

**National Environmental Science Program** 

# Best practice case studies for increasing value recovery from end-of-life tyres and conveyor belts

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#### **PROJECT SCOPE: Best practice case studies**



Product stewardship schemes



Enablers for recycling



New technologies for value recovery

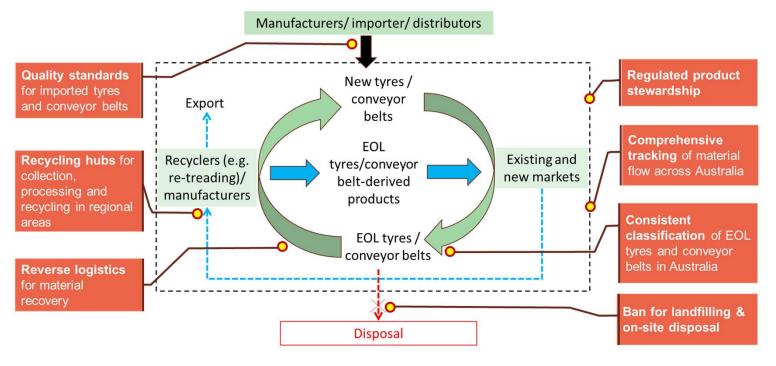


Uses and markets for products



Strategies for engagement with traditional owners

### Enablers for recycling end-of-life (EOL) tyres and conveyor belts















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## Tyre management approaches and technologies mapped against the waste hierarchy

	Waste hierarchy	Management approaches	Technology and concept examples
	Avoidance	Life extension through improved quality	Product design
	Reuse	Re-grooving, re-treading and repair for reuse	Mould retreading, vulcanisation in autoclave and grooving
	Reprocessing	Chemical or physical processing	Devulcanisation, shredding, crumbing, sorting
	Recycling	High-temperature processing to extract oil, carbon black and steel	Destructive distillation, pyrolysis, steel making
\	Energy recovery	Combustion for energy	Incineration
	Disposal	Landfilling or on-site burial	Segregated storage for tyres and conveyor belts to enable later resource recovery

#### **KEY RECOMMENDATIONS**

- ✓ Enacting regulated tyre and conveyor belt stewardship scheme
- ✓ Banning of landfilling and onsite disposal of end-of-life tyres and conveyor belts to support value recovery
- ✓ Implementing enablers to support stewardship scheme and market development
- Selecting recycling technologies based on waste hierarchy, circular economy principles, and indicators and metrics
- ✓ Engaging with traditional owners for end-of-life tyre and conveyor belt management





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