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# Rio Tinto Iron Ore (RTIO): Delivering More Value With Less Impact

## - An Integrated Tyre Management Strategy – From Delivery to Disposal

**RIO  
TINTO**

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IRON ORE



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## Summary

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## Introduction

- The global resources boom has had a significant impact on the availability of OTR (off the road) tyres
- In order to reduce the risk to the business, Rio Tinto Procurement (RTP) and Pilbara Iron devised an integrated tyre management strategy
- The approach drives value by extending the life of tyres, providing a second life to a percentage of Pilbara Iron's tyres and by recycling rubber particles produced as a result of the retreading process
- By approaching the issue through a sustainable development approach, RTIO is in a position to develop a significant opportunity to deliver more value with less impact



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## Lessons Learned

- The key lessons learned in developing the opportunity have been to:
  - approach tyre management from a holistic perspective;
  - explore other end use options for tyres; and
  - understand the opportunities to contribute to community capacity building
  - challenge traditional business assumptions – tangible benefits alone do not capture the true value of alternative solutions



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## Boundary Conditions – Rio Tinto’s Sustainable Development Approach

- Rio Tinto has developed a suite of guidelines and strategies to assist the business in delivering superior returns to shareholders over time taking a long term and responsible approach to the Group’s business
  - The Way We Work
    - “...Rio Tinto businesses, projects, operations and products should contribute constructively to the global transition to sustainable development”
  - Product Stewardship;
    - “...ensure that products are produced, used and managed at end of life in a socially and environmentally responsible manner in order to support societal goals of sustainable development and commercial goals of sustainable markets”
  - The objectives of the RTIO sustainable development principles delivering more value with less impact

