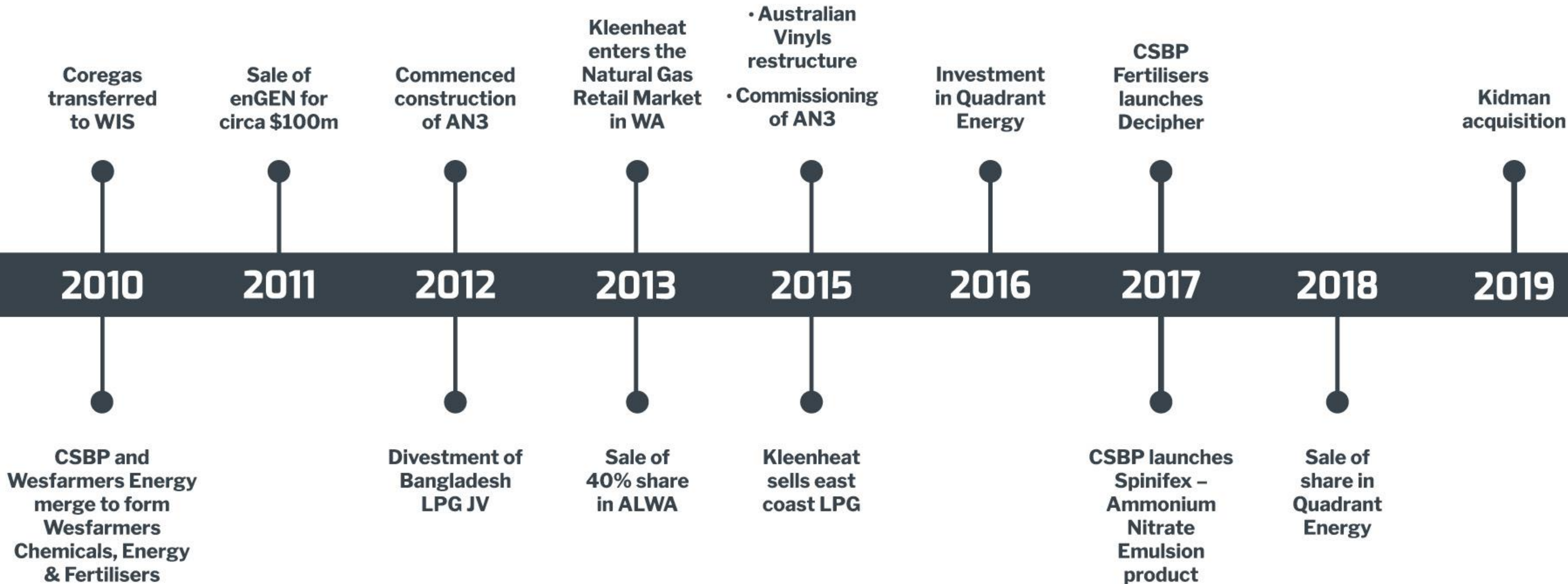
Energy Division



Chemicals and Fertilisers Division



Portfolio Management and Investment



Innovation & Commercialisation

Foster sustainable growth through creating an innovative mindset

Innovation focussed on continuous improvement and step out growth opportunities

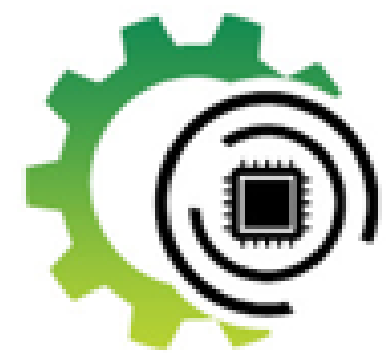
WesCEF Innovation pillars



Carbon impact: effects of climate change



Circular economy: a mindset of turning waste into opportunity



Industry 4.0: emerging technologies such as Internet of Things and additive manufacturing

Advanced Analytics

Leveraging strong history of data driven decision making

Key focus areas

- Growing team of data scientists and data engineers
- Organisation wide investment in data literacy
- Collaborating across industries to achieve fresh insight into data
- Scaling for petabytes of data

Use cases

- Predictive models for production optimisation
- Agile delivery
- Cross-functional team

Data literacy

- Investing in general data literacy across the organisation
- ~ 50 employees have participated in formal analytics training

Safety, Environment & People

Liane Unewisse

General Manager,
HR, HSEQ & Communications



Safety approach & performance

To have a workplace free of high potential incidents

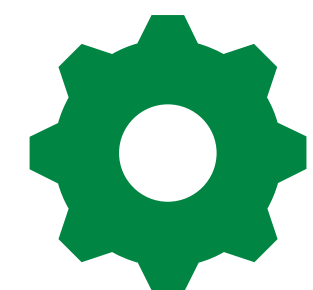
SAFE



PERSON • PROCESS • PLACE

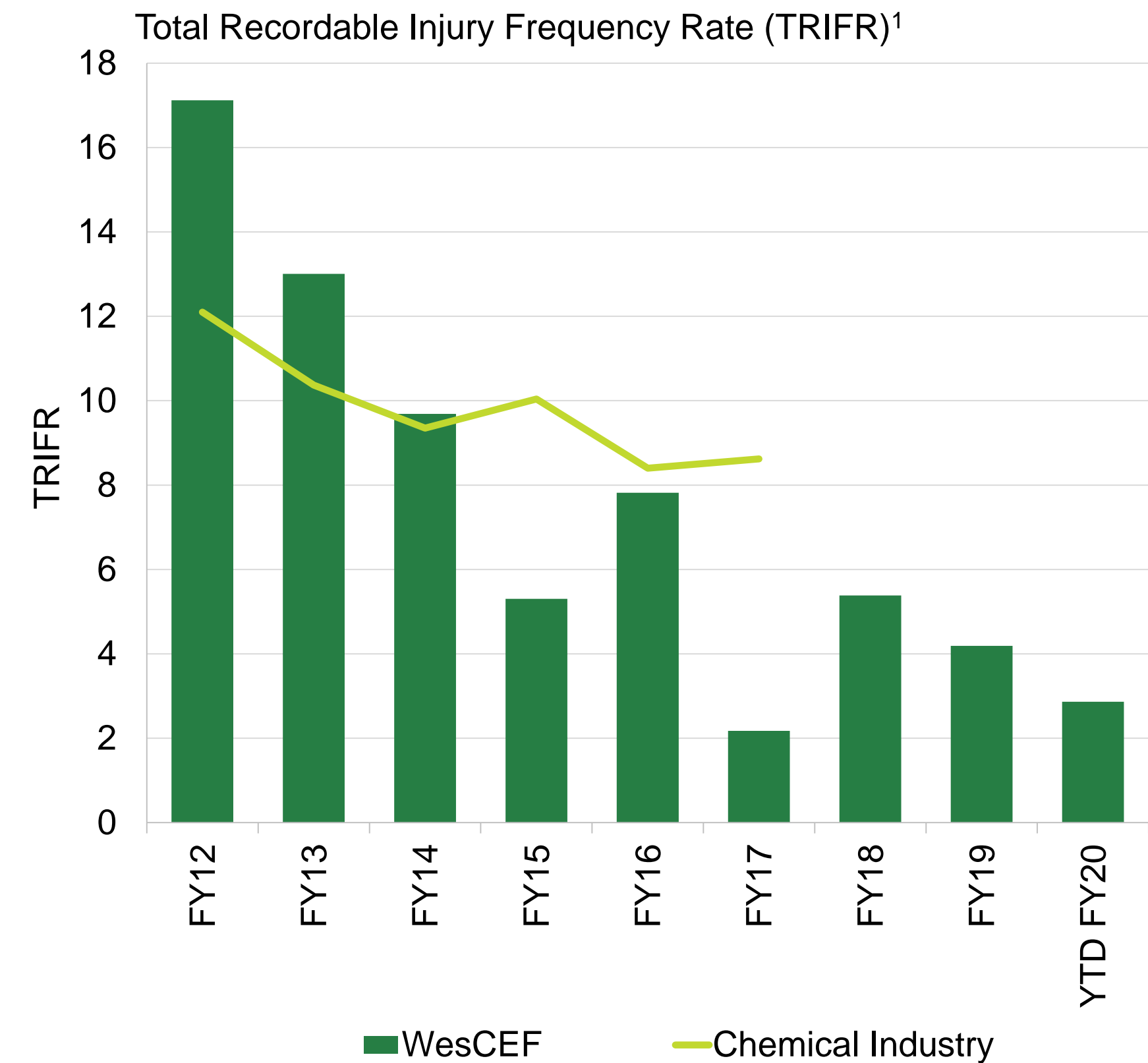


Occupational Health & Safety
Manages potential impact on workers



Process Safety
Manages impact on workers and potential impact on facilities and the wider community

Ongoing improvements in safety performance



Note: Chemical industry benchmark data not available beyond FY17

1. TRIFR is the number of lost time injuries and medical treatment injuries per million hours worked.

Environmental responsibility

Focus on improving environmental impact through:

- Greenhouse gas reductions
 - Implementation of technology over the last 10 years has reduced CO₂ emissions by 80%
 - Further information available in Wesfarmers Annual Report in line with Task Force on Climate-Related Financial Disclosures recommendations
- Legacy waste and land remediation
- Water usage and wastewater management
- Energy efficiency – already a net energy producer



Investment in our people

Continued investment in the capabilities of our people:

- Ensuring competence of hundreds of operational employees in dozens of safety and technical skills
- Every year induct, train and supervise over 2,000 contractor employees as they undertake a range of maintenance and shut down activities in our operations
- Identifying and building skills in new technology and systems
- Evolving our culture to be agile, curious, inclusive as well as safety conscious
- Continuous improvement focus across all operations, businesses and functions forms part of our discipline



Ammonia & Ammonium Nitrate

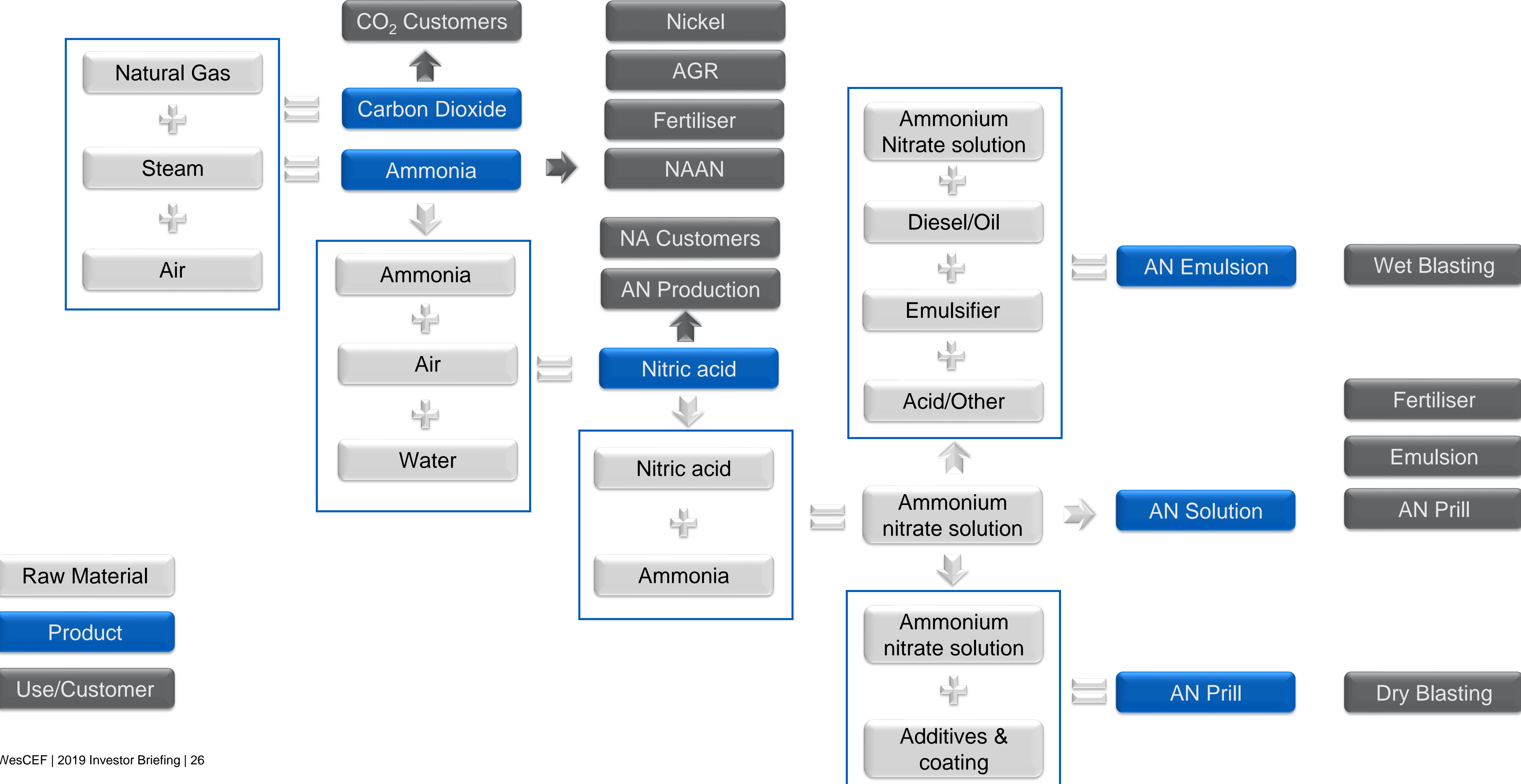
Vision: To be a leader in chemical and mining solutions

Ryan Hair

General Manager,
Ammonia / AN & Operational Services



Ammonia/Ammonium Nitrate Production processes, products and uses

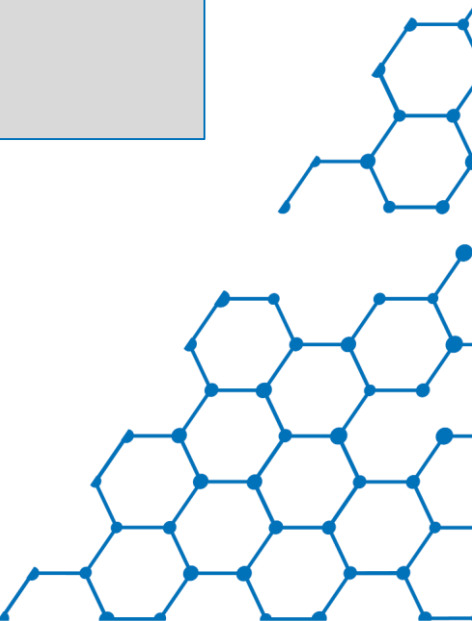


Plant capacities

Plant	Nameplate Capacity (ktpa)	Current Capacity (ktpa)	Year Commissioned
Ammonia	225	255	2000
AN 1 (solution)	200	275	1996
AN 2 (solution)	235	275	2008
AN 3 (solution)	260	275	2014
Total AN	695	825	
Prill Plant	350	620	2008
Emulsion ¹	>100		2017

