The Australian Model: How a ban on the export of baled tyres, revitalised Australia's domestic tyre reprocessing market – a case study for the UK

Australia - a blueprint for domestic circularity