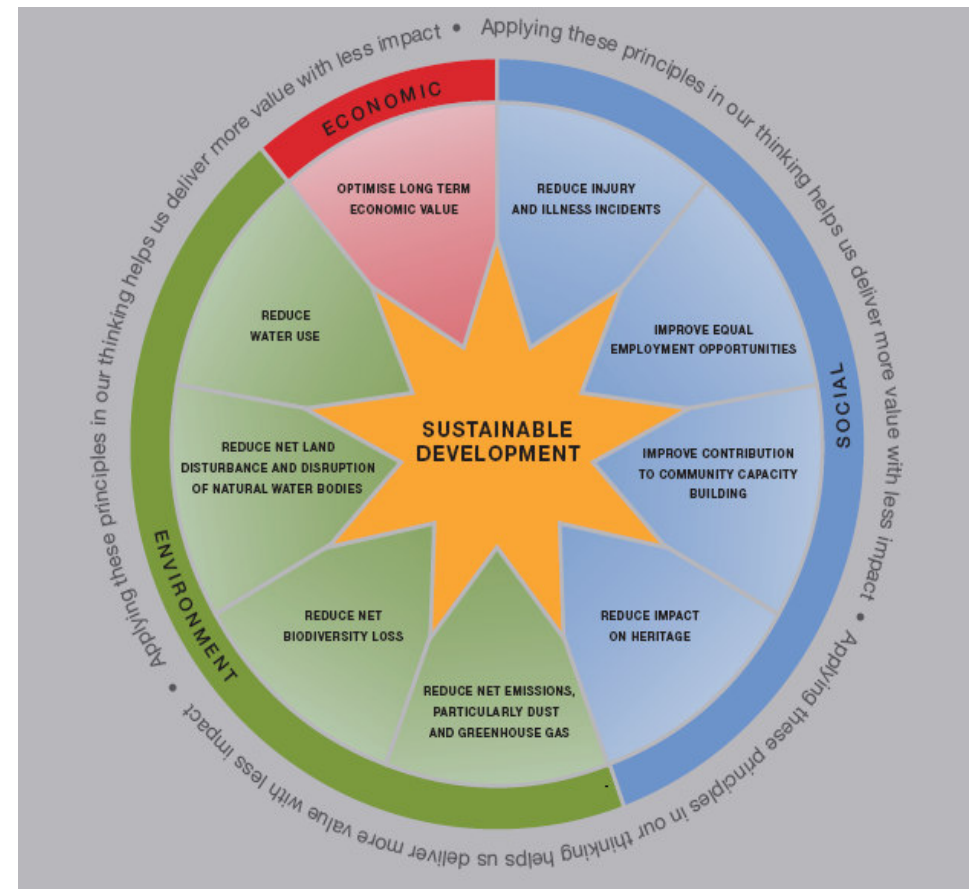


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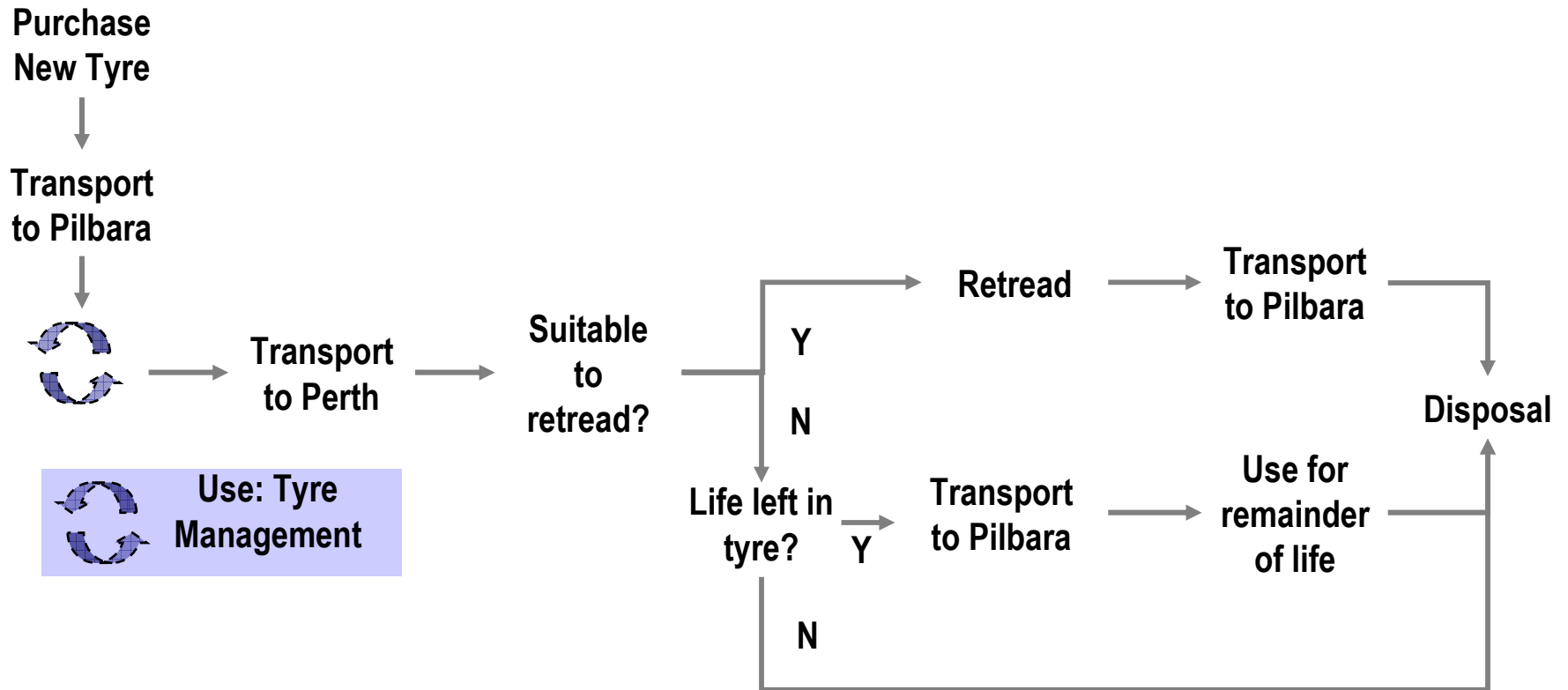
## Boundary Conditions – RTIO Sustainable Development Principles

- RTIO Sustainable Development (SD) Principles enable projects to be defined in economic, social and environmental terms providing a broad focus and assisting in the identification of risks and opportunities.
- The SD principles with most relevance to the tyre management strategy are:
  - Optimise long term economic value
  - Reduce injury and illness incidents
  - Reduce net land disturbance
  - Contribution to community capacity building