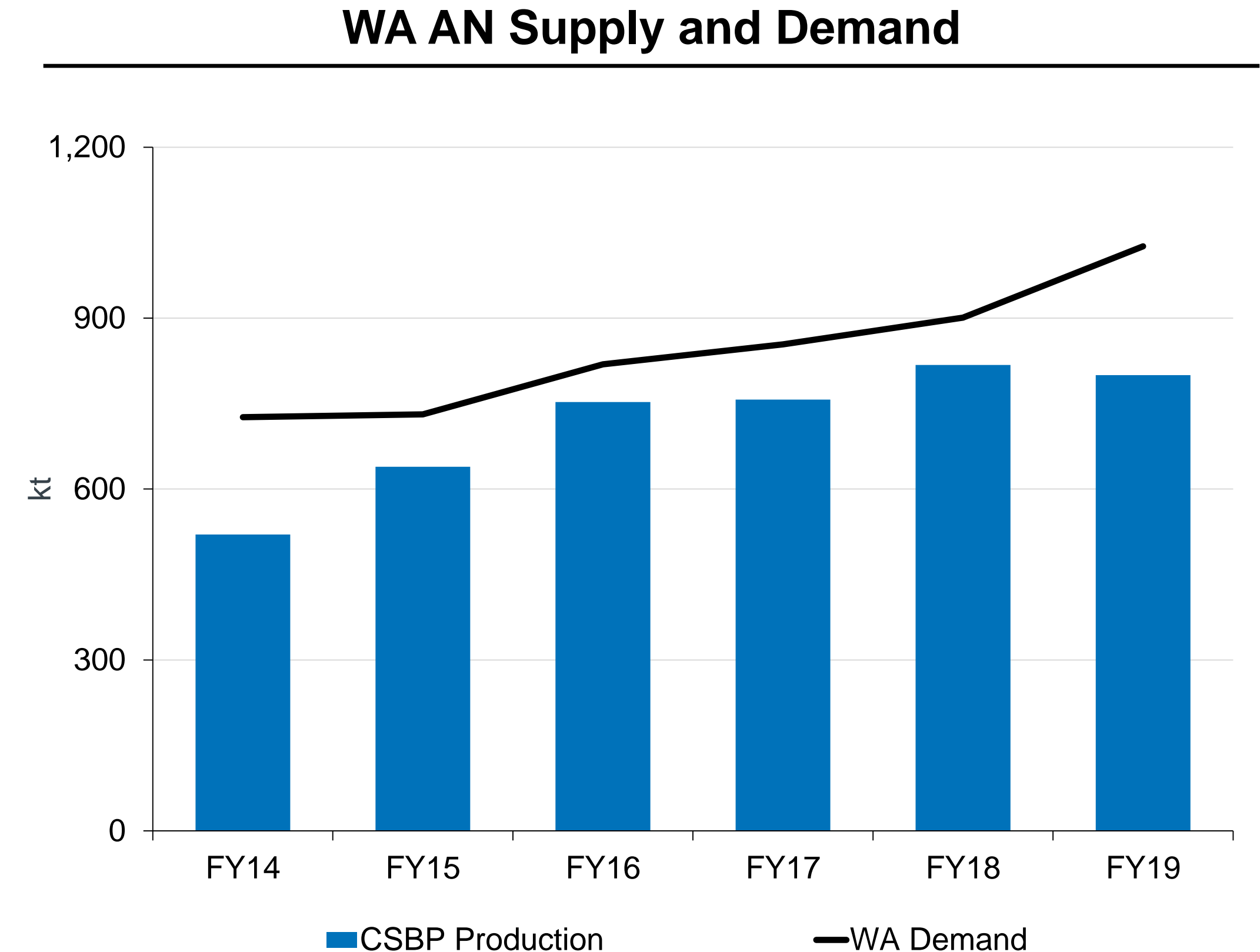
Over time, disciplined investment and operational improvement have delivered significant improvements in production and plant capacity

1. Emulsion capacity refers to instantaneous rate



Ammonium nitrate flexibility and optionality

- CSBP is a reliable supplier of Ammonia and Ammonium Nitrate (AN) - #1 AN supplier in WA
- History of ongoing investment and continuous improvement
- Ability to switch AN production between Explosives Grade AN (EGAN) and Fertiliser manufacture
- Currently exporting AN to the east coast
 - Proven sales channel and supply chain to leverage export opportunities as required



Note: WA demand is based on AN used in explosives and fertiliser
Source: CSBP internal analysis

Overview of ammonia facilities

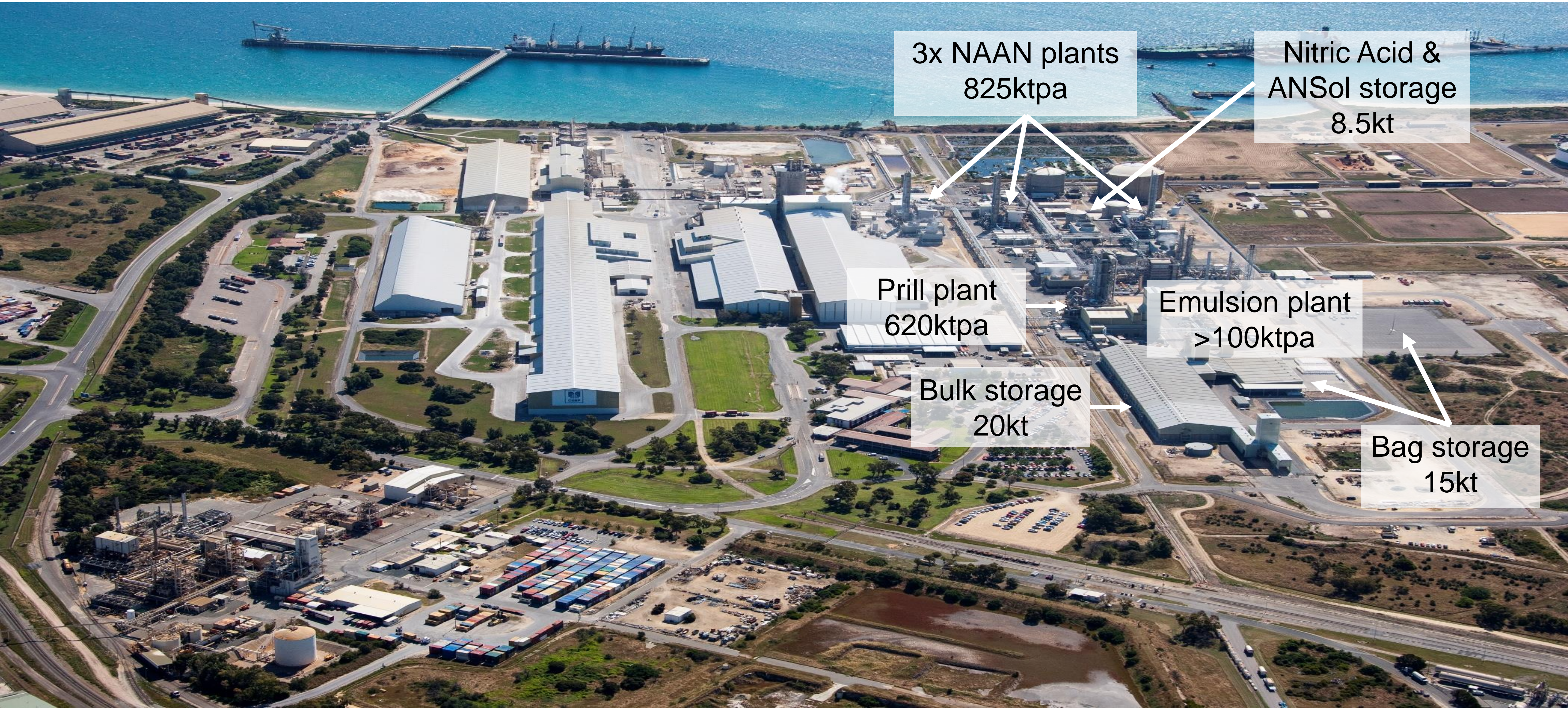


Ammonia imports with priority berthing rights

40kt
Ammonia storage

255ktpa
Ammonia plant

Overview of ammonium nitrate facilities



3x NAAN plants
825ktpa

Nitric Acid &
ANSol storage
8.5kt

Prill plant
620ktpa

Emulsion plant
>100ktpa

Bulk storage
20kt

Bag storage
15kt

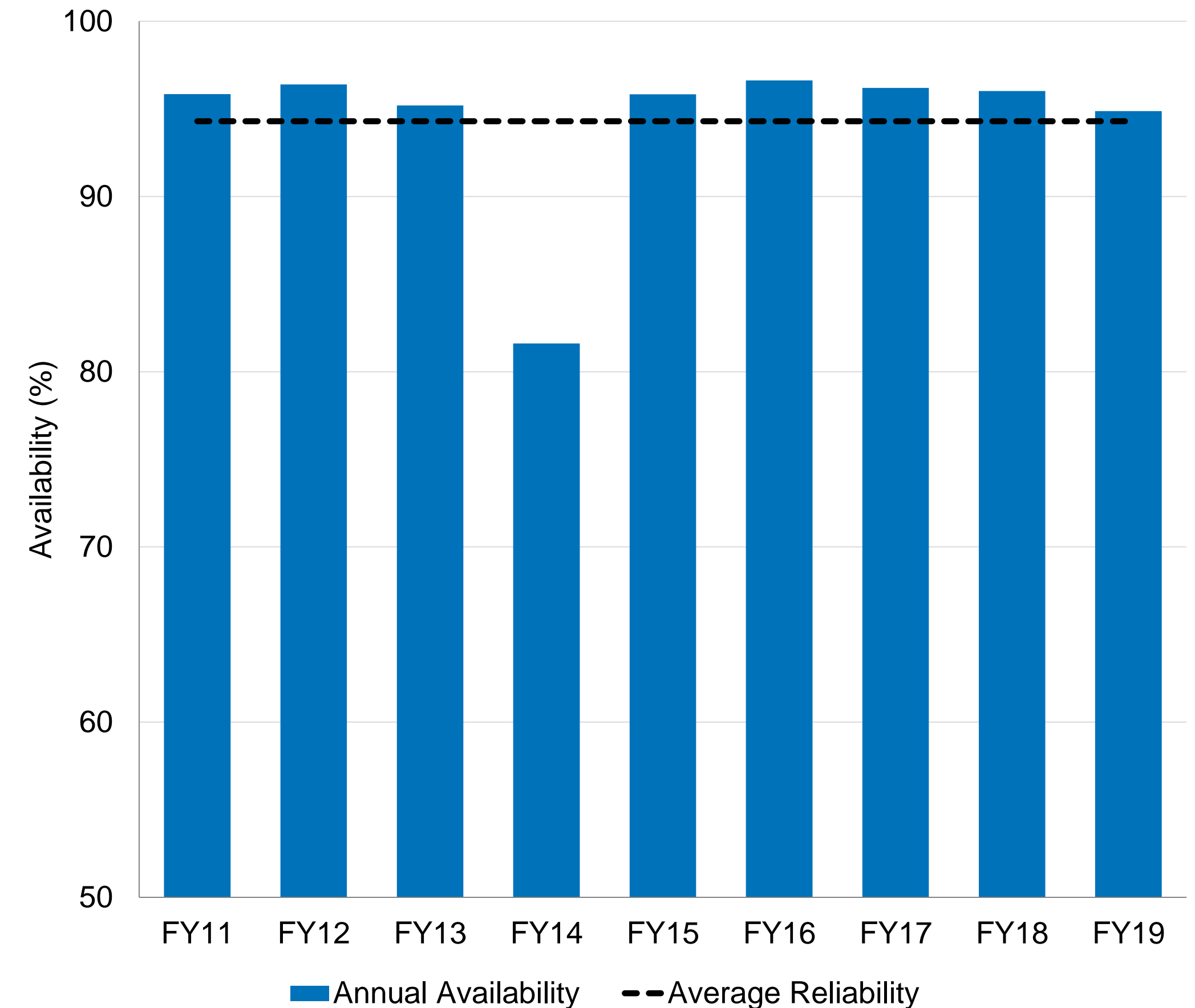
Nitric acid plant performance

- Average nitric acid plant availability of 94.3% - in the top 35% of global nitric acid producers³
- Nitric Acid Train 3 availability of 96%; scheduled for first major maintenance shutdown in 1H20
- FY14 availability driven by an extended single event outage related to an OEM⁴ refurbishment

Nitric acid plant performance highlights continuous focus on delivering world-class performance

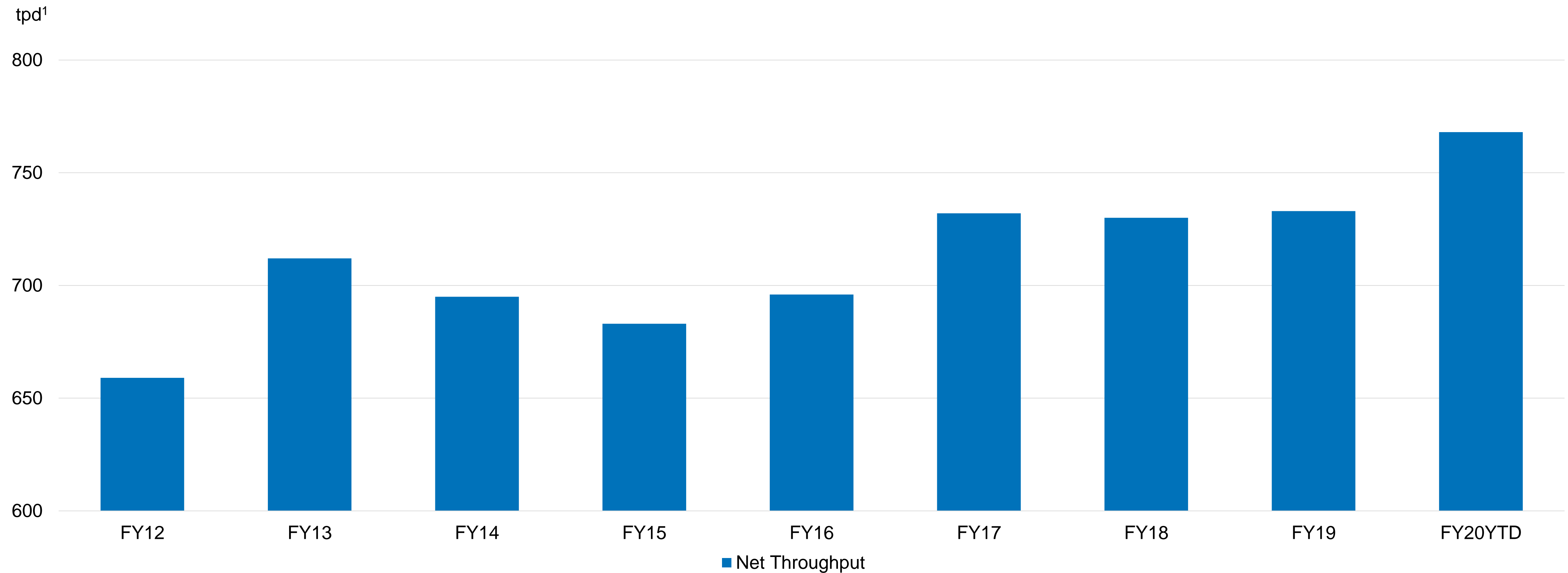
1. Excluding planned major shutdowns
2. Average of NA1, NA2 and NA3
3. Independent benchmarking 2016
4. OEM – Original Equipment Manufacturer

