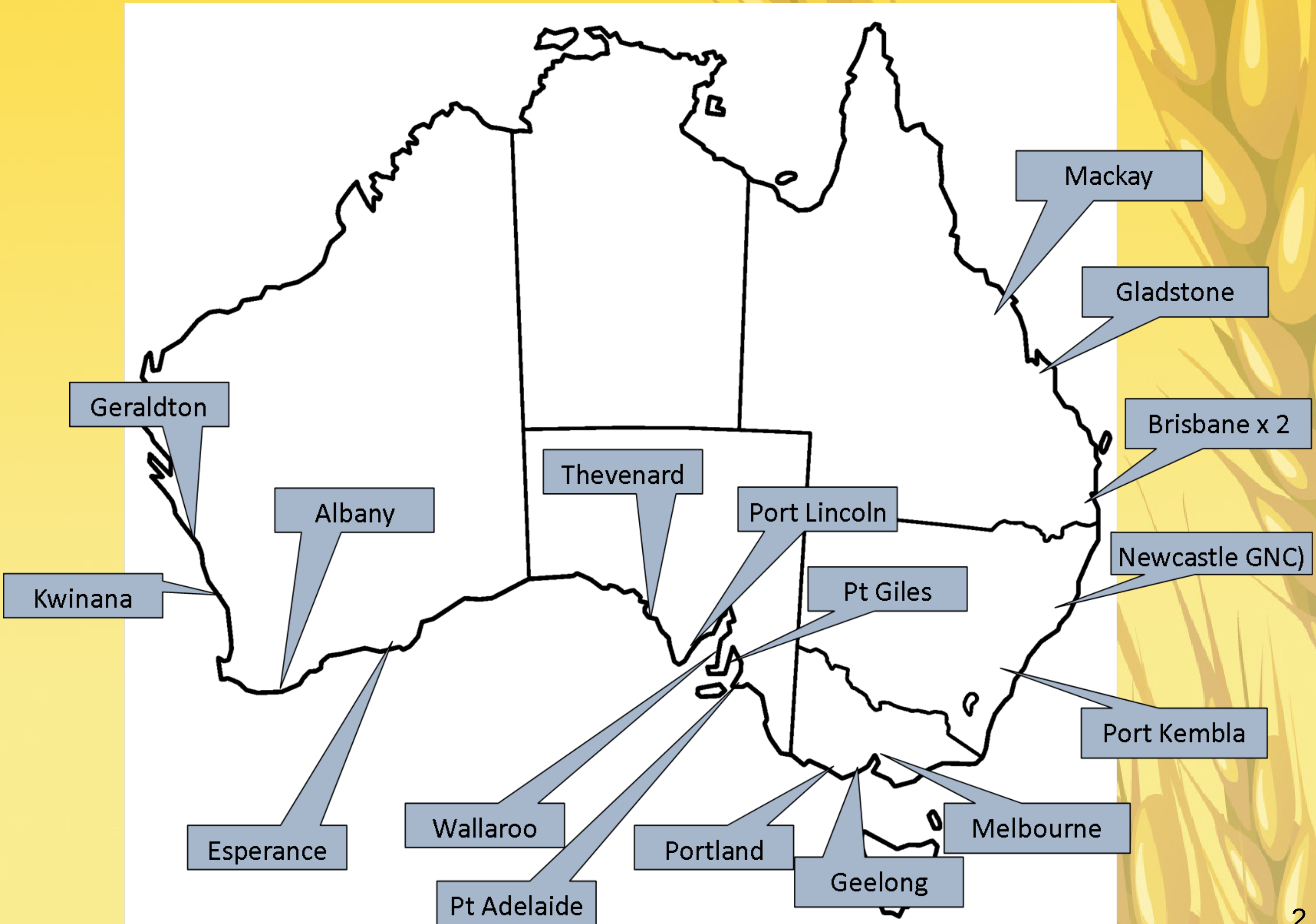
Drivers of the future shape of Australia's export grain supply chains

