Product quality along the supply chain:
A producers' perspective

James Whiteside
Chief Operating Officer
Incitec Pivot Fertilisers

The IPL Group has two businesses

4 million tonnes per annum in Australia and internationally via Quantum Fertilisers

**Manufacturing assets:**
- Fully integrated production of 1mtpa of MAP & DAP at Phosphate Hill, NW Qld
- Ammonia, urea, granular sulphate of ammonia production at Gibson Island, Brisbane
- Superphosphate production at Geelong and Portland, Victoria

**Distribution assets**
- 11 import and distribution centres in eastern Australia
- Network of over 400 dealers
- International trade
- Quantum Fertilisers in Hong Kong. Offices in Switzerland, India and USA

**Commercial explosives and blasting services in North America and Asia Pacific**

**Manufacturing assets:**
- Ammonium nitrate and fertiliser manufacture at Cheyenne Wyoming, Louisiana Missouri, Donora Penn, St Helens Oregon, Moranbah Qld, Moura Qld (JV)
- Initiating systems manufacturing and assembly plants in USA, Mexico and Australia

**Distribution assets**
- In Australia, USA, Canada, Mexico, South Africa, Chile, Turkey, Indonesia and Papua New Guinea
Product quality

What is quality?

“Contractual” components
- Product meets physical and chemical specification at those points specified in the contract of sale

“Commercial” components
- The product performs to the standards set by the customer
- The product can accommodate variable storage, handling and transportation conditions over a prolonged period in time
- The company performs its obligations under the contract in every respect and consistently
- The company endeavours to accommodate changes to the customers need to the extent it is practically possible to do so
- The company actively and continuously engages with the customer to improve quality, as measured by the customer
- The customer actively and continuously engages with the customer to reduce costs and improve supply chain performance

Australian farming requires high quality fertiliser

Farmers use tools such as soil testing to optimise choice and rate

Dry land farming is characterized by low inputs across wide areas: product distribution is critical
Seeding equipment is designed for low rates and requires consistently high quality fertiliser

Exports

Australian manufactured product is also sold to:
- New Zealand
- Pakistan
- India
- Thailand
- Bangladesh
- Brazil
- Argentina
- Chile
Quality at Incitec Pivot

IPL is applying “Lean” principals of manufacture and supply chain performance to manage its process of business improvement.

“Quality”, as defined by the customer, is the vital element that defines how processes should be improved.

We’ve call this process “BEx”

BEx is “ground up”: it empowers everyone in the company to work collaboratively to improve their part of the business. To do this, they need to understand how their part impact on overall supply chain performance

Our goal in implementing BEx Value Chain is to develop best practice and performance, organisation wide, to produce world class results

... through a structured approach to continuously improving our best practice maturity, step by step.
How does this work?

We use a methodology – called TRACC® - based on Lean tools and techniques.

1. An assessment of our business will be conducted to measure current performance against world’s best practice.

2. Output is a roadmap and set of actions to progressively improve standards and performance.

Standardising and embedding best practices underpins sustainable World Class performance.

The “Parthenon” highlights “foundation” capabilities and “functional” capabilities
How this impacts quality and our customers

A key element of BEx is that it focuses on quality as defined by the customer. This mandates us to reach out to our customers and ask them how we can work together to improve all elements of our offer to them. We are well advanced with this work in the Australian market.

International markets are more challenging:
- the variety of needs is greater: can we be “all things to all people”?
- our “footprint” moves

Regardless, many of the benefits derived from the domestic market will apply internationally.