

Stronger Primary Industries



Department of
Primary Industries

P2X- initial meeting

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Presentation Outline

- Who is NSW DPI
- What does NSW DPI do and where/why
- Strategic alignment
- Opportunities to work with DPI
- P2X interest -fertiliser and fuel
- H₂ Cuts
- Questions

Who is NSW Department of Primary Industries ?

Research

- Largest rural research provider in Australia
- 650 scientific and technical staff
- \$500M portfolio of R&D projects
- Globally, top 1% of research organisations in agriculture, plant and animal sciences.
- 25 research stations and 13,000 ha trial sites



Services

- Provides policy and production advice to industry
- Supports industry training and workforce development
- Advocates for market access
- Provides loans and assistance through Rural Assistance Authority for industry development and emergency responses – *Rural Assistance Authority*

Regulation

- Regulates biosecurity, food safety and animal welfare- NSW Food Authority
- Enforces biosecurity control compliance and leads biosecurity emergency responses - *State Coordination Centre*
- Licenses and approvals, such as fishing and hunting, and approvals for intensive production systems
- Monitor industry and natural environment

Regional NSW

- NSW DPI
- LLS
- Soil Con
- Regional Development
- Precincts
- Mining

DPI Regional Footprint

DPI ...with you

Researching the future today

With twenty key research stations state-wide, DPI has been benchmarked in the **top 1% of research organisations globally** for science focusing on agriculture, plants and animals.

1% Globally recognised as a top 1% Ag research organisation

\$ Portfolio of \$100m per year of research and development projects

DPI is the largest rural research provider in Australia

13,000 ha of trial sites

600+ scientific and technical staff



Fast Facts

- ✓ 1500 staff
- ✓ 25 sites across state
- ✓ \$500m portfolio in R&D
- ✓ global top 1% of research organisations in agriculture, plant & animal sciences.
- ✓ Capacity to research wide variety of commodities across multiple climate and production zones.

4 Sites that are slated to be carbon neutral :
Wollongbar, Port Stephens, Tocal and Narrabri

DPI Strategic Priorities- 2021-2030

Sustainable Resources and Productive Landscapes

- Assess and monitor natural resource health for sustainability
- Govern natural resource use through modern policy and frameworks
- Regulate natural resource access now and for the future
- Improve the quality of the natural resource base



Biosecure Industries and Environment

- Lead the preparation for and prevention of future biosecurity threats
- Coordinate timely and risk proportionate responses
- Rapidly and efficiently contain biosecurity threats
- Work in partnerships to minimise impacts to primary industries and the environment from endemic biosecurity threats

Carbon Neutrality and Climate Resilience

- Expand options for cost effective emissions reductions or avoidance
- Increase carbon storage and sequestration
- Adoption of energy efficient and renewable energy technologies
- Quantify vulnerability and opportunities to climate changes and support adaptation



Economic Growth

- Improve access to a capable workforce
- Support high value, new and emerging industries and new product development
- Develop zero waste and circular economy opportunities
- Drive use of food for improved health and consumer outcomes
- Partner for productive, efficient and resilient food and fibre supply



Response Capacity

- Anticipate and prepare for adverse events
- Timely and proportionate response
- Minimise impact of events
- Deliver rapid assistance and support sustained recovery



Food Safety and Animal Welfare

- Prepare for and reduce the occurrence of food safety risks
- Respond to and contain foodborne illnesses and food incidents
- Continuously improve the welfare of animals
- Ensure communities expectations around animal welfare are being met

Access opportunities at DPI research stations

The NSW DPI has an array of research stations across NSW. These stations undertake research priorities for government and industry. With around 13,000 hectares of land under management over 25 sites, DPI's research stations replicate most agri-ecological zones for food and fibre across NSW.

Opportunities arise where stations may look to collaborate with the commercial sector. We are developing opportunities for demonstration sites and tests beds for producer and community engagement. DPI is interested in partnering with industries, government and private enterprises to facilitate trials and collocation at our sites.



A) Site collocation and facilities hire for enterprises

External parties can make proposals for commercial operations or enterprise collaboration on DPI research stations where there is alignment with DPI objectives and site requirements. DPI has various facilities available for use by enterprises. This includes sheds, office space, field trials, labs and education facilities across stations and locations. DPI will consider enterprises whose activities are aligned with the Department's strategic priorities and regional economic benefits. Premises are available on varying terms and are negotiated on a case by case basis.

General details about the offerings at specific research stations are outlined [here](#). Please submit the [Request for Opportunity form](#) with your needs. DPI staff will assess requests against DPI resource and site availability, priority and preference.

B) Testbeds, Demonstration or trials at DPI sites

DPI can provide particular opportunities for specific businesses:

- DPI is developing various **testbeds** and **demonstration sites** for commodities and across regions which can demonstrate and promote technology and products.
- DPI can also provide fee for service **trial or validation services** on its sites for specific use cases.