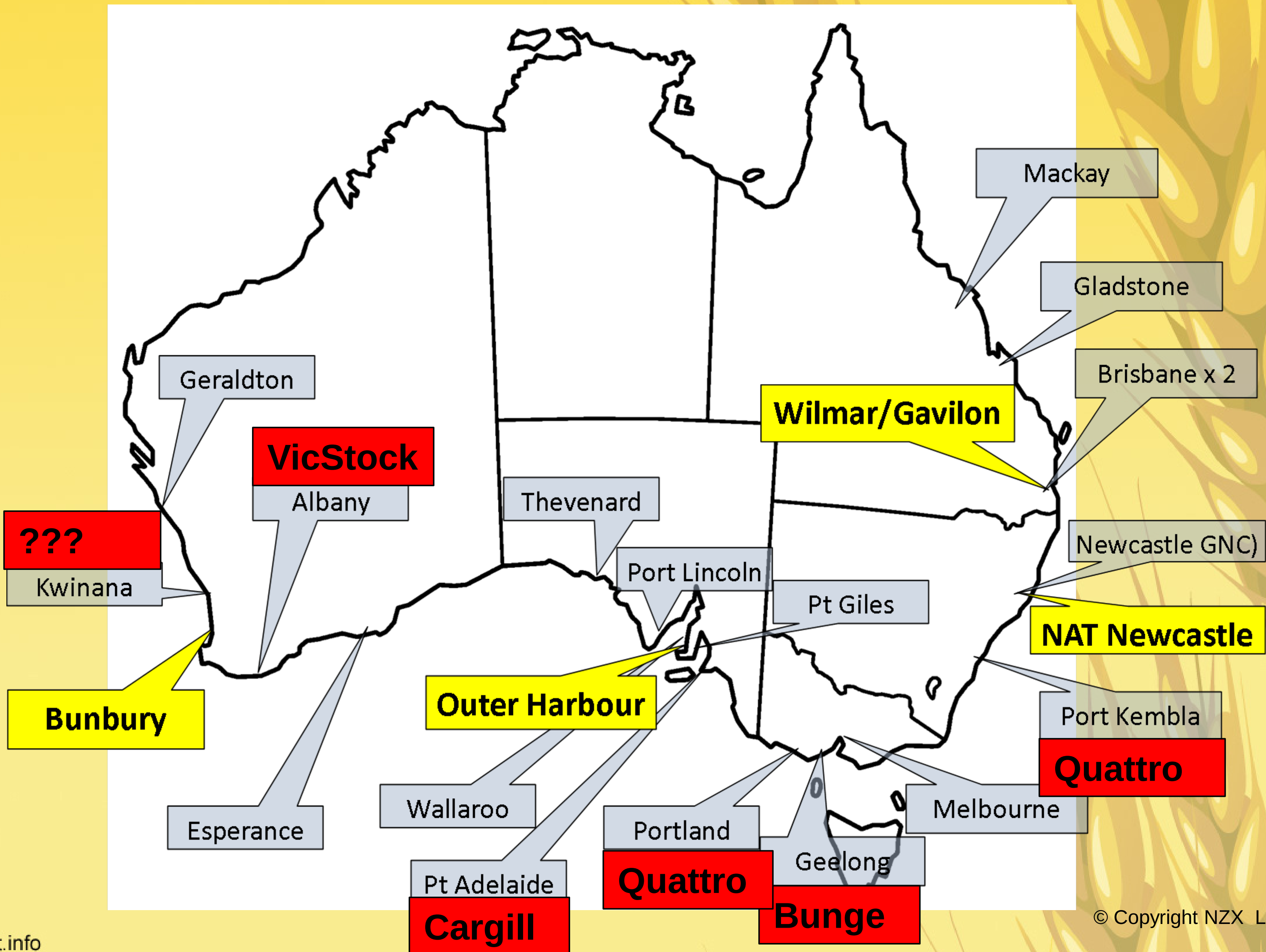
Mitch Morison, Managing Director, Injekta Group