Average Plant Availability^{1,2}



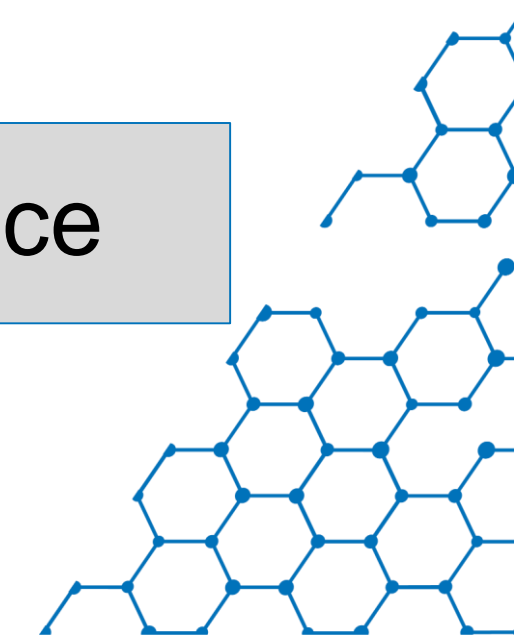
Ammonia plant performance

Ammonia plant daily rate



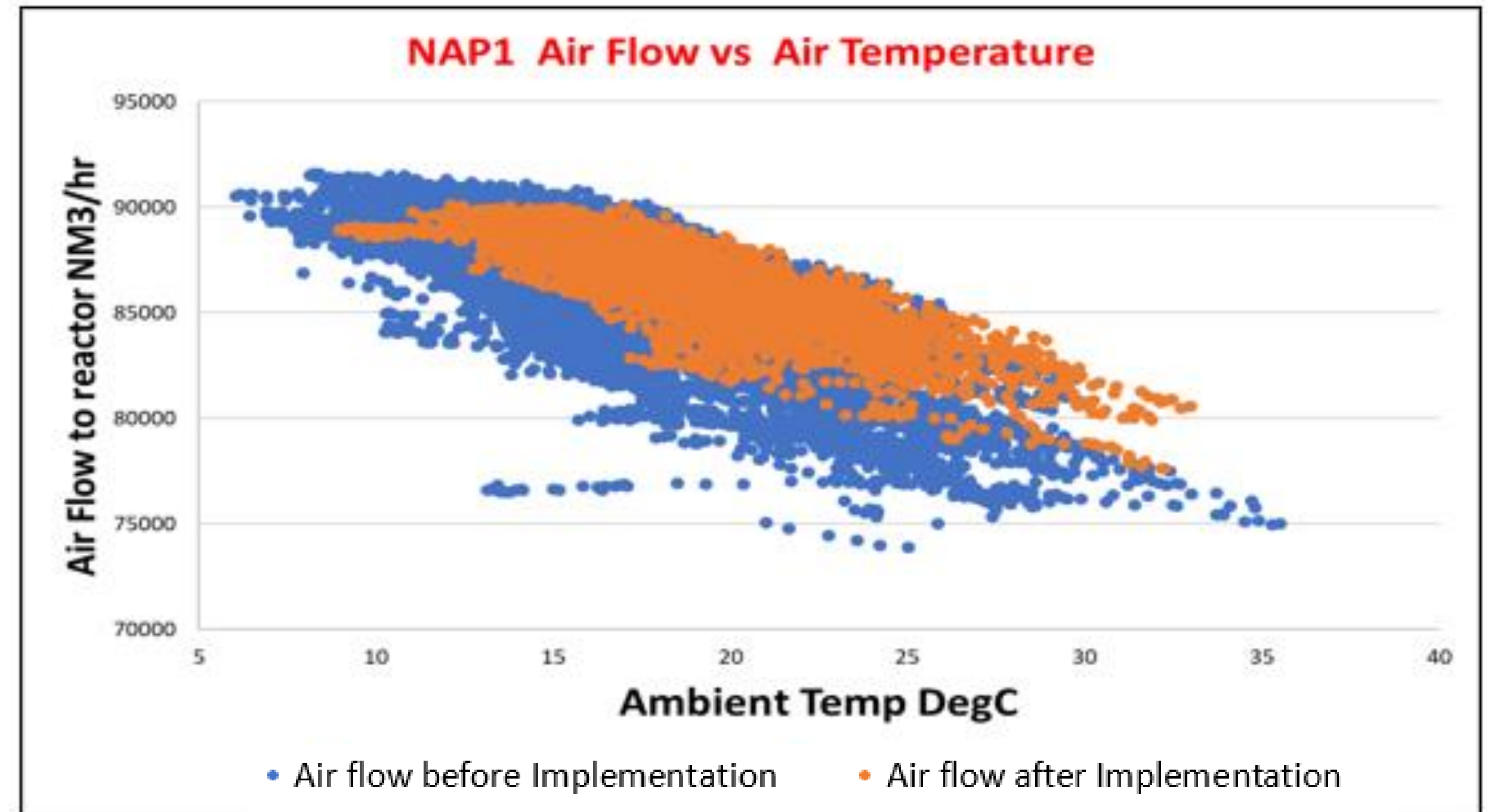
Ammonia performance highlights focus on delivering continuous improvements in plant performance

1. Tonnes per day while the plant is online



Case study: Making better use of data in nitric acid plant

- Bottleneck is **Nitric Acid**
- Nitric Acid rate limiter is **Air flow**
- Air flow is reduced in higher temperatures, but is influenced by other factors, including **operator control**
- **November 2018**: recommender system implemented
- **July 2019**: NAAN Train 1 plant achieved highest monthly production in 22 years
- **FY20**: Include dynamic updates using an online data model with AAC¹ support, and automatic DCS² control requiring no operator intervention



Improvement in plant performance delivered through recommender system translates to ~\$2m p.a. EBIT uplift

1. Wesfarmers Advanced Analytics Centre
2. Distributed Control System

Sodium Cyanide

Vision: To contribute to the success of our customers with an uncompromising focus on people, safety and the environment.

Barney Jones

General Manager,
Chemicals Joint Ventures & AV/Modwood

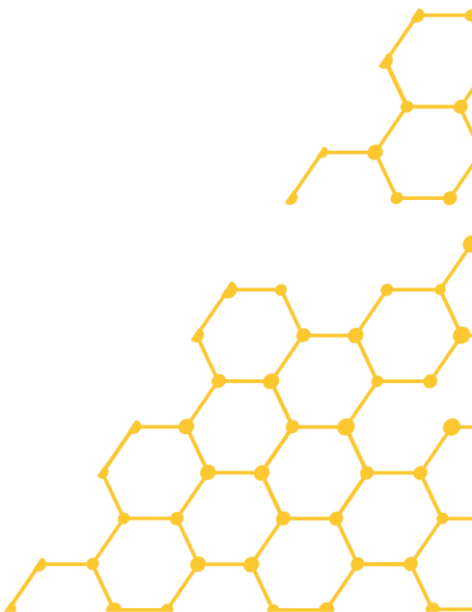


Overview of Sodium Cyanide business

- Australian Gold Reagents (AGR), is a joint venture between CSBP (75%) and Coogee Chemicals (25%)
- CSBP is the operating and sales agent
- Manufactures Sodium Cyanide for recovery of gold in mining
- Only producer of Sodium Cyanide in Western Australia
- No serious or significant events in 30-year operating history
- Australia is the second largest gold mining country; two thirds of gold mined is in WA



Plant	Commissioned	Production Capacity (tpa)
Sodium Cyanide Liquids Plant No 1	1988	Combined total of >90,000
Sodium Cyanide Liquids Plant No 2	1998	
Sodium Cyanide Solids Plant	2002	>45,000



Three different products are provided to meet customer needs

Solution

- 30% Sodium Cyanide
- Delivered ready for use
- No onsite water needed
- No site handling
- No box destruction
- Lower inventory
- Increased freight cost

Midwest / Goldfields WA



Solid to Solution

- ~98% Sodium Cyanide
- Requires onsite mixing
- Requires water onsite
- No onsite handling
- No box destruction
- Lower inventory
- Minimises freight costs

**Remote WA, interstate,
overseas**



Solids

- ~98% Sodium Cyanide
- Requires onsite mixing
- Requires water onsite
- Onsite handling
- Box destruction required
- Boxes easy to store
- Minimises freight costs

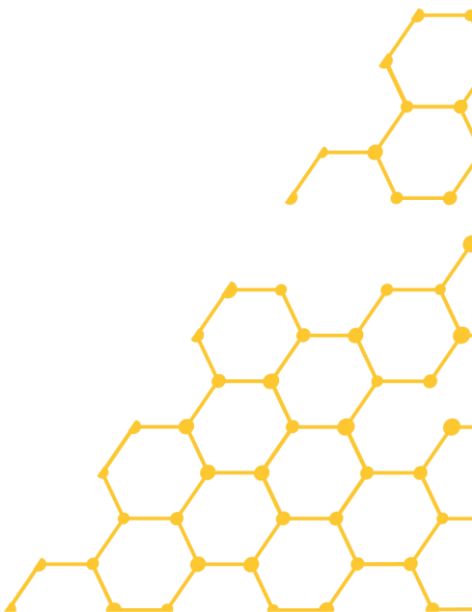
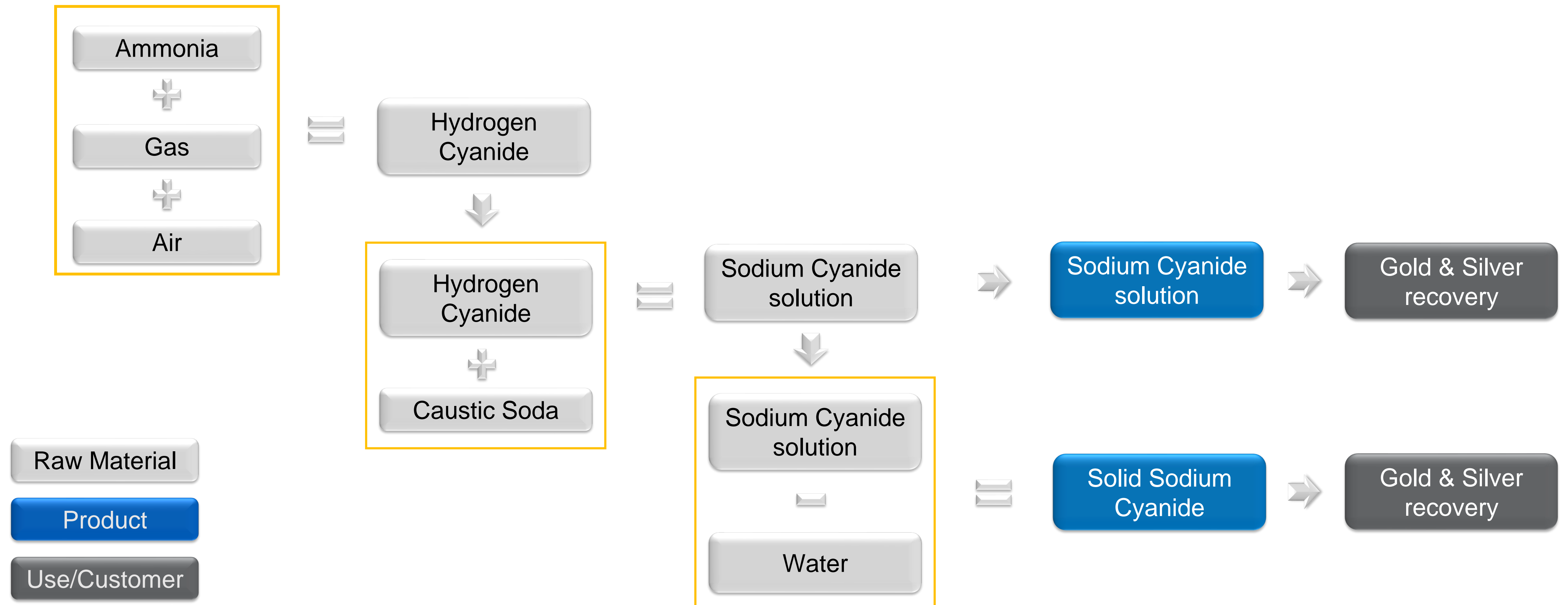
Interstate and overseas



AGR
Global
Customer base



Sodium Cyanide production process



Value-added services represents a key part of the product offering

AGR offers services to ensure the safe and efficient use of Sodium Cyanide

1. Transport

- Audits of logistics providers
- Route reviews for transport

2. Training

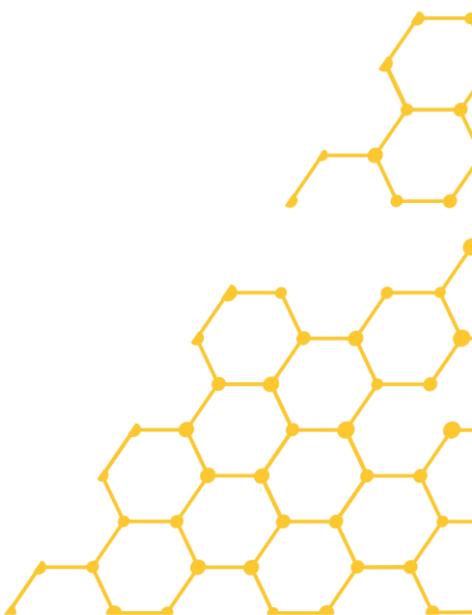
- Training of customers' team in safe handling of Sodium Cyanide

3. International Cyanide Management Institute (ICMI) compliance

- Assistance for customers and transporters to obtain and maintain ICMI code compliance

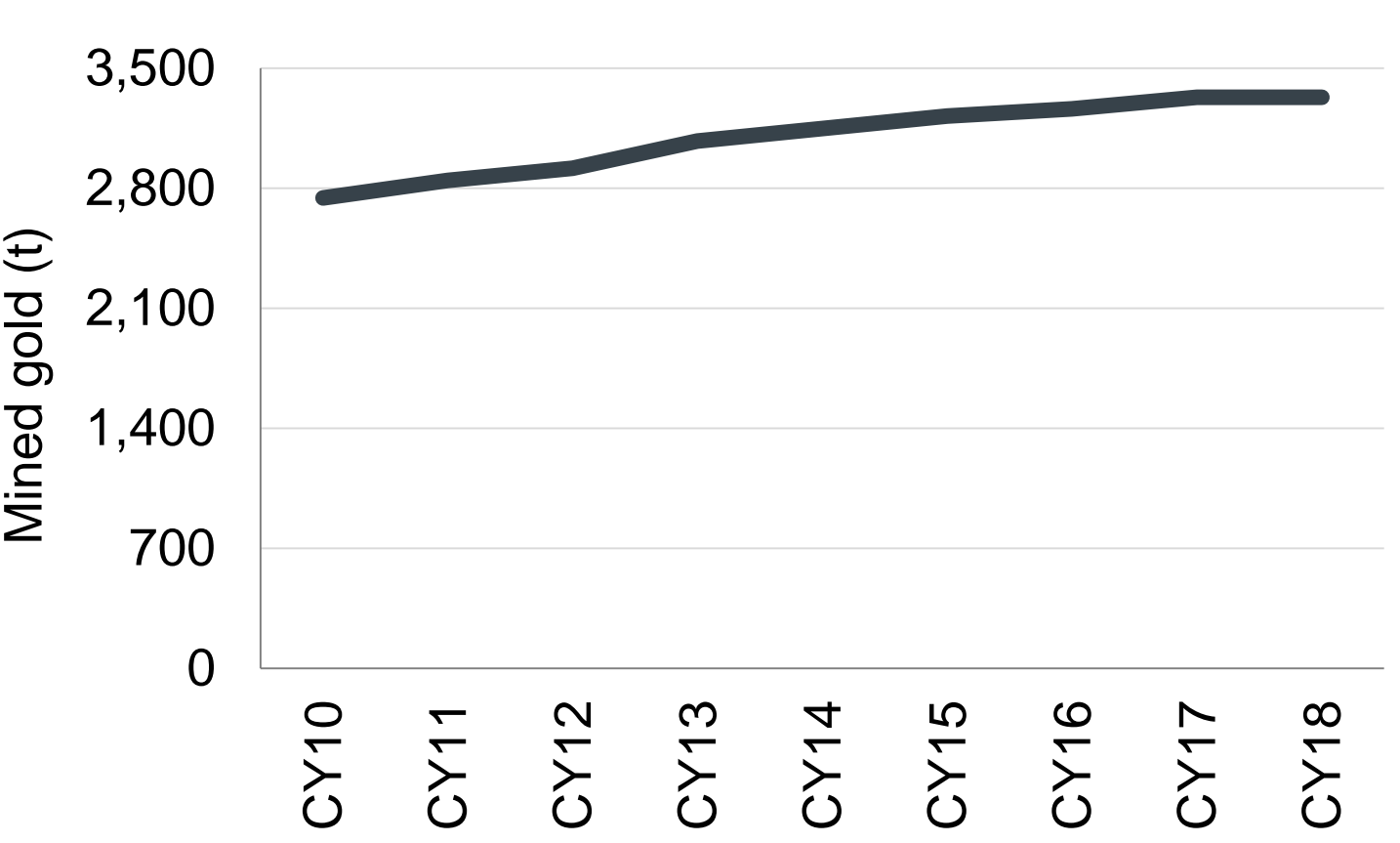
4. Sodium Cyanide usage

- Assistance with efficiency of Sodium Cyanide use through Australian Minerals Industries Research Australia program