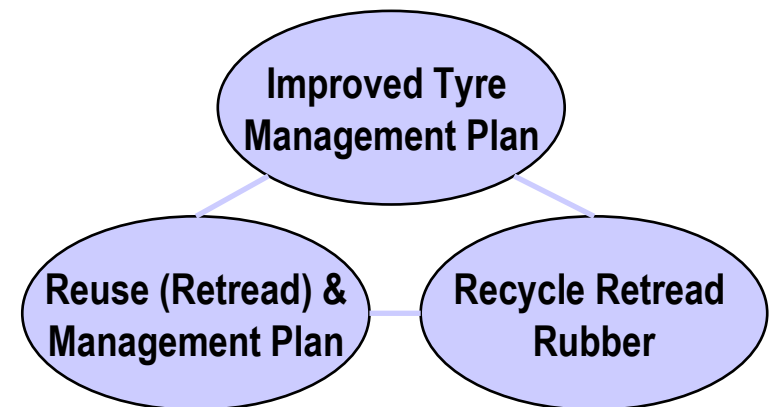
# The Integrated Tyre Management Strategy





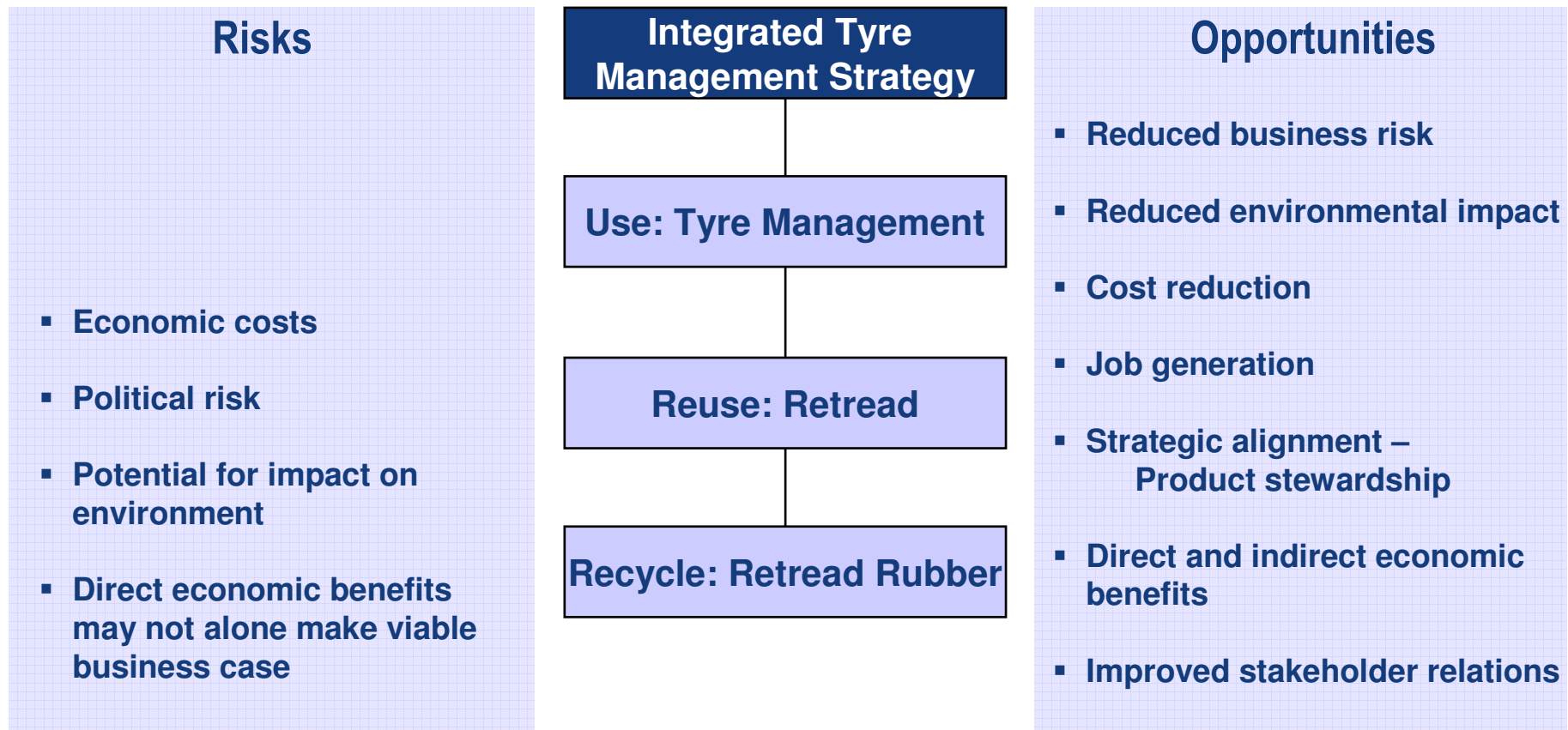
## The Opportunity – Integrated Tyre Management Strategy