Completing the [Request for Opportunity form](#) assists DPI staff to assess requests against DPI resource and site availability, priority and preference. A preliminary assessment of your needs will be followed up with direct discussions.

Research Station Request for Opportunity

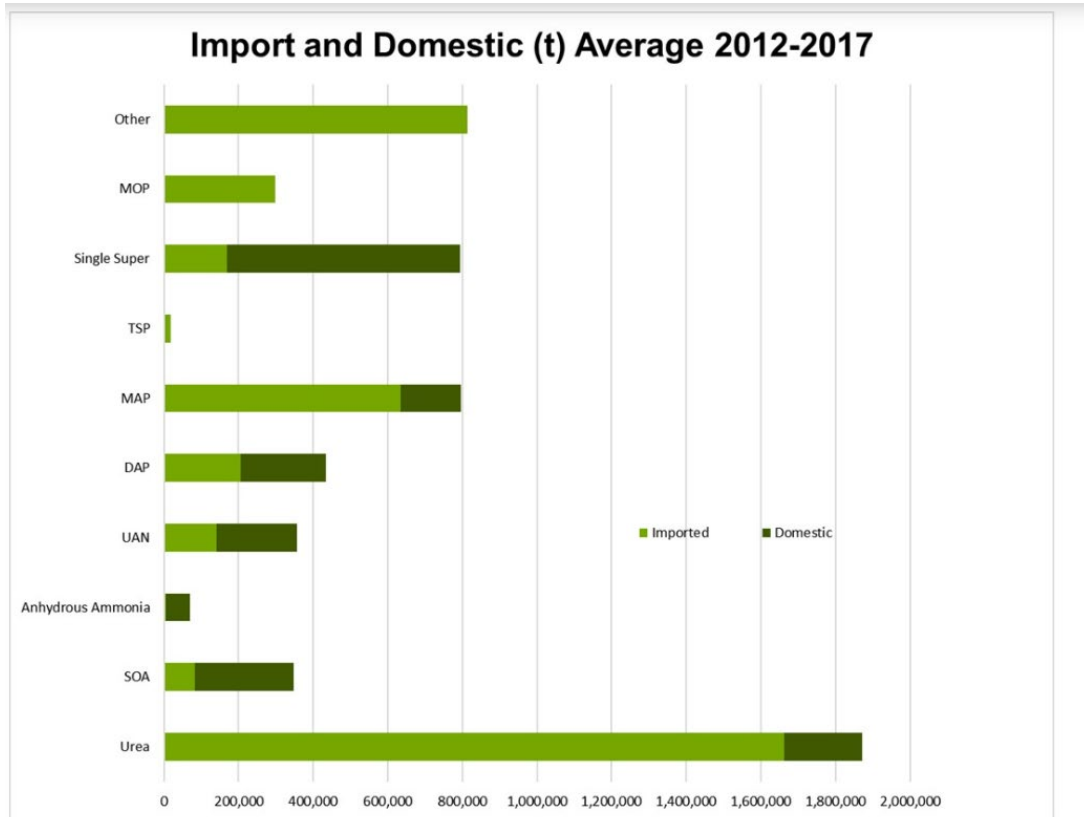
Completing the Research Station Request for Opportunity form assists DPI staff to respond to requests against DPI availability.

[Research Station request for Opportunity](#)