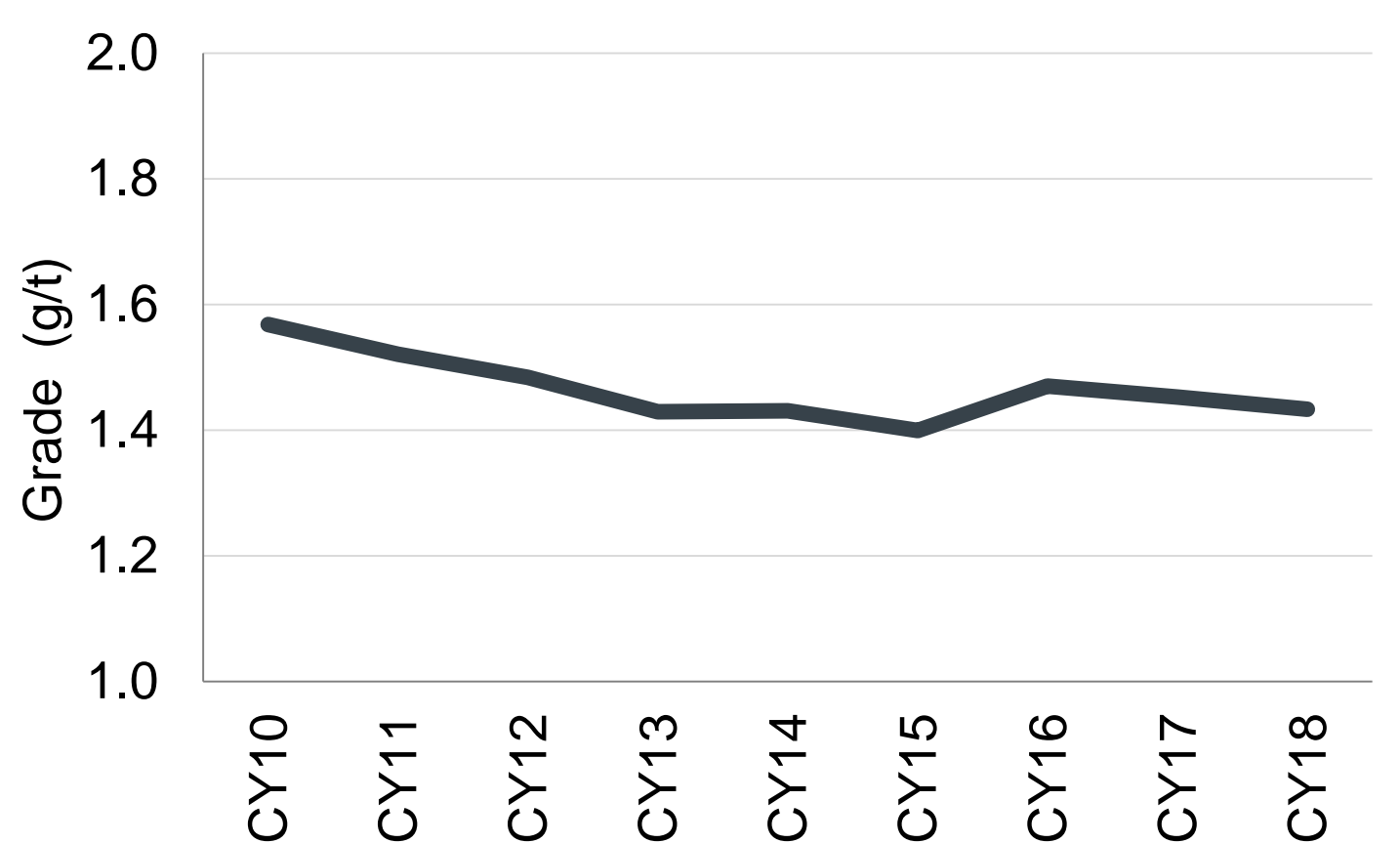


Global gold production, grade and demand for Sodium Cyanide

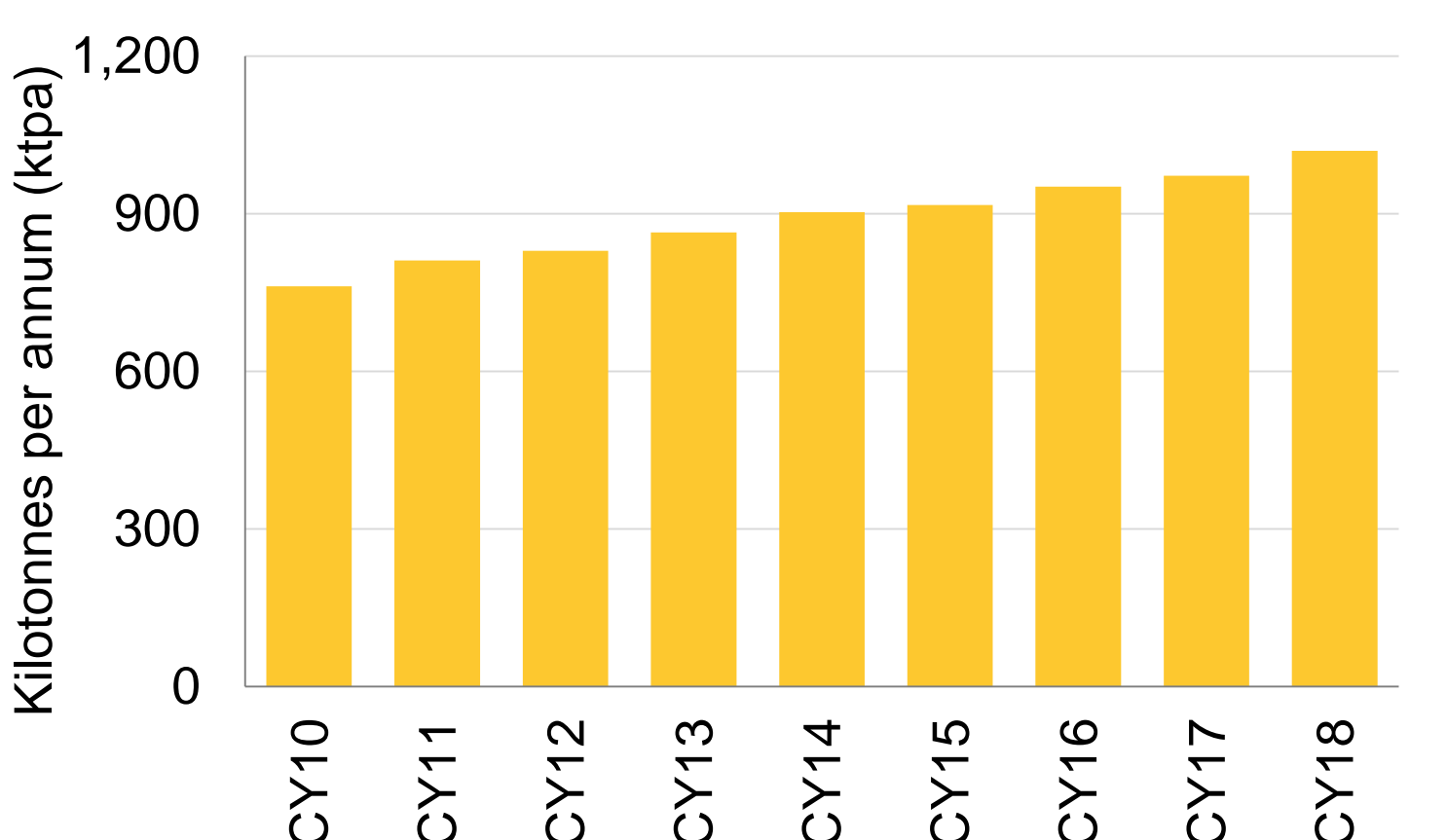
Global gold production



Global gold grade

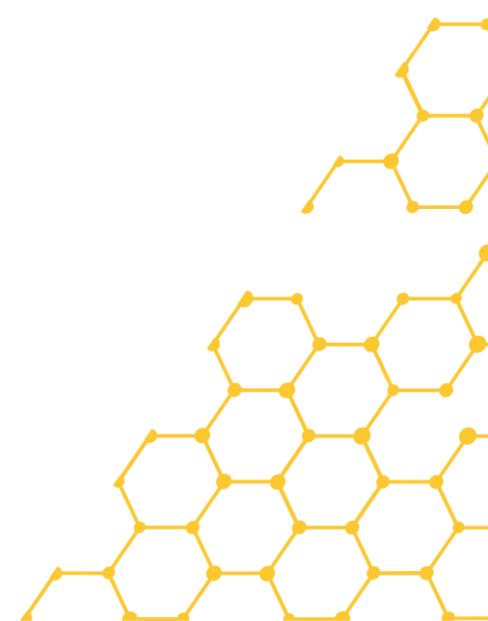


Sodium Cyanide – global demand



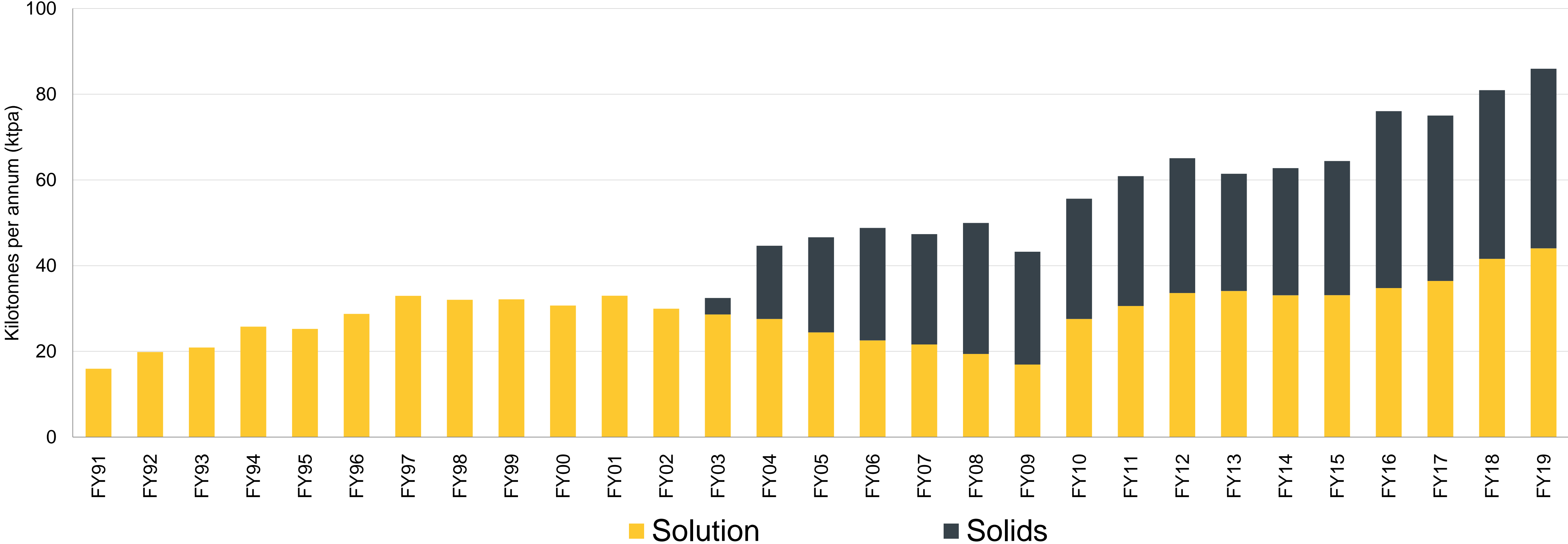
Sodium Cyanide demand is supported by increasing gold production and decreasing gold grades, requiring more ore to be processed to extract a given amount of gold

Source: AME, Wood Mackenzie, CSBP analysis



Sodium Cyanide production growth

Sodium Cyanide – Annual Production



Since 1991, annual production capacity has increased by an average of 2.5ktpa, highlighting the continued focus on operational excellence and disciplined investment over time



Kleenheat

Vision: The energy solutions provider of choice

Mark Gadsby

General Manager, Kleenheat

Kleenheat



Kleenheat is a WA-focused energy solutions provider



Liquefied Petroleum Gas (LPG)



Liquefied Natural Gas (LNG)



Natural Gas (NG)

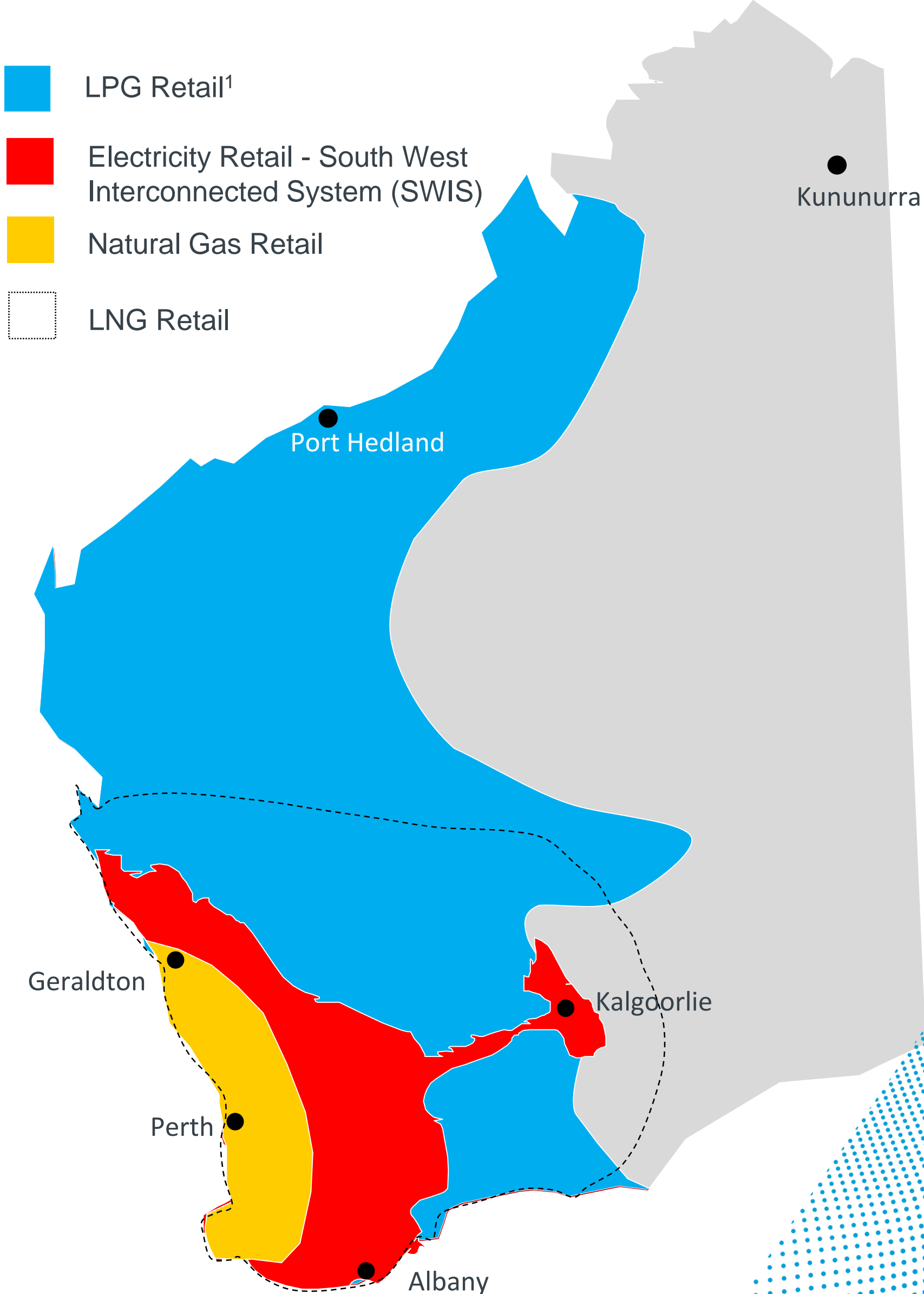


Electricity

Market overview

	LPG	LNG	NATURAL GAS	ELECTRICITY
Competitive position	#1 ~55% share	#1 55% share	#2 27% share	#4 contestable market in WA
Market dynamic	Mature, declining domestic market	Growth market	Active competition, maturing market	Dominated by Synergy; full retail contestability unclear
Competitive advantage	Production facility, established infrastructure	Production facility, transport economics, expertise	Trusted / strong local brand, customer service	Challenger brand, leverage long wholesale market