- The proposed cycle consists of three key components:
  1. **Use:** Development of improved tyre management systems and tools on site to extend the life of new tyres (and subsequent retreads)
  2. **Reuse:** Retreading the tyres in Perth to extend life time
  3. **Recycle:** Rubber buffings that are a by product of the retread process





# Testing the Strategic Alignment





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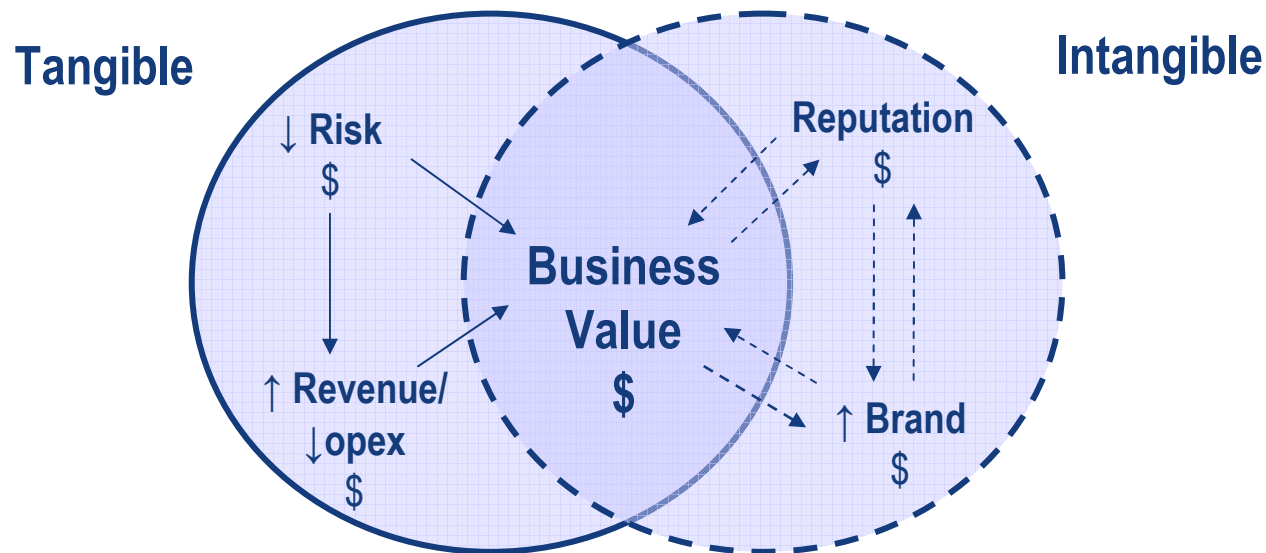
## The Current Situation

- The business case for use and reuse has been made and is currently in operation
- The business case for recycling is not clear on the basis of tangible and intangible benefits alone
- The Rio Tinto Iron Ore Sustainable Development & Climate Change leadership Panel took a holistic approach to understand the value proposition on the basis of both tangible and intangible benefits and build a viable business case.