REUTERS/Shamil Zhumatov

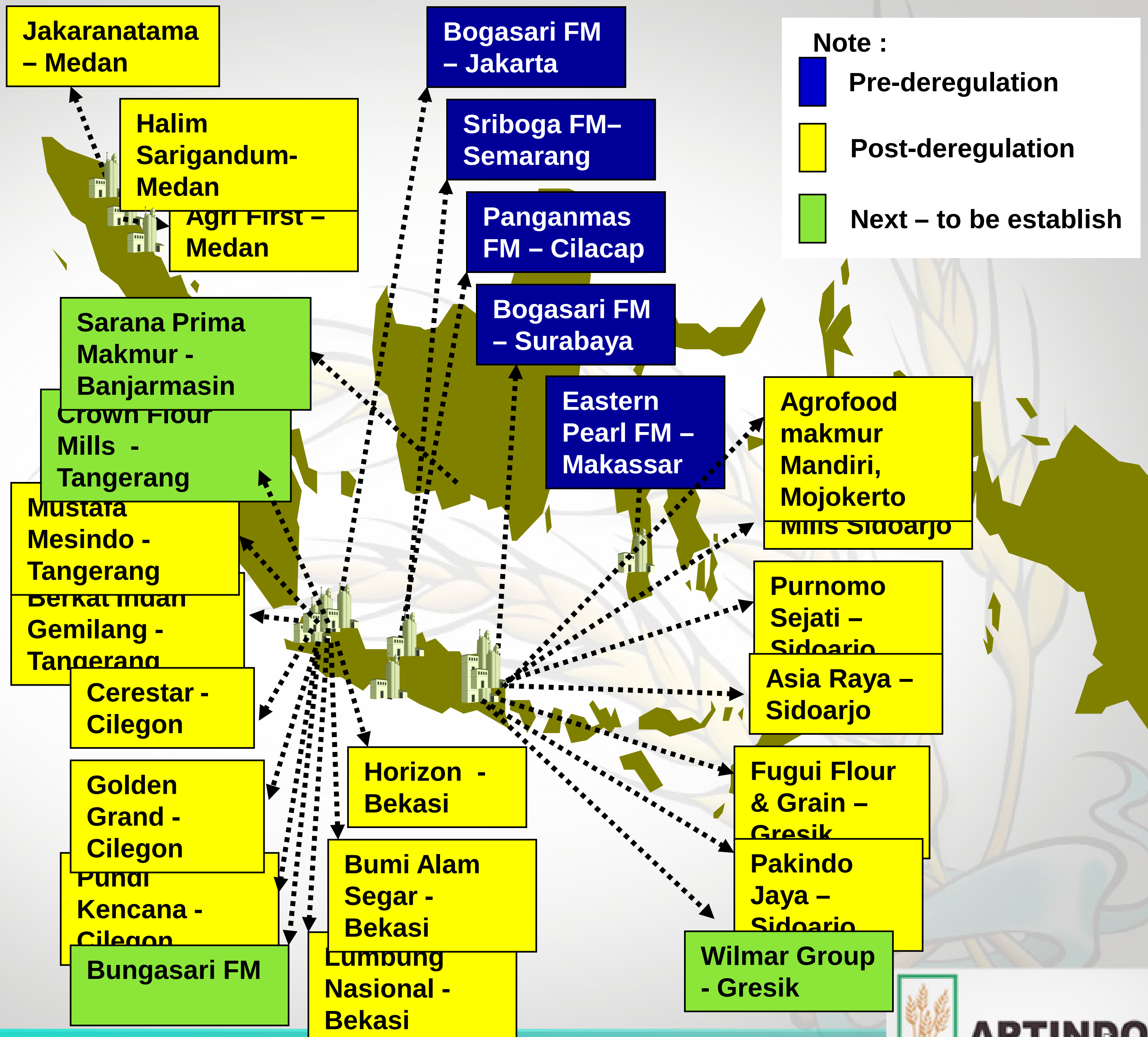
Grain Port Infrastructure 2008



Grain Port Infrastructure 2020



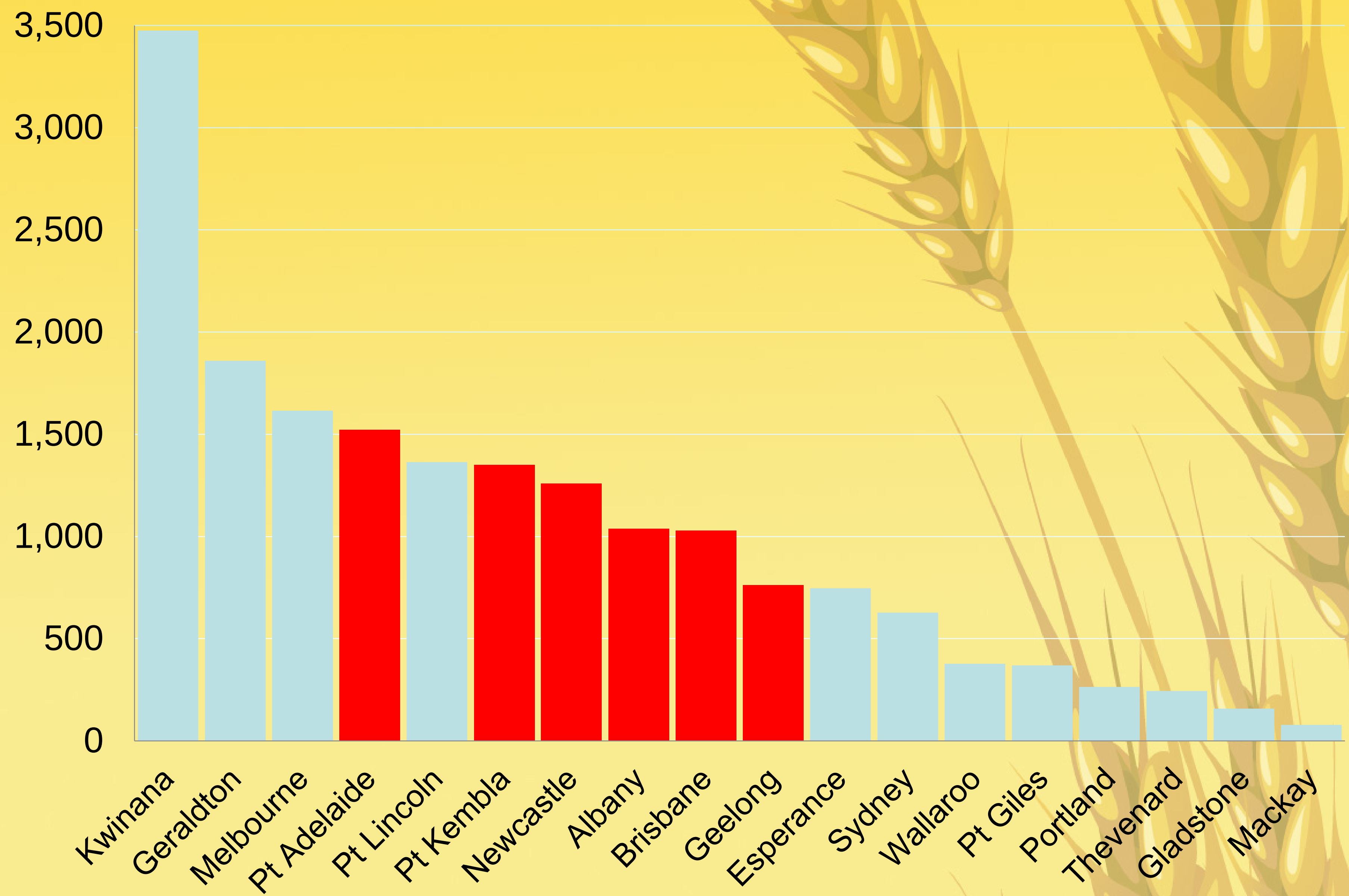
PETA LOKASI INDUSTRI TEPUNG TERIGU INDONESIA SEBELUM DEREGULASI (Era of BULOG: Pre 1998)