Upstream gas availability underpins these segments



LPG Distribution and Retail



- Established in WA over 60 years ago
- Market share leader
- Servicing all LPG markets (bulk, forklift, residential, autogas and leisure)
- Bulk uses include industrial heating, food production, minerals processing and fabrication



- Declining domestic market driven by autogas market decline
- Supply from own production (WA) and import facility (NT)

LPG production facility



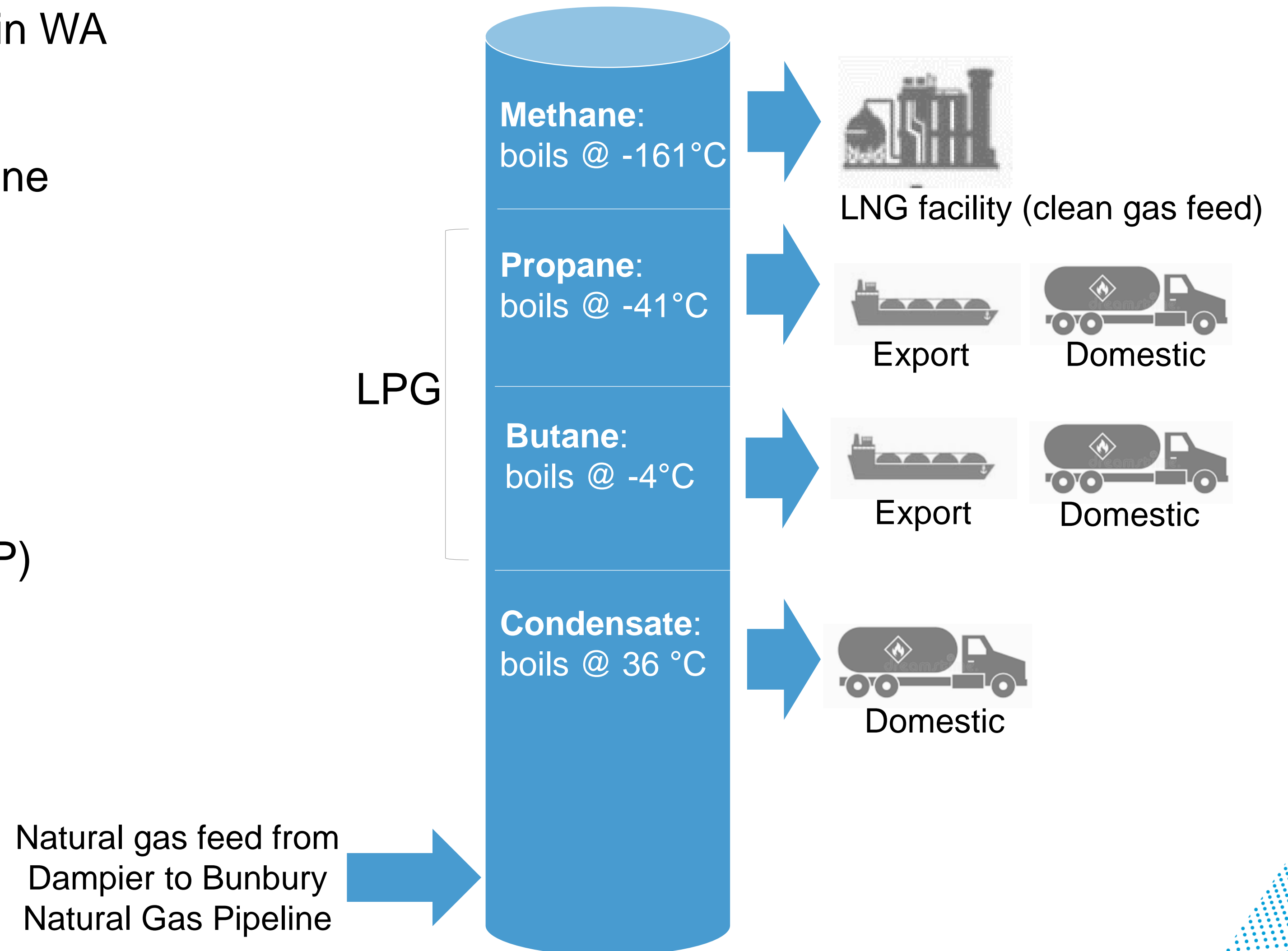
LPG production at Kwinana Production Facility (KPF)

Commissioned	1988 (train 1) 2000 (train 2)
Products	Propane, butane and condensate
Capacity	350,000 tpa
Production (all products)	~150kt
Availability	~98%
Propane storage	26kt
Butane storage	13kt

LPG production process

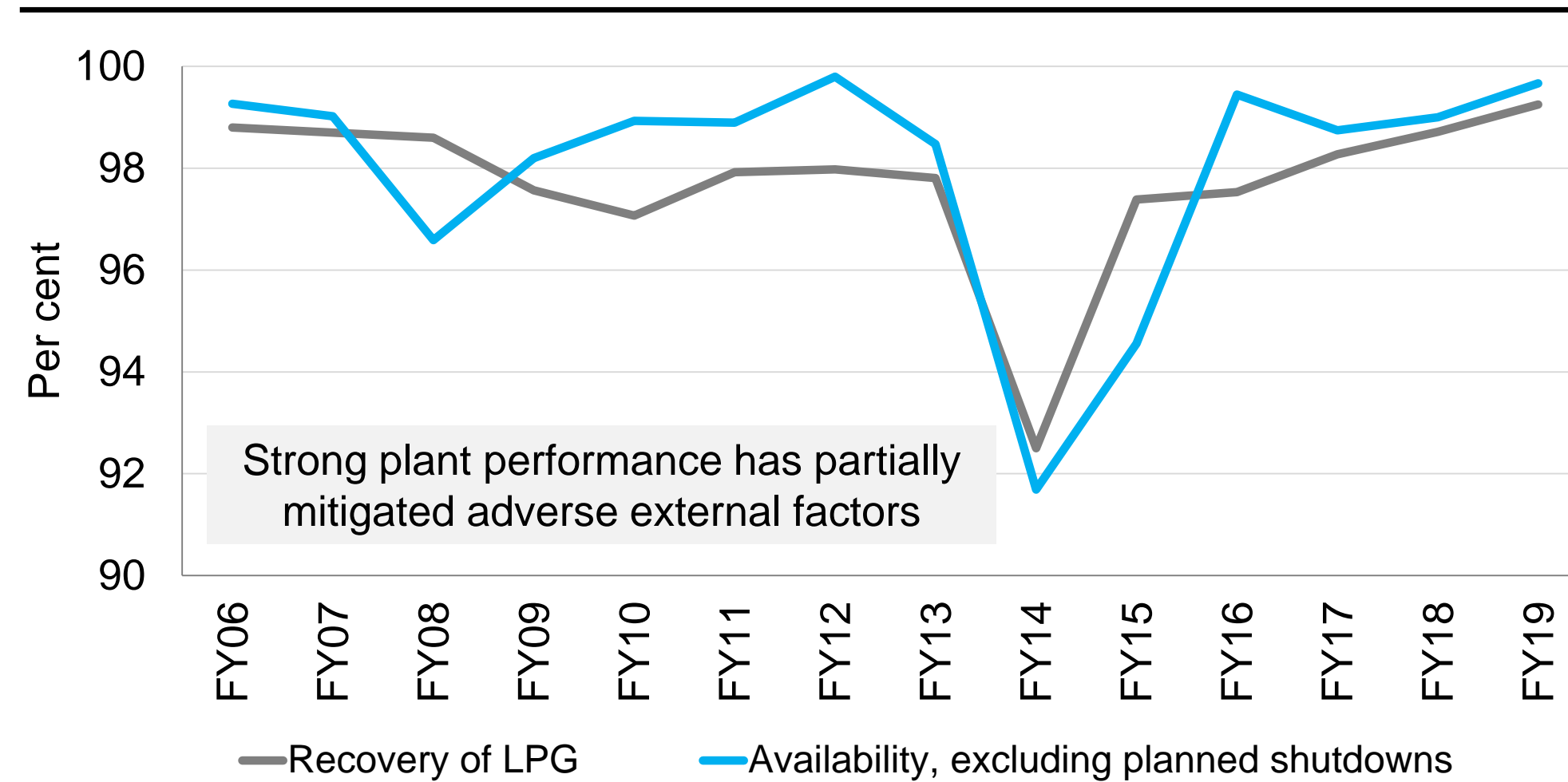
- Largest domestic-focused LPG facility in WA
- Processes LPG via available flow from Dampier to Bunbury Natural Gas Pipeline
- Domestic and export markets
- Value drivers:
 - Plant performance
 - International LPG price (Saudi CP)
 - Pipeline LPG content and flow
 - Domestic demand