# The Value Proposition

- The value proposition in recycling OTR tyres relies on a combination of tangible and intangible value





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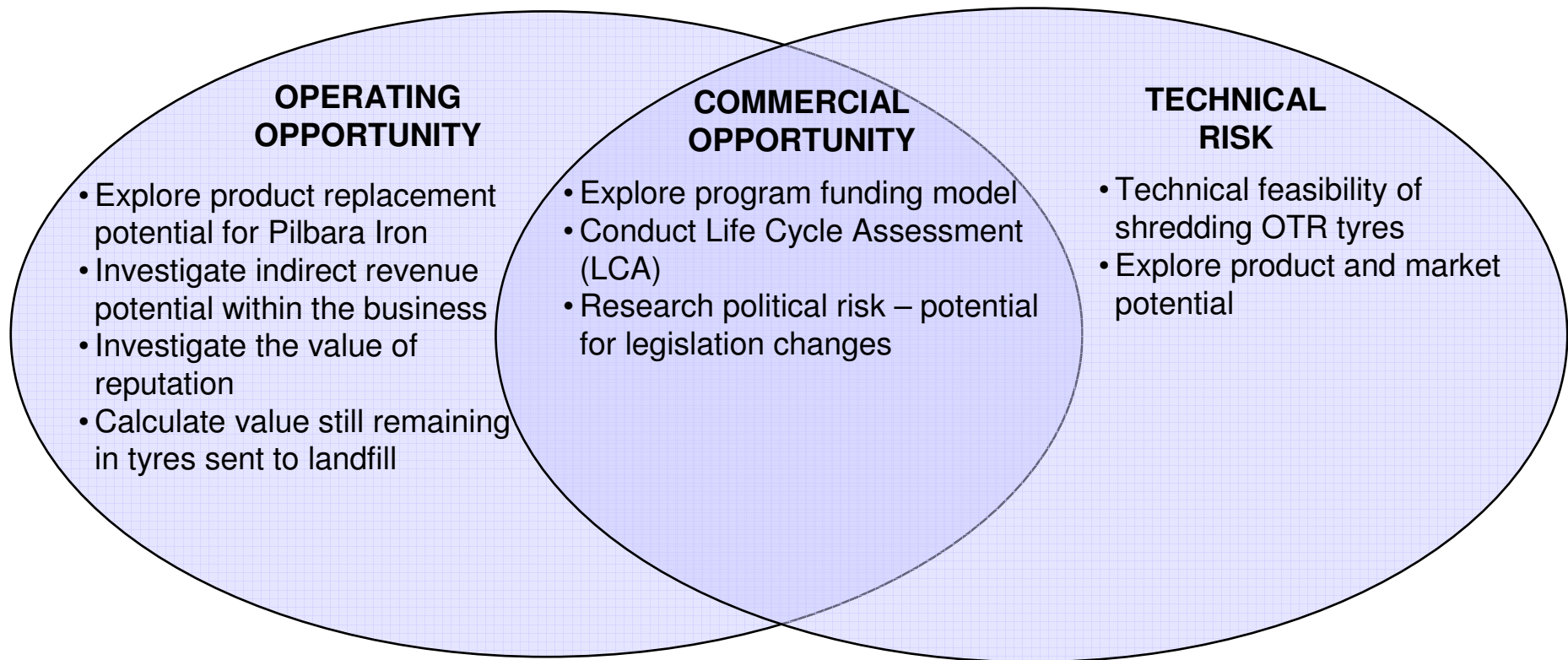
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## Building the Business Case

- Intangible value is the key:
  - Identify the complete range of risks and opportunities
  - Understand how the reputational and indirect revenue components contribute to the technical, operating and commercial aspects of the opportunity



## Building the Business Case – Actions





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## Building The Business Case – Delivery

- Delivering on the actions will indicate whether OTR tyre recycling is a feasible long term component of an Integrated Tyre Management Strategy.

In the process:

- Optimising long term economic value;
- Reduce injury and illness;
- Reducing net land disturbance;
- Contributing to community capacity building.



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## Take Home Messages

- A clear set of boundary conditions facilitates the development of the business case
- The key is in the intangible value:
  - Understand how the reputational and indirect revenue components contribute to the technical, operating and commercial aspects of the opportunity
- Finding sustainable solutions requires time, enthusiasm and commitment
- It's hard to deliver more value with less impact, but the business is realising the long term benefit