Jakaranatama – Medan
Halim Sarigandum- Medan
Agri First – Medan
Bogasari FM – Jakarta
Sriboga FM– Semarang
Panganmas FM – Cilacap
Bogasari FM – Surabaya
Eastern Pearl FM – Makassar
Note :
Pre-deregulation
Post-deregulation
Next – to be establish
Sarana Prima Makmur - Banjarmasin
Crown Flour Mills - Tangerang
Mustafa Mesindo - Tangerang
Berkat Indah Gemilang - Tangerang
Cerestar - Cilegon
Golden Grand - Cilegon
Pundi Kencana - Cilegon
Bungasari FM
Horizon - Bekasi
Bumi Alam Segar - Bekasi
Lumbung Nasional - Bekasi
Agrofood makmur Mandiri, Mojokerto
Mills Sidoarjo
Purnomo Sejati – Sidoarjo
Asia Raya – Sidoarjo
Fugui Flour & Grain – Gresik
Pakindo Jaya – Sidoarjo
Wilmar Group - Gresik

Five year average wheat exports by port (Mmt)

(2008-09 to 2012-13 including volume in containers)



Comparison of Australian supply chain costs to Canada

2013/14	WA CBH	NSW GrainCorp	SA Viterra	Qld GrainCorp	Victoria Emerald	Canada West Coast
Port Charges*	$ 21.90	$ 20.99	$ 21.78	$ 24.11	$ 21.11	$15.00
Upcountry receival	$ 11.49	$ 15.18	$ 13.64	$ 15.39	$ 15.85	$15.00
Storage (3 months)	$ 0.00	$ 4.50	$ 3.30	$ 4.50	$ 4.80	$10.00**
Rail freight (200km)	$ 19.00	$ 23.00	$ 27.20	$ 23.00	$ 23.40	$45.00***
Total	**$ 52.39**	**$ 63.67**	**$ 65.92**	**$ 67.00**	**$ 65.16**	**$85.00**

Notes

*** Includes terminal elevation charges by terminal operator + berth service charges from port owner (wharfage, berthage, harbour fees).**

**** Storage charges are predominantly 'on-farm' costs for grower storage**

**** Canadian transport distances are much larger (1200 – 1500km) but lower *cost per net tonne per km (ave $0.03/ntk In Canada vs ave $0.07/ntk in Australia)*.**

Source: 'The cost of Australia's bulk grain export supply chains – AEGIC 2014'