KPF value extraction process

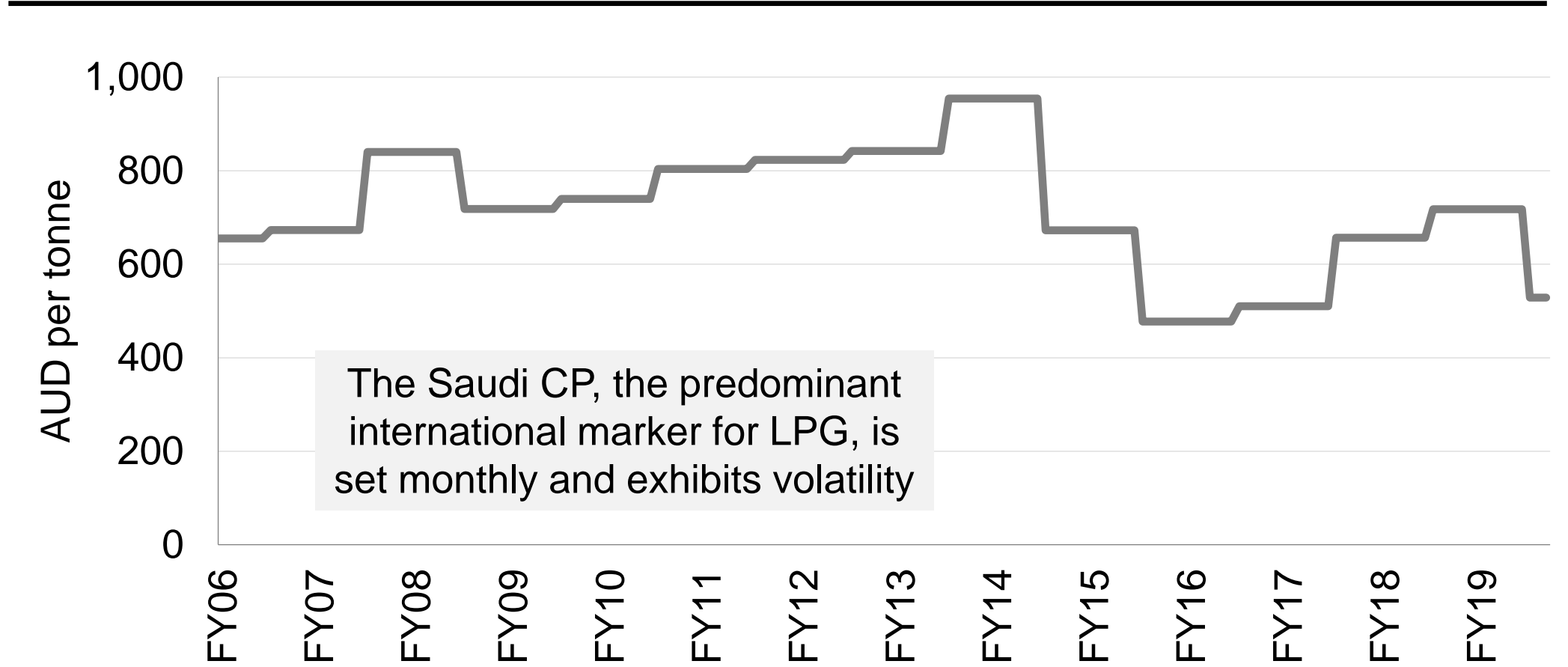


Key drivers of LPG business

Plant performance

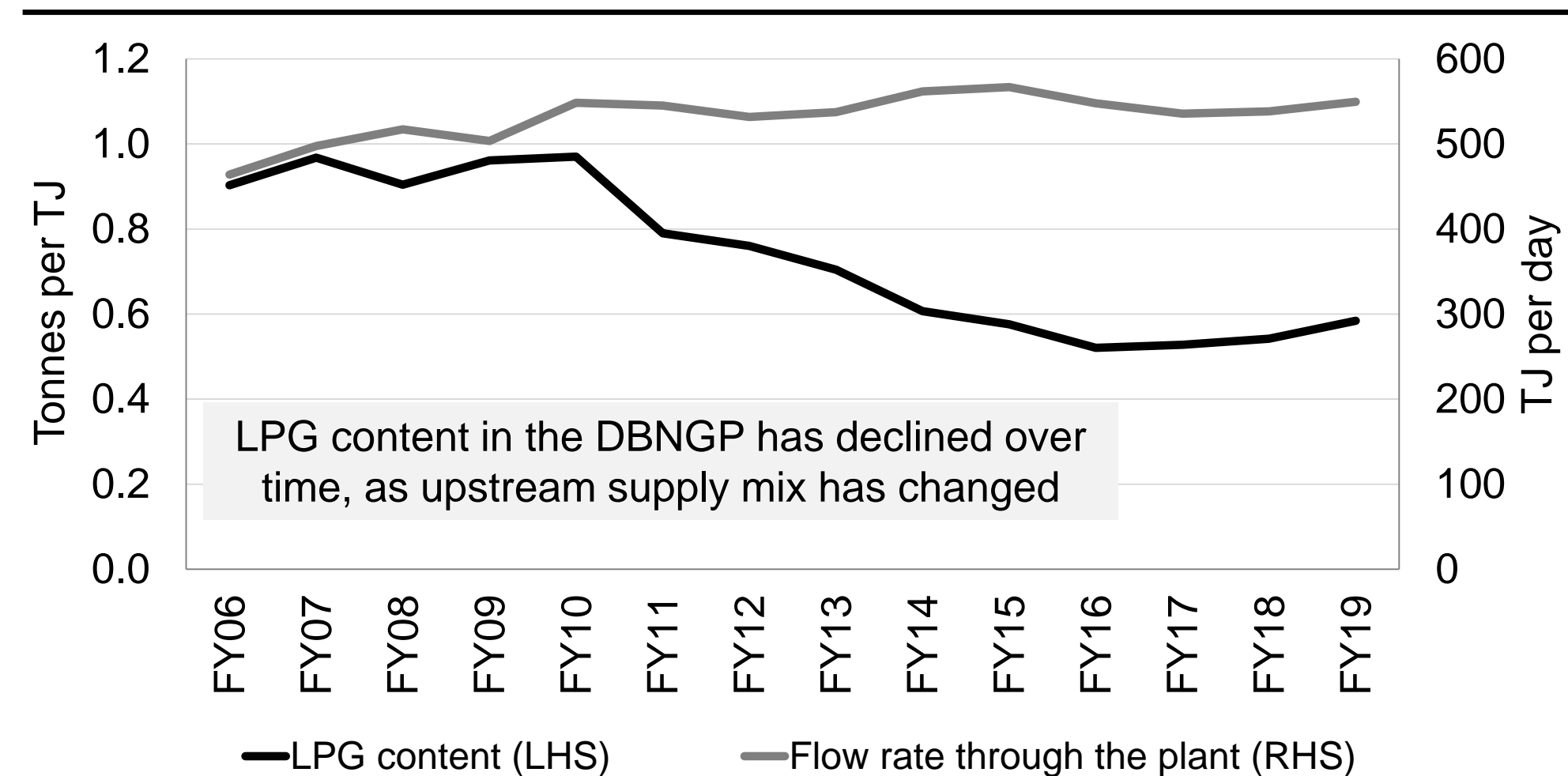


Saudi Contract Price

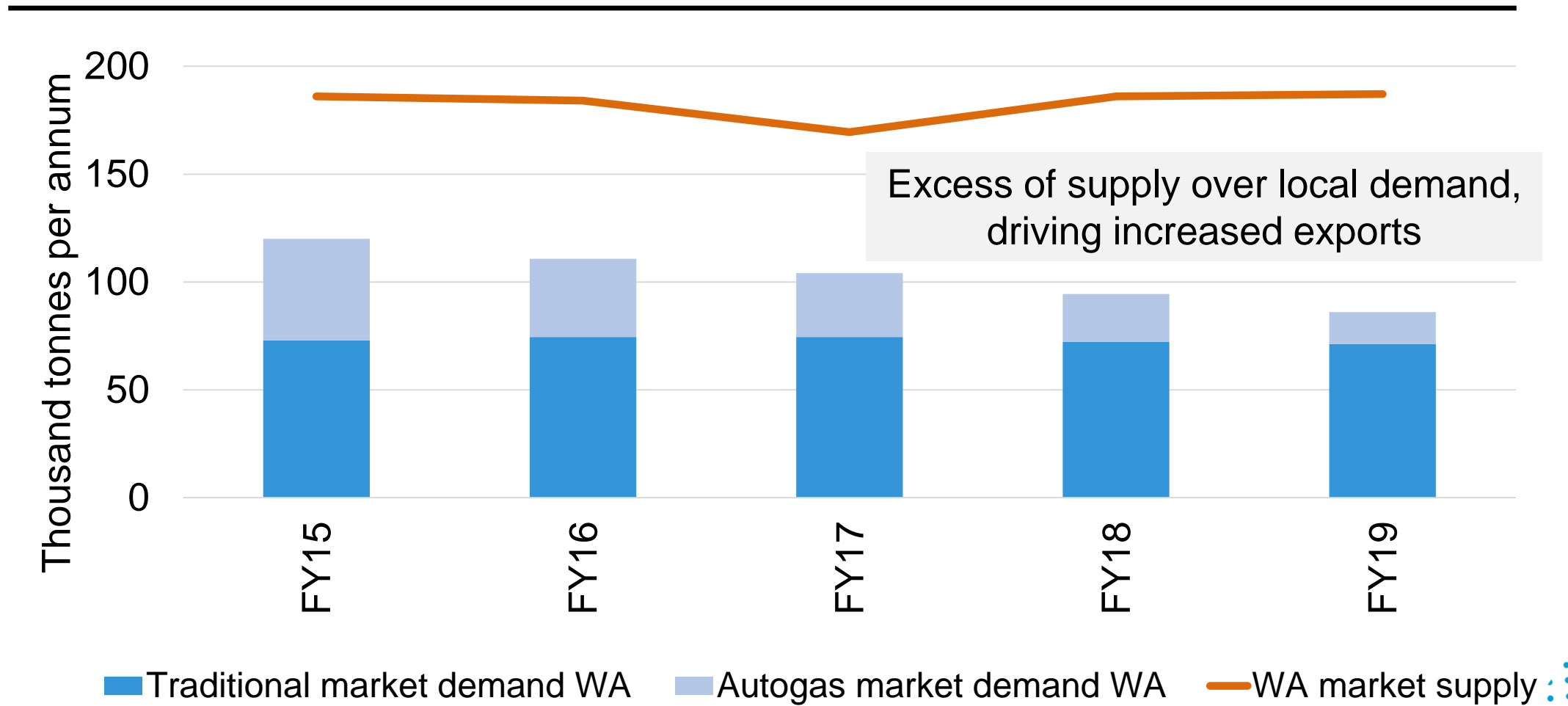


Source: Gas Energy Australia

Pipeline LPG content and flow



Domestic demand and supply for LPG



Source: internal estimates, Gas Energy Australia

LNG business overview

- EVOL LNG business services remote power generation, marine, export and industrial markets by offering a cleaner alternative to diesel
- Over 225,000t CO₂-e avoided¹ in WA power generation, and over \$80m in savings² to those customers
- Economic delivery range is ~1,000 km
- Value drivers:
 - LNG production/plant availability
 - Diesel price
 - Mining activity (particularly gold)



1. Scope one emissions, internal estimates
2. Savings compared to diesel

LNG Customers

Good pipeline of prospects with strong mining activity in WA

- Contracted
- Opportunities
- Early prospects

- 30+ tonnes per day
- 20-30 tonnes per day
- 10-20 tonnes per day
- 0-10 tonnes per day



LNG production facility

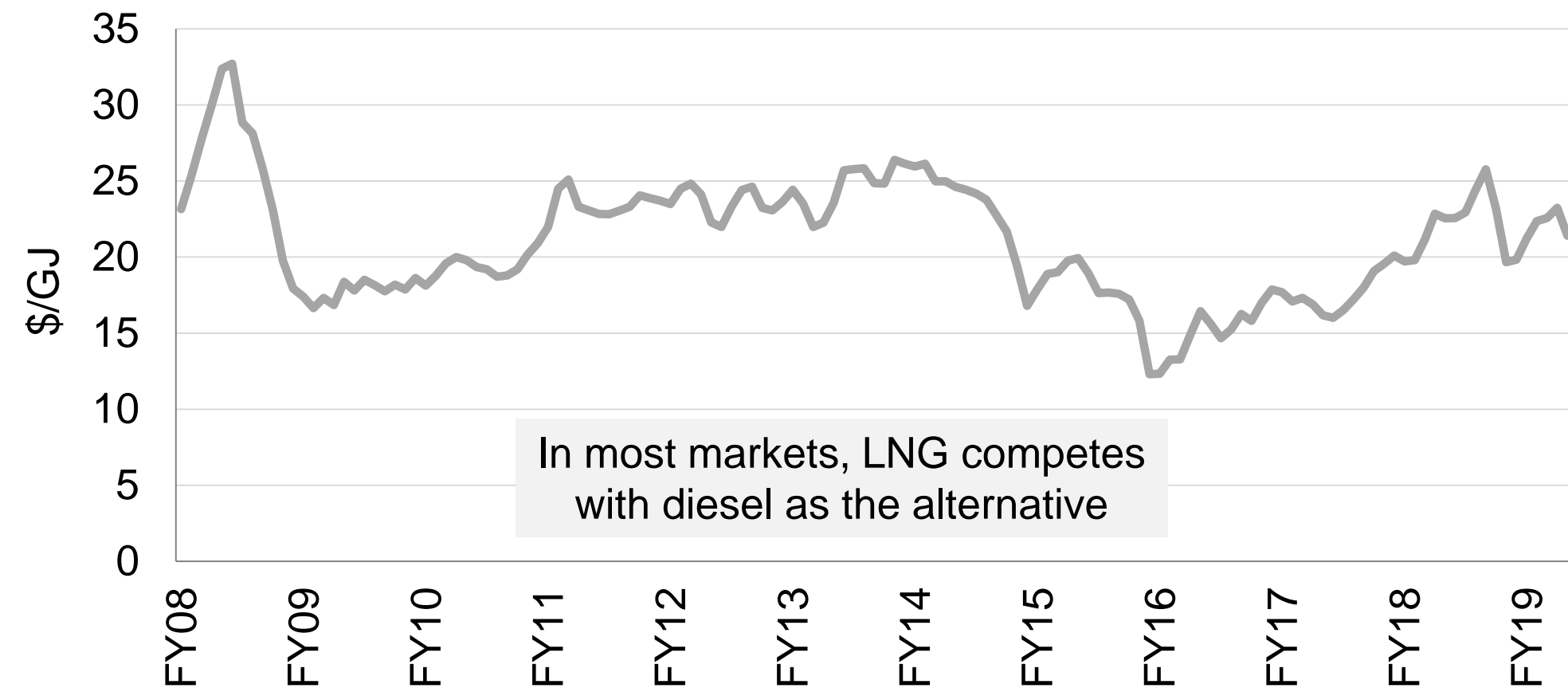


LNG production at Kwinana Production Facility (KPF)

Commissioned	2008
Products	Liquefied Natural Gas (LNG)
Capacity	200 tpd
FY19 production	140 tpd
Availability	~96%
LNG storage	1,600 t

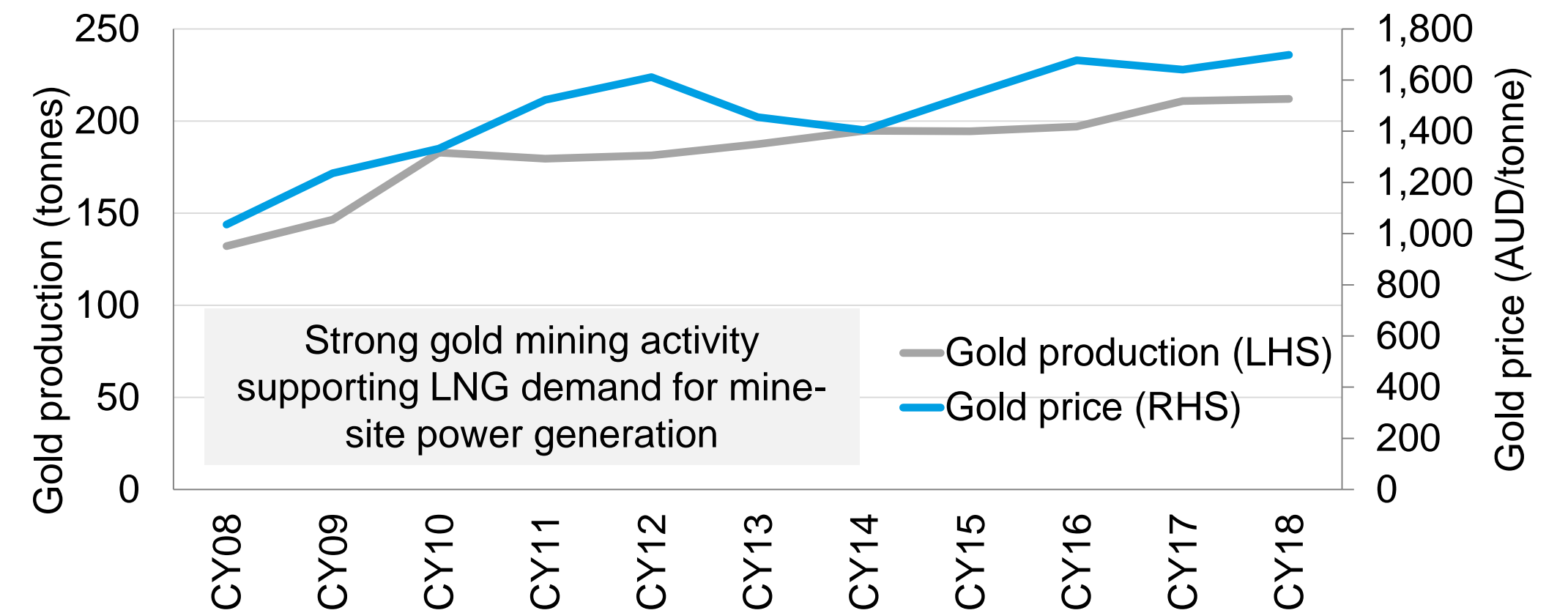
Key drivers of LNG business

Diesel price



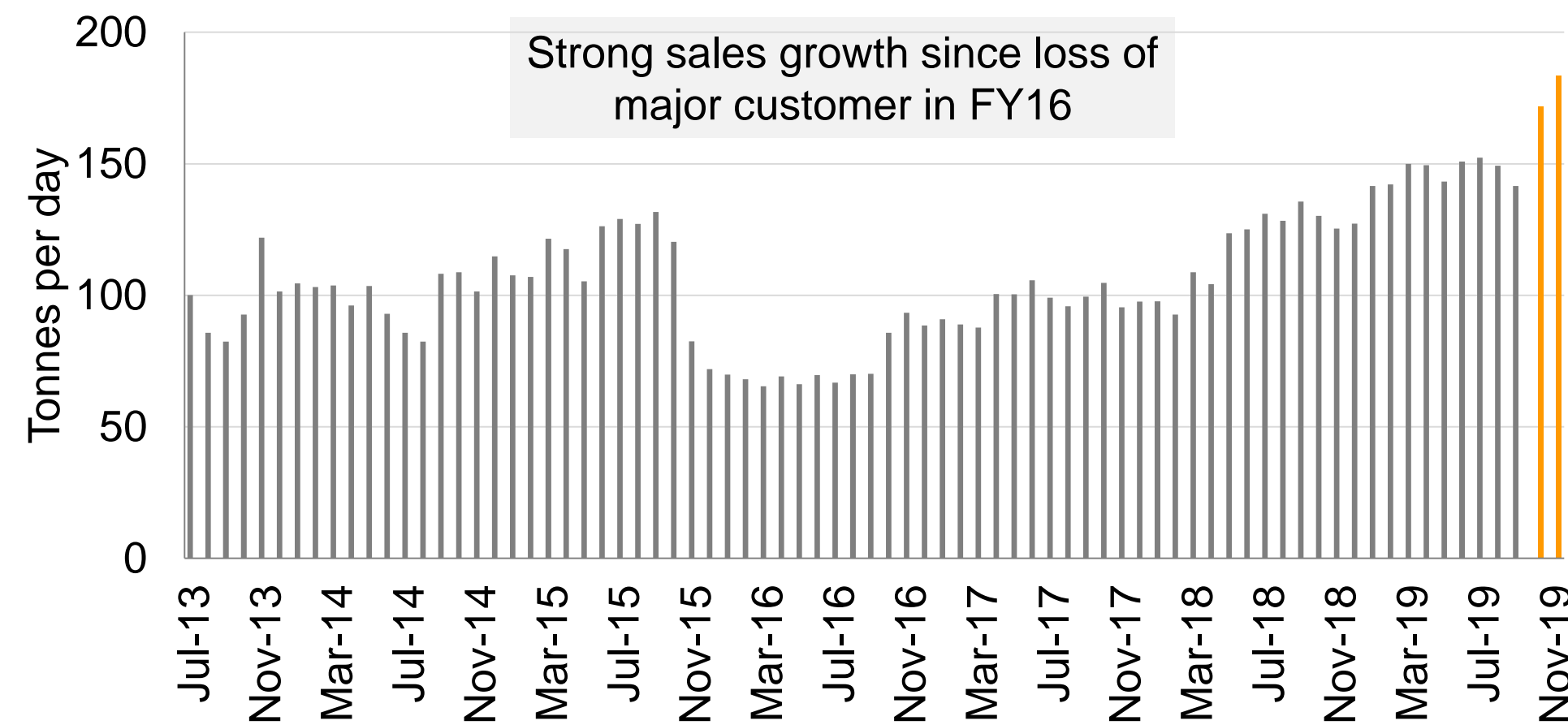
Source: Perth terminal gate price per AIP, excluding excise and GST