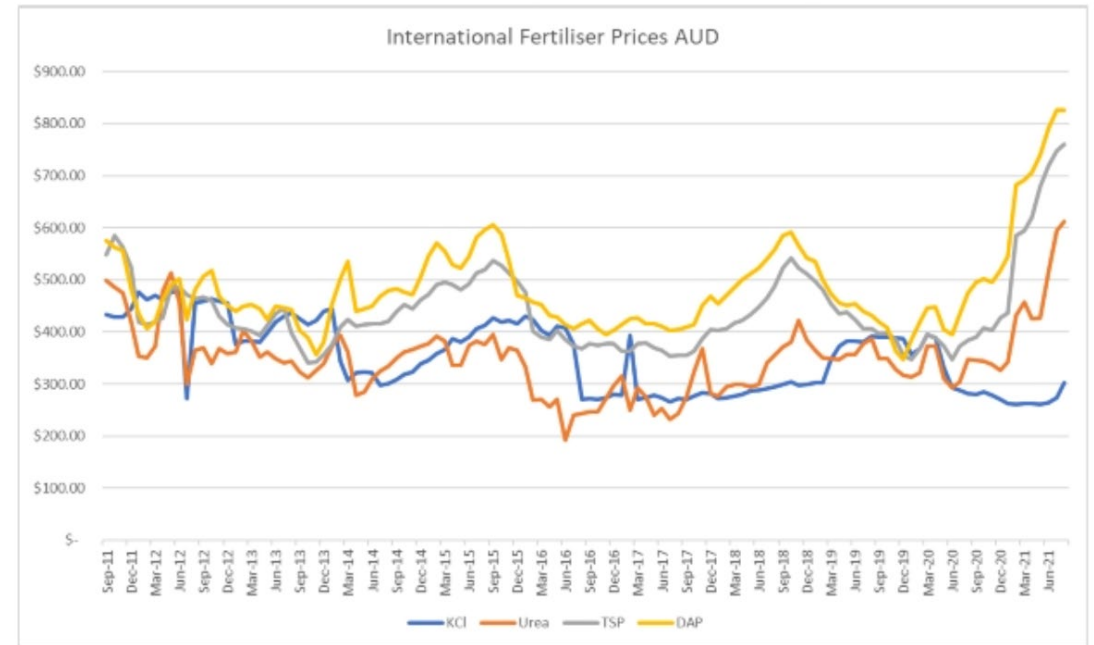


P2X interest -fertiliser and fuel

Fertiliser (source and cost)



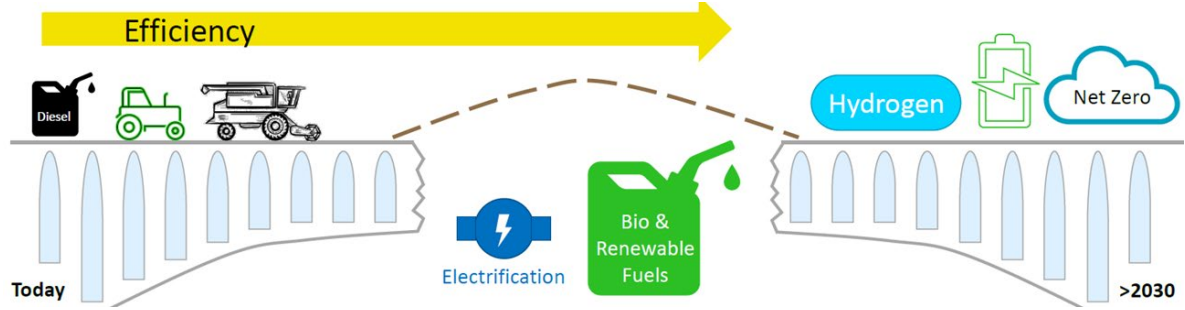
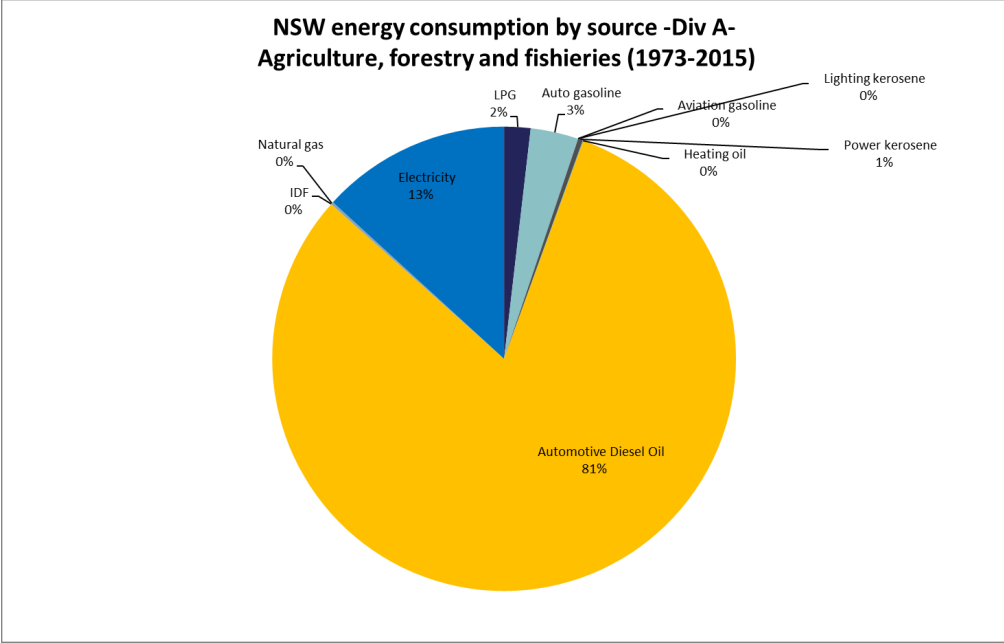
The graph shows average fertilizer sales in Australia for the calendar years 2012 to 2017. *Domestic single super is manufactured from imported phosphate rock.



Source: <https://fertilizer.org.au/Fertilizer-Industry/Global-Fertilizer-Prices>

Source: <https://fertilizer.org.au/Fertilizer-Industry/Australian-Fertilizer-Market>

Diesel- sector dependent diesel imports



Source: https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0011/1321796/mov3ment-diesel-use-in-ag.pdf



CUTS
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NEXT HAIRCUT AVAILABLE



HYDROGEN

HYDROGEN



Exploring Beyond Diesel webinars

Low and zero carbon alternatives to diesel, including hydrogen, biofuels and electrification for agricultural applications.



Thank you for your time.

We look forward to
working with you.

Questions & Comments