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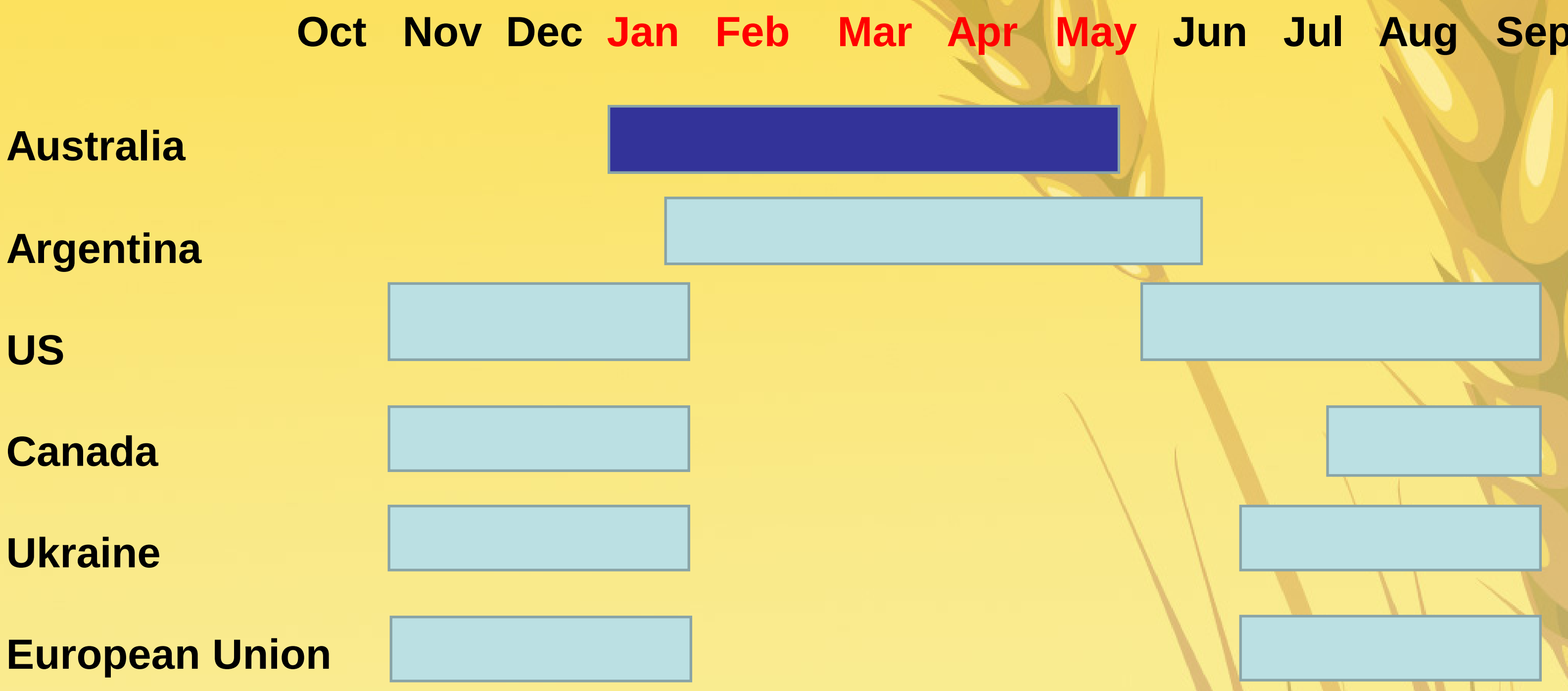
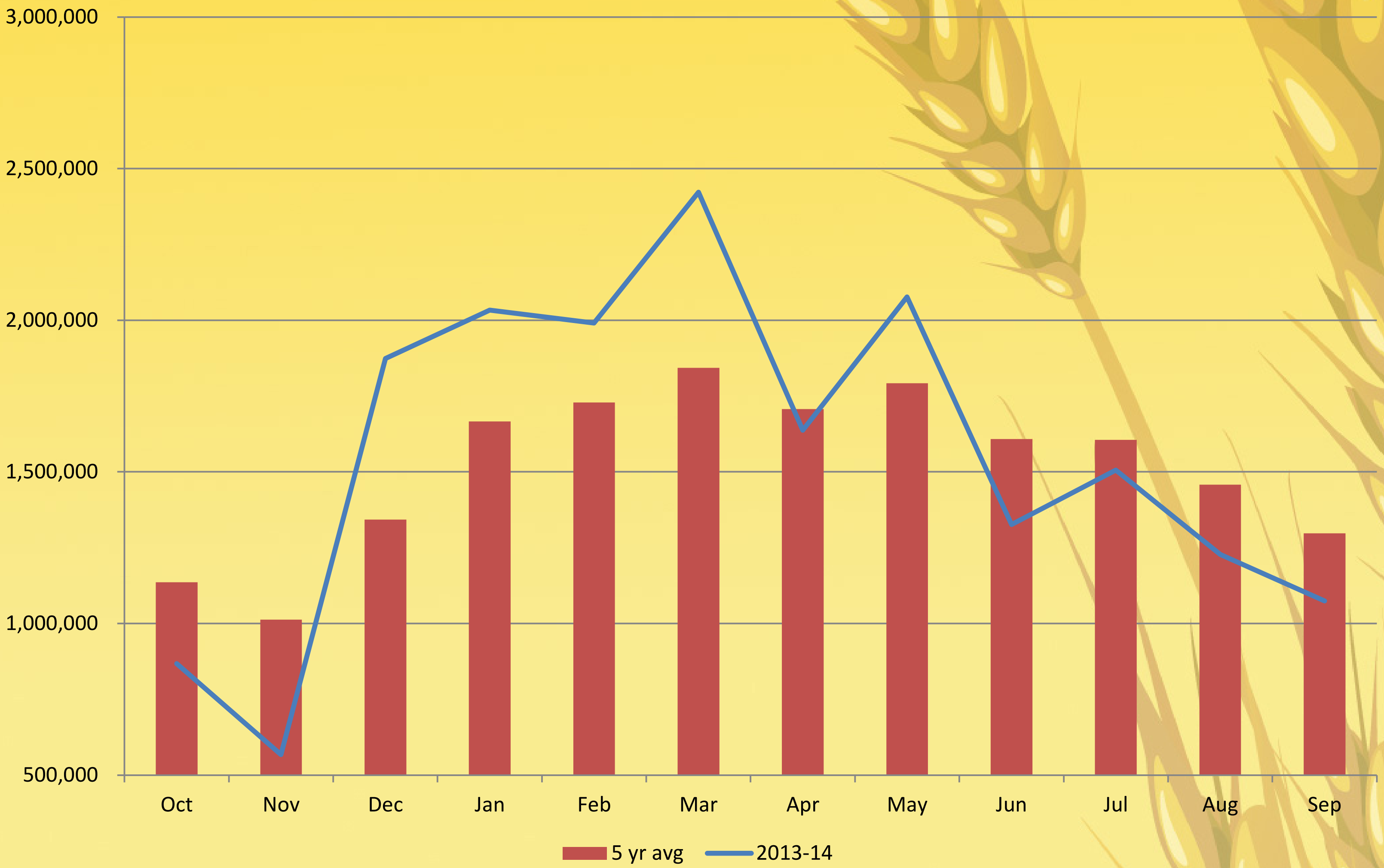
Major grain exporters ‘peak’ marketing seasonality