WA gold production and gold price

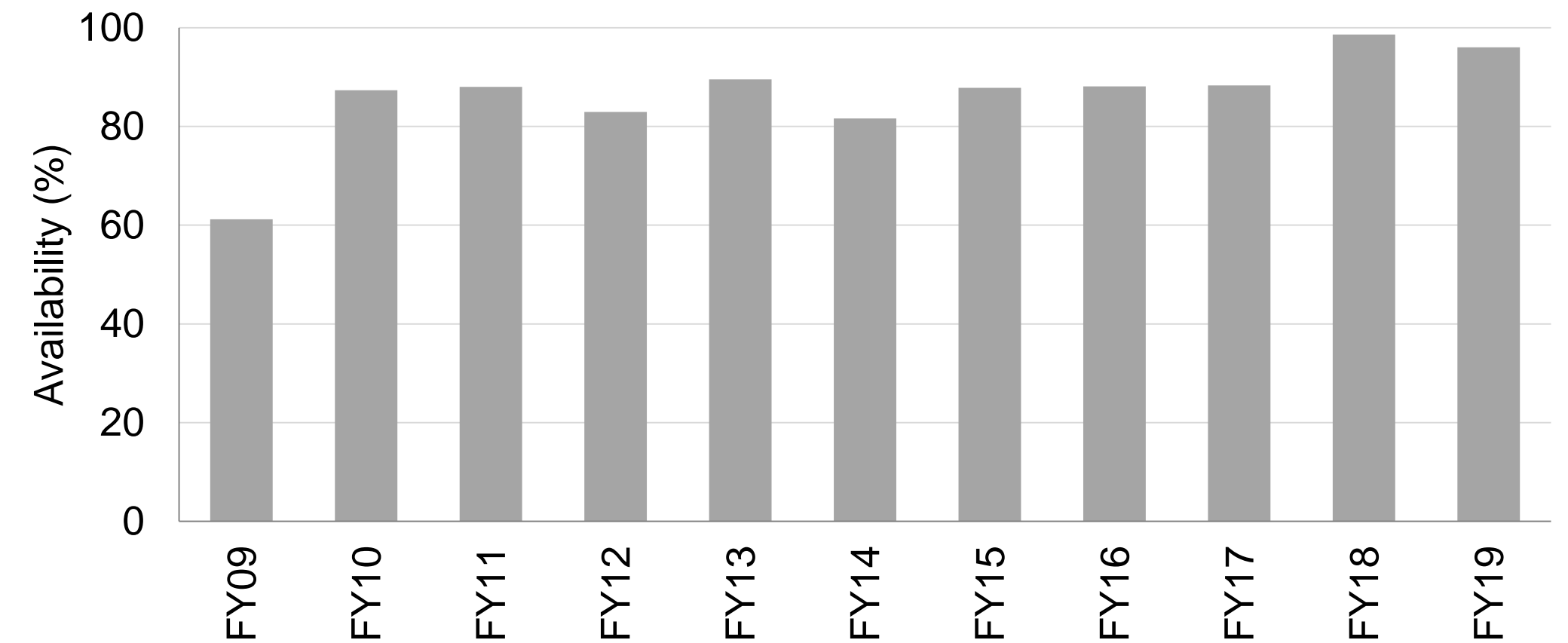


Source: Department of Mines, Industry Regulation and Safety (production), Bloomberg (price)

LNG sales volume



LNG plant availability¹



1. Plant availability excludes downtime while plant was operating in campaign mode

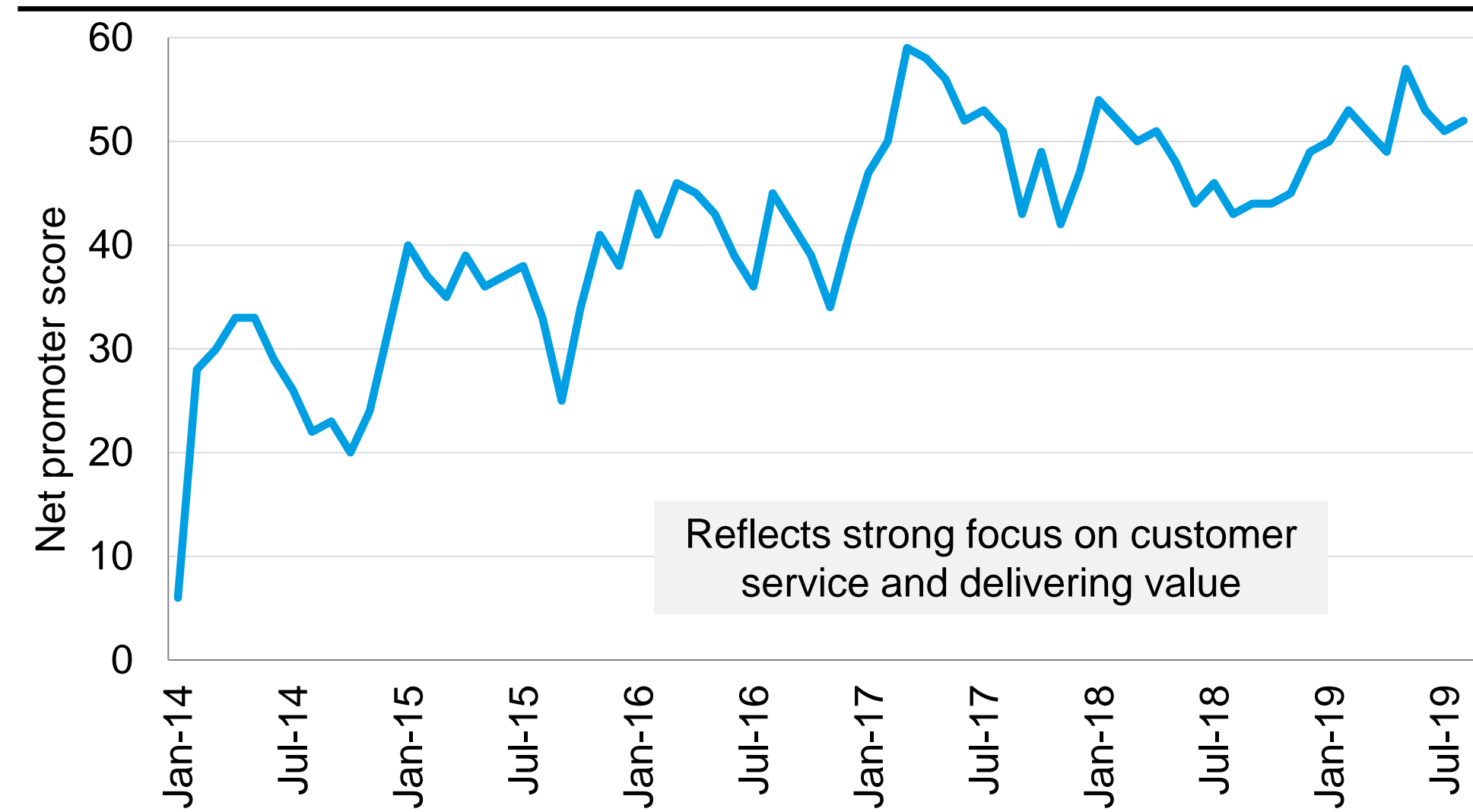
Retailing natural gas

- Commenced retailing to the WA market in March 2013
- Around 200,000 customers (~ 27% share, #2 position)
- No physical assets: account management and marketing business
- Serving residential, small to medium enterprise (SME), commercial and industrial markets
- Crowded market – five retailers now competing in WA



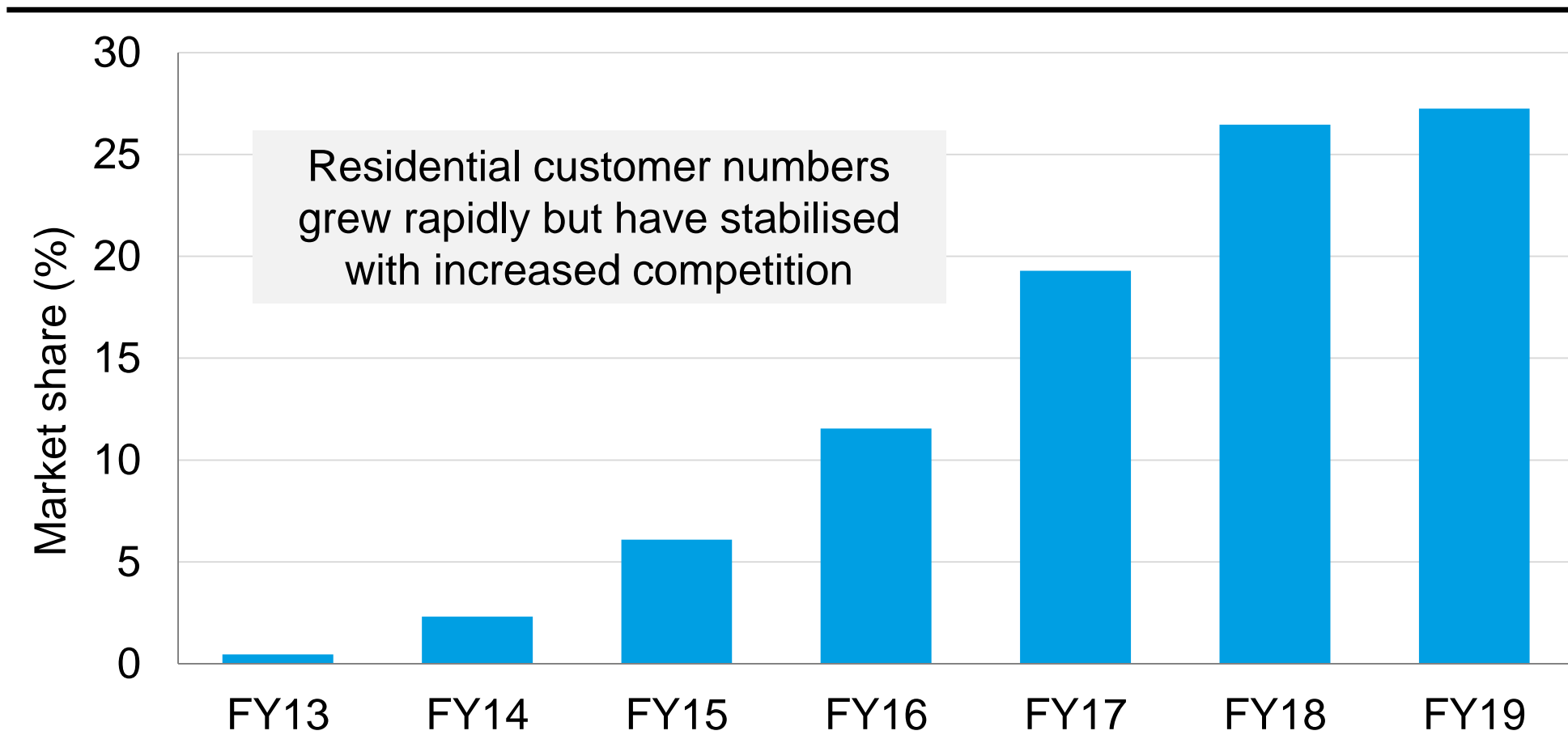
Retailing natural gas – Customer growth and satisfaction

Net promoter score (relationship basis)



Reflects strong focus on customer service and delivering value

Market share



Residential customer numbers grew rapidly but have stabilised with increased competition

Brand strengths

- WA born and bred
- Local customer service
- Ongoing discounts
- Community involvement

Spontaneous awareness

66%
(market research, Q3 2019)



Fertilisers

Vision: Trusted to deliver the best for growers

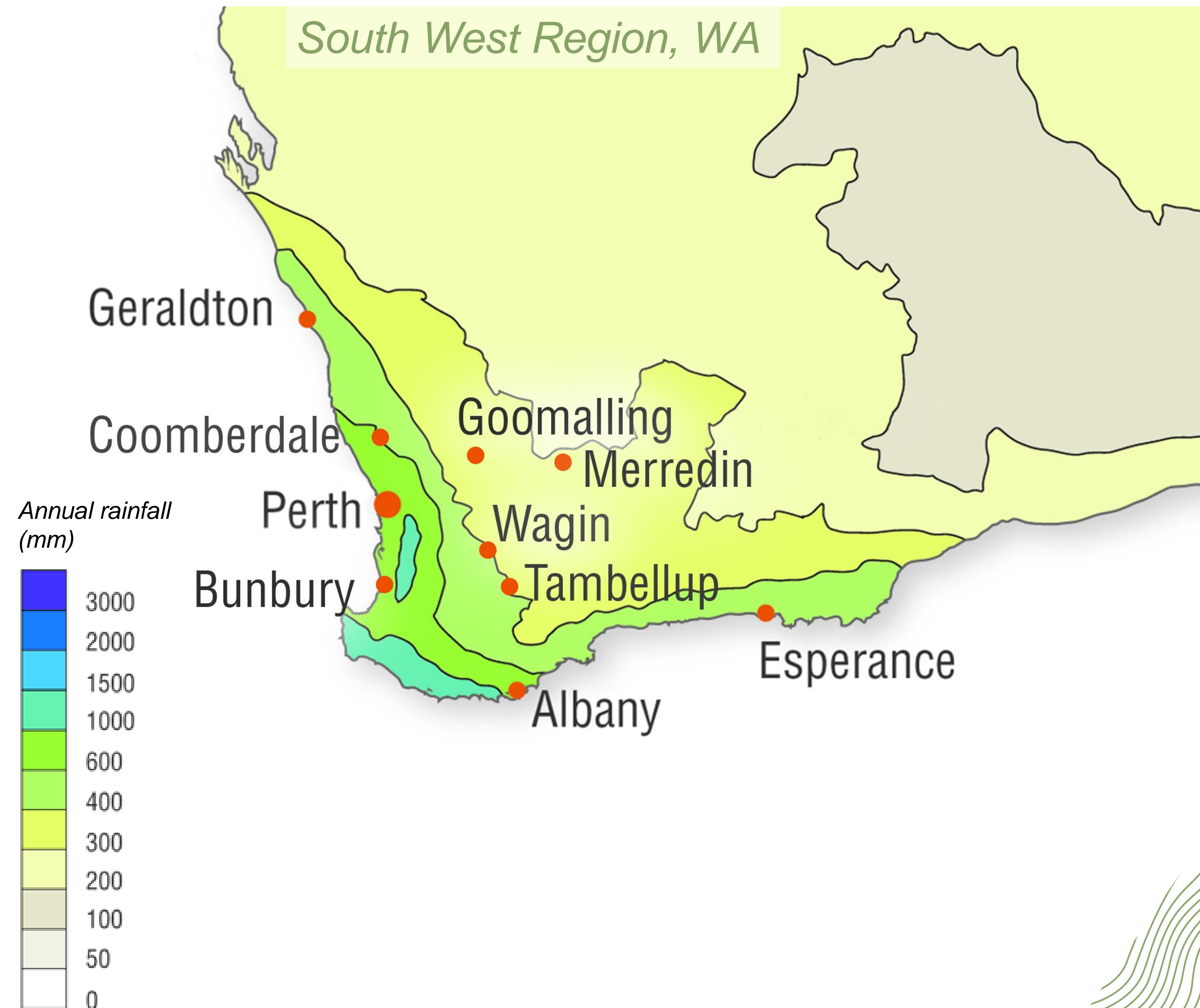
Ian Hansen

Chief Executive Officer,
WesCEF



Western Australian agriculture

- Nutrient deficient soils
 - Requires nitrogen, phosphates and potassium (NPKs)
- Long-term declining sheep numbers
 - Shift from pastures to crops
- Small dairy, beef and horticulture sectors
- Dominated by broadacre cropping
 - Wheat, barley, canola, malt and lupins
- One-harvest season per year
 - Reliant on winter rainfalls, volatility
- Consolidation and corporatisation of farms



Overview of CSBP Fertilisers

Key products and services

- Largest supplier of granular and liquid fertilisers developed specifically for WA soils and conditions
- Value-adding services and AgTech products
- Product and service development