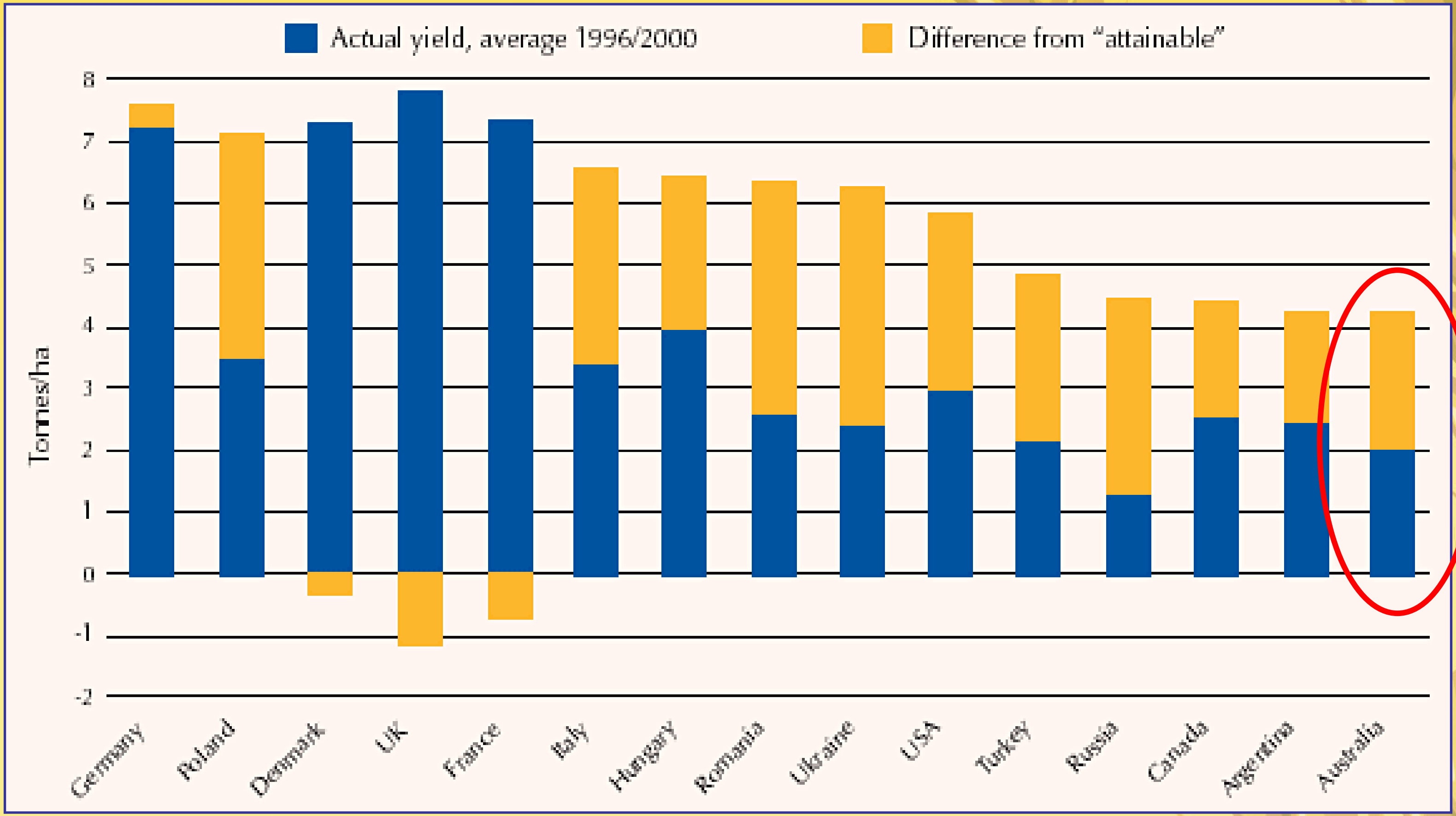
The maximum demand for shipping slots from Australian ports is from January to May
Why? Grower marketing + Marketer balance sheet + Southern Hemisphere window

Export shipping 'seasonality' for Australian wheat (Mmt/month)



The upside for Australia's grain supply chain

Wheat: actual and agro-ecologically attainable yields (rainfed, high input)
Source: FAO, World Agriculture -- Towards 2030.



GIWA's WA Grains Industry Strategy 2025+ Vision

Commenting on the launch today (***24th Feb 2015***) by the WA Food and Agriculture Minister of the **WA Grains Industry Strategy 2025+,** a strategy to **double** the value of the WA grains industry by 2025, the Chairman of the Grain Industry Association of WA Inc. (GIWA) Mr Sean Powell, said***, "It is not inconceivable that by 2025 we may be looking at an annual Western Australian grain crop approaching 20 million tonnes, valued at around $10 billion."***

GIWA
Grain Industry Association of Western Australia

The current 'risk vs return' challenge in the Australian industry

- Lack of political will and financial capacity by Gov'n to address rail infrastructure
- Returns on asset for existing grain infrastructure – very low (2.1%*)
- Level of price competition at farm gate for grain – hyper-competitive in East, diminishing in WA and SA
- Methods to secure seasonal shipping slots – very inequitable
- Level of efficiency of transport to port – very poor

So why are the 'multi-nationals' investing in new infrastructure: both up-country storage and port terminal elevation?

(Juturna Infrastructure market briefing report, April 2014)*

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Incumbents vs challengers: good market dynamics

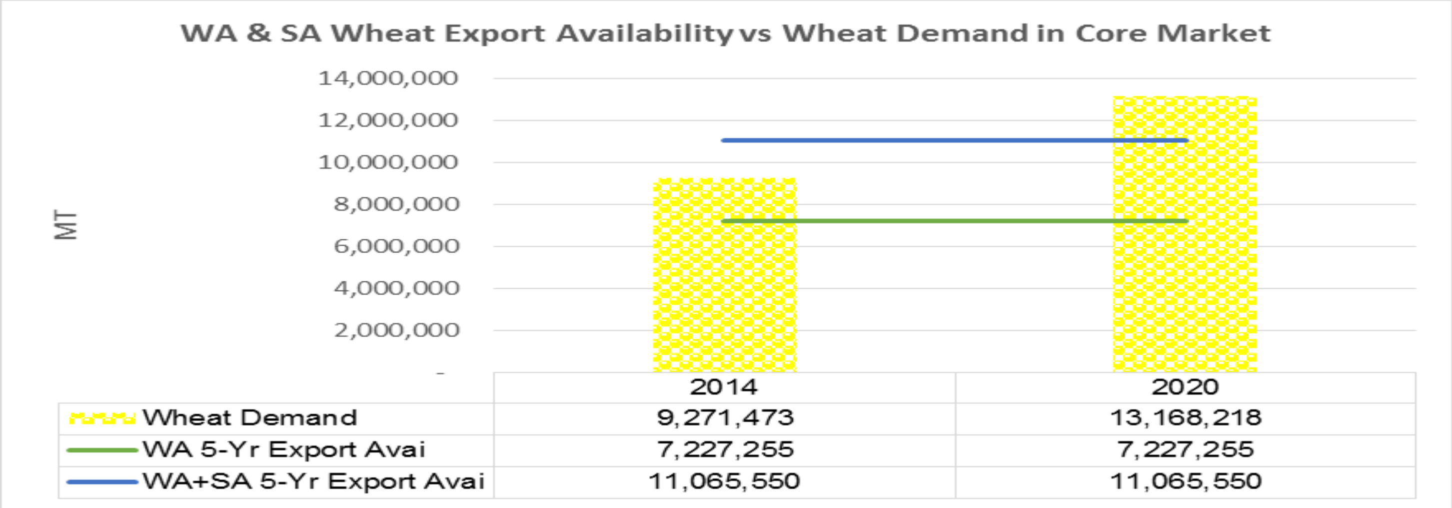
Common refrain from existing asset owners (e.g. GrainCorp, CBH, Glencore):

GrainCorp's Port Terminals at Geelong and Portland face:

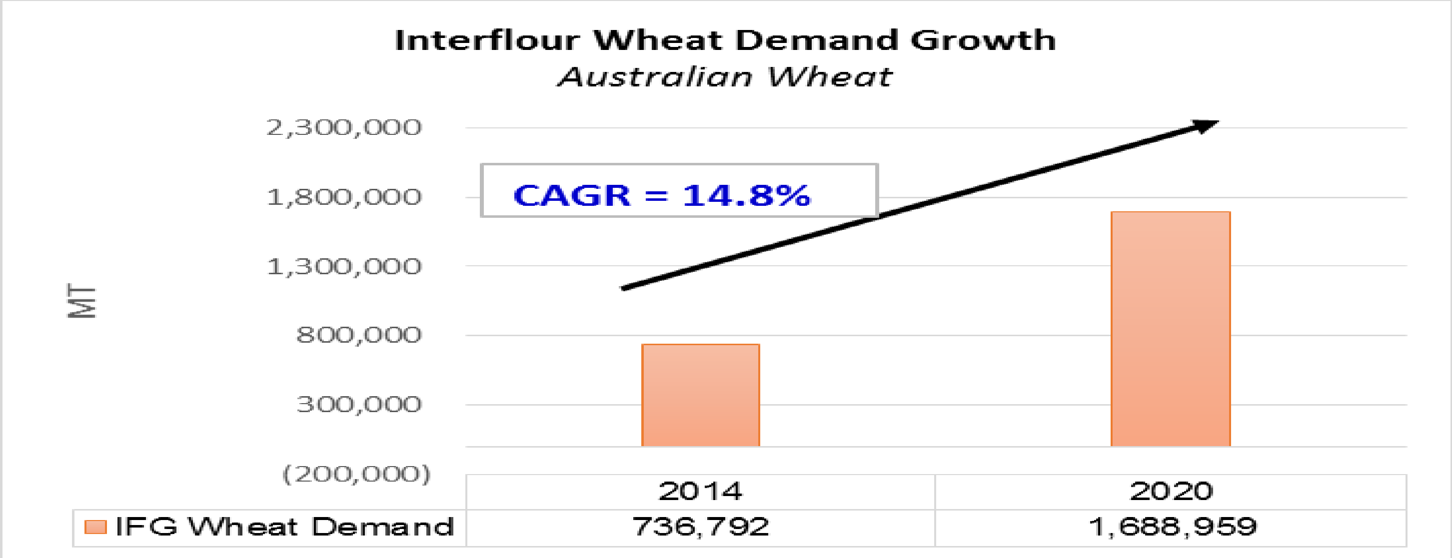
- ***Variable grain production and receivals and even more variable bulk export task;***
- ***Strong demand from domestic end-users, limiting surplus grain for export;***
- ***Strong demand from container packers, further limiting surplus export grain for bulk export;***
- ***Strong competition and excess capacity at each step of the grain supply chain.***