Business model

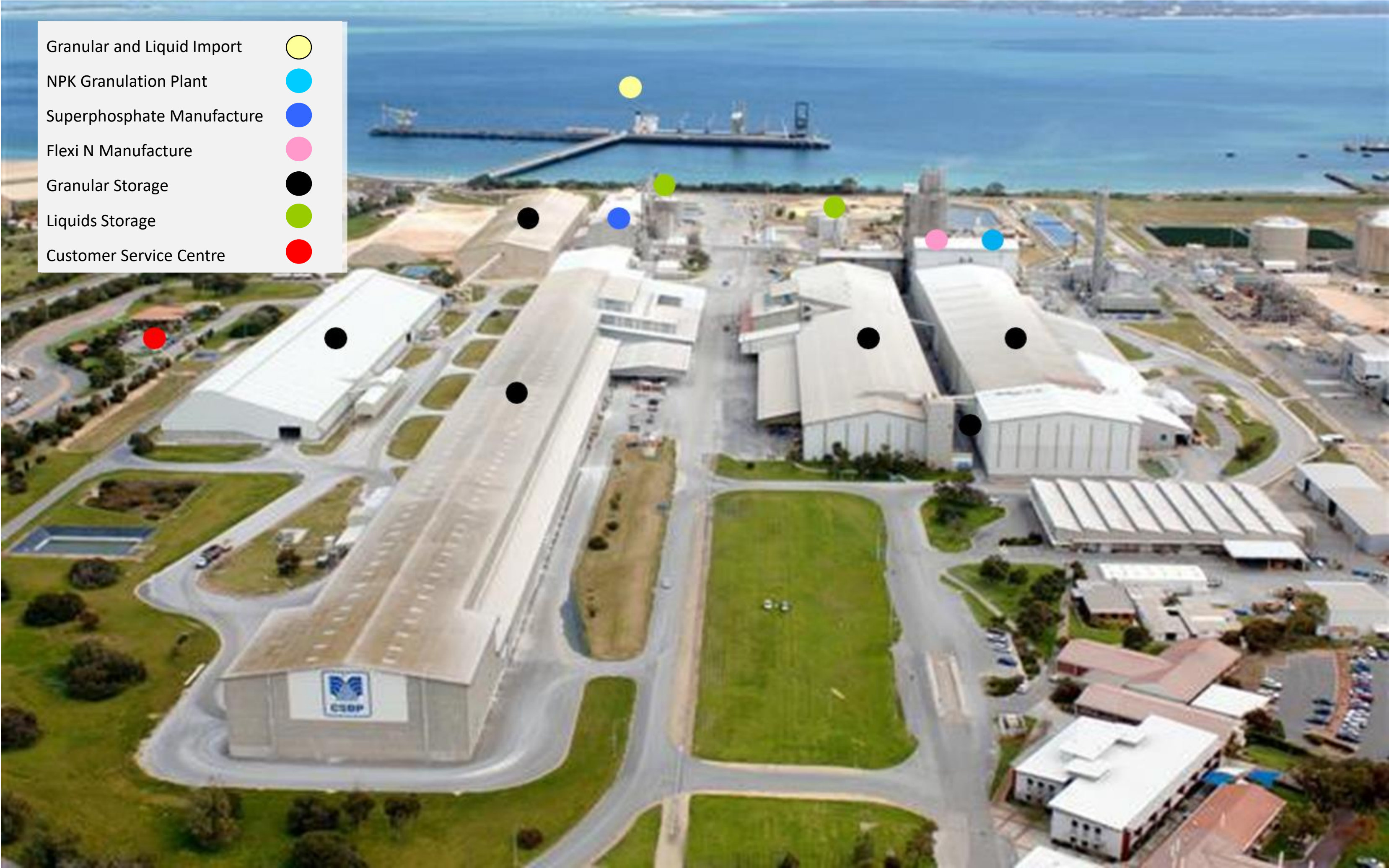
- Manufacturer and importer of wide range of quality nitrogen, phosphate and potassium-based fertilisers in blended, compound and liquid form
- Dedicated soil & plant analysis laboratory
- Over 90 years of trials research
- Dedicated sales force of 50 team members plus a network of agents delivering quality nutritional advice

Competitive advantage

- Kwinana site established in 1967 with key access and logistical advantages
- Only WA manufacturer of superphosphate and granular fertilisers
- Leader in the development of liquid fertiliser products
- Leveraging local agronomist knowledge through services



Fertiliser facilities at Kwinana



Flexi-N Development

- CSBP introduced liquid Flexi-N (UAN¹) to the WA market in 2003 as an alternative to solid nitrogen e.g. Urea
- Leverages underutilised, fully-depreciated storage assets and CSBP's AN solution production capacity
- Local manufacturing supplemented by large shipments via a dedicated jetty pipeline
- Growers recognise the logistical and agronomic advantages of Flexi-N over solid nitrogen and have invested significantly in on-farm Flexi-N storage



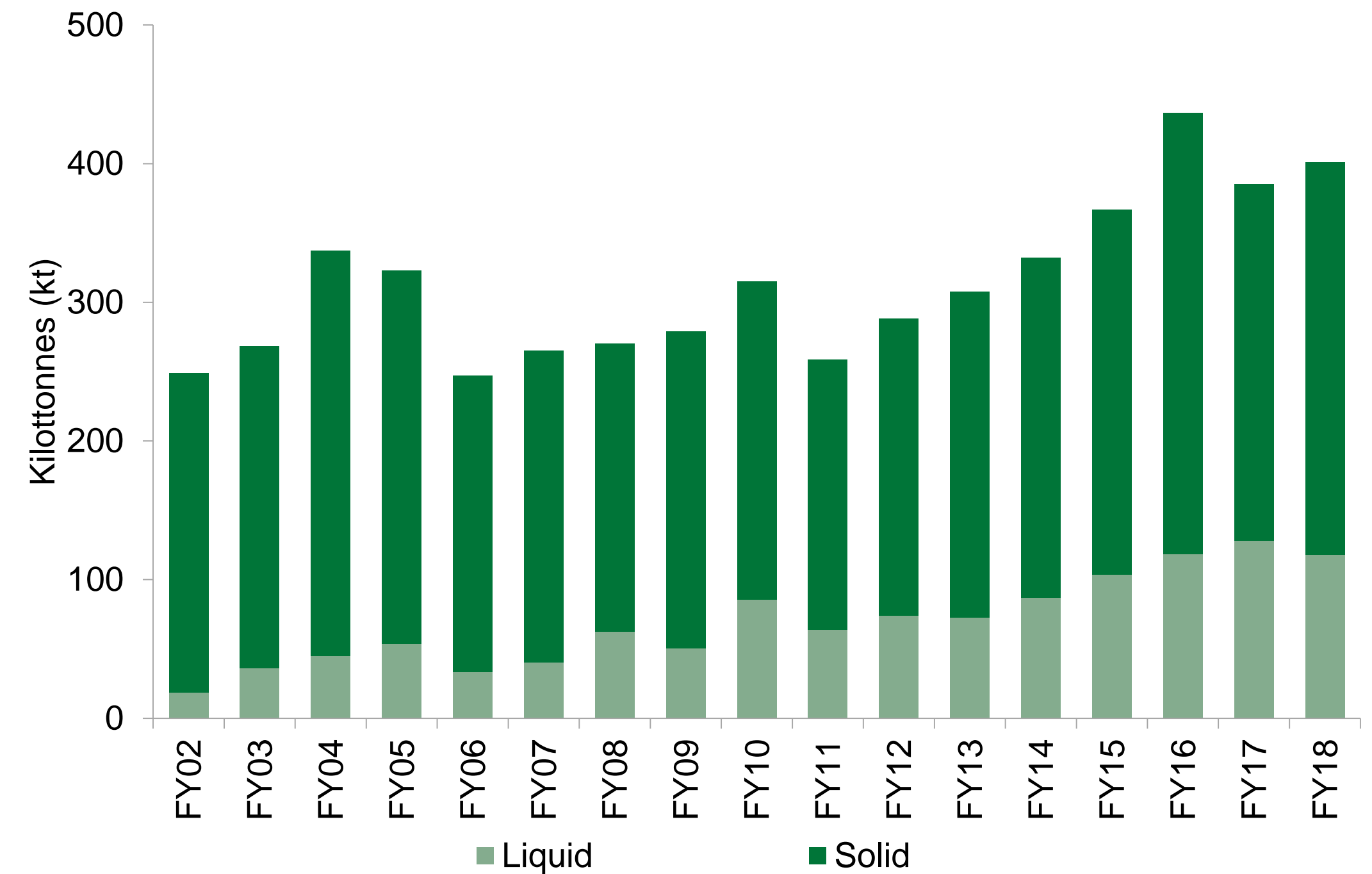
1. UAN – Urea Ammonium Nitrate



Flexi-N Development (continued)

- UAN now represents over 30% of total WA nitrogen requirements; Flexi-N the market leader
- Growth in nitrogen, especially UAN, driven by:
 - Higher yielding crop varieties
 - Increased planted area
 - Move away from pasture
- CSBP is currently progressing with a capital investment which will increase Flexi-N storage and despatch capacities in Kwinana by 50%

WA Market nitrogen volumes (nutrient tonnes)



Decipher Investment

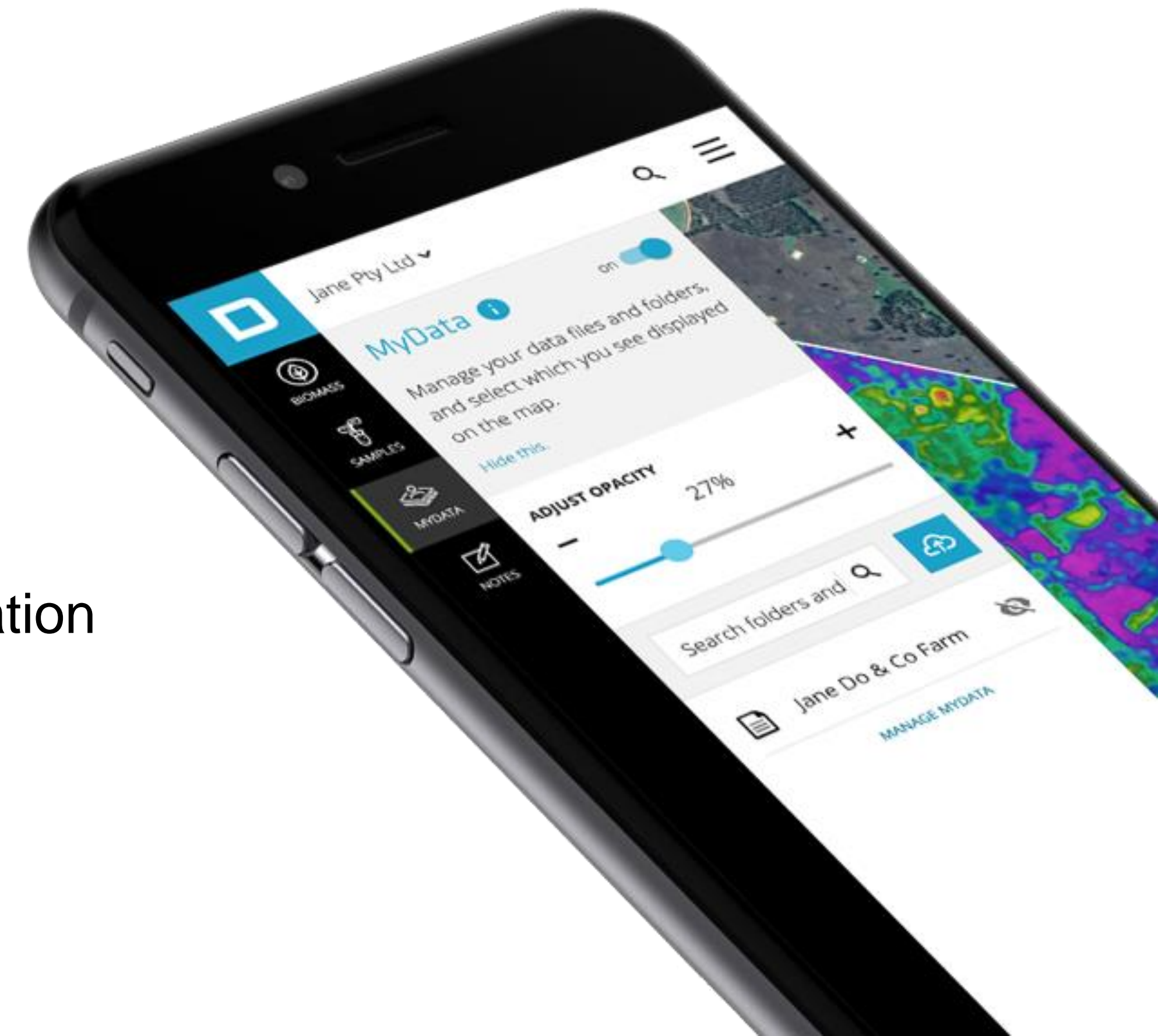
- Launched Decipher as the Geospatial Information System platform for agriculture in October 2017, based on an evolution of CSBP's research into this area
- Powered by Google Earth Engine, Decipher enables growers and their advisors to easily visualise farm data enabling informed nutrition management decisions
- Decipher recently expanded to include mining rehabilitation

DecipherAg – Agriculture

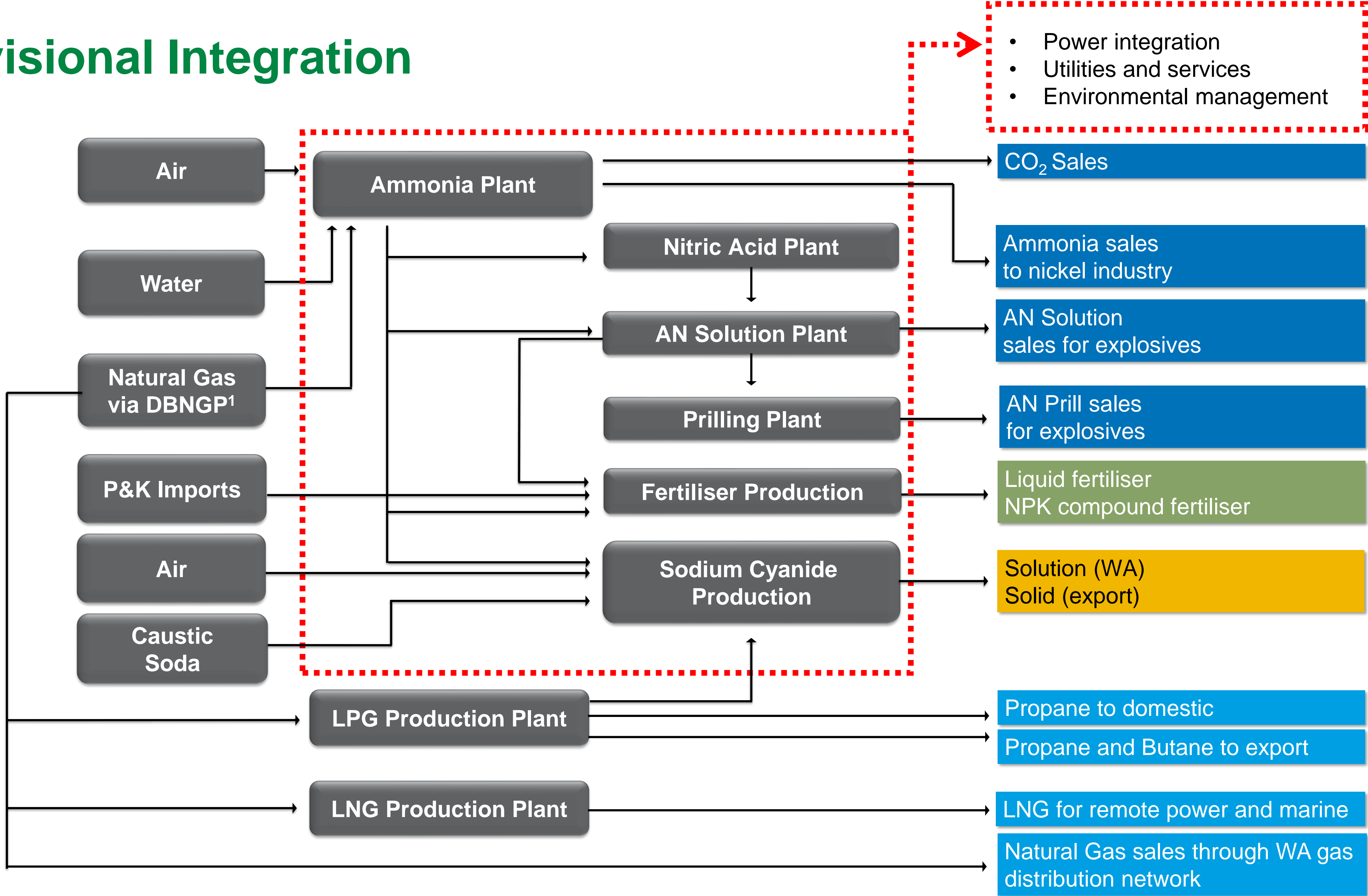
- Provides reliable vegetation analysis helping growers optimise yield and return-on-investment

DecipherGreen – Mine rehabilitation

- Provides one central platform for customers to visualise vegetation performance and health



Divisional Integration



- Power integration
- Utilities and services
- Environmental management

Distribution & logistics

1. Dampier to Bunbury Natural Gas Pipeline



**Wesfarmers Chemicals,
Energy & Fertilisers**