(Page 4 - GrainCorp's Dec 2014 submission to ACCC for *Exemption from Port Terminal Access (Bulk Wheat) Regulation*)

WHEAT DEMAND & WHEAT AVAILABILITY



	2014	2020
Wheat Demand	9,271,473	13,168,218
WA 5-Yr Export Avai	7,227,255	7,227,255
WA+SA 5-Yr Export Avai	11,065,550	11,065,550



	2014	2020
IFG Wheat Demand	736,792	1,688,959

KEY POINTS

1. Total demand in Asian markets for Australian wheat will exceed supply by 2020.

2. The importance + value of Australian wheat will become even more critical to consumers.

3. Integrated supply chains will need to be developed – whether for bulk or specific wheat grades / varieties.

4. Questions + confusion about the capability + sustainability of the Australian supply chain to meet this requirement

   * Port Access
   * High Cost Structures
   * On Farm, Warehouse and Port Loading Blending

The challenges for Australia's <u>grain vessel loading</u> system

CBH secures 'free pass' on allocating capacity and running port terminals from Federal Government in March 2015.

Glencore, GrainCorp and CBH want to implement LTA with willing exporters: essentially long term 'take or pay' at $8 to 10/mt up front payment to secure slots.
Problems:

- **Opaque allocation of volume, but will be 'spread' including outside peak shipping months (June to Dec).**
- **Inherently unfair to smaller exporters and new exporter entrants**
- **Run by 'logisticians' rather than 'exporters' looking 'along the value chain'**

Result: Increased catalyst for further investment in alternative port terminal infrastructure.

The challenges for Australia's interior grain transport system

Rail today: Inefficient and out-dated rail with 'path dependency' and mis-aligned gauge systems + Variability of task + Poor siding condition + Slow rail discharge + Poor track condition + 'Last mile' access to port conflicts + Low priority for state and federal government's infrastructure spending**.**

Road today: Flexible + Price competitive + Critical to surge task requirements + Subject to some regional load restrictions + Supply subject to other sector demand and seasonality

'GrainCorp expects to triple its rail loading rates at 68 sites to average more than 500 tonnes an hour, estimating the rail export efficiency lift could be worth an extra $5/t in returns to growers and return 1 million tonnes of grain to rail from road*.' – *GNC Project Regeneration 2014 grower marketing material

Is bulk/heavy load road transport priced appropriately? ***Juturna Infrastructure market briefing paper – 'Good Instincts', April 2014:***

'Continued government funding of major heavy vehicle upgrades to highways that run parallel to mainline rail, combined with a lack of reference pricing for full cost recovery from heavy vehicles on these specific inter-capital east coast routes, continues to sterilise a market for commercial mainline rail investments that would benefit grains….'

The $50 Billion question: Should the Federal and State Government's invest, or can they create the right environment to encourage private sector investment, in Australia's regional bulk (grain) rail infrastructure?

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*A recent report prepared for Regional Development Australia – **Murraylands and Riverland** into freight and rail operations stated:*

*"The two Mallee railway lines are bulk single commodity lines that were not constructed to the standards required for the bulk commodity task and are too old and costly to maintain and justify upgrading. **A benchmark estimate is that an investment of around $700 million would be required to replace these lines to the standard required.** The two key attributes for bulk freight infrastructure are volume and consistency **and these two railway lines currently lack both. The road freight alternatives using larger truck configurations are becoming increasingly economic and operate throughout the year.***

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Glencore/Viterra ***submission to the COMMONWEALTH GOVERNMENT'S AGRICULTURAL COMPETITIVENESS GREEN PAPER – Submission date: December 2014***

The challenges for Australia's up-country supply storage

Up-country storage today – Too much, too expensive and too much of poor quality, resulting in low return on assets (and equity) and poor serviceability of under-performing assets to growers.

- ***'GrainCorp is midway through closing more than 100 sites in NSW, Victoria and Queensland and creating receival cluster areas based on key depots where it will spend $200 million in a three-year period to boost storage and rail logistics efficiencies' – Andrew Marshall, Fairfax Agricultural Media 23rd December 2014.***

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- ***'Wally Newman, (Chairman CBH) said CBH's Supply Chain Optimisation (project) wouldn't automatically shut bin sites down due to a "phase in" period and expected that new sites may emerge as priorities****.' - ***Farm Weekly 26th Feb 2015***

The future shape of the Australian grain supply chain

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5 – Existing port terminal owners seek to increase storage at port as a means of 'insulating' their business from new competitors at those ports.

The future of Australia's grain supply chain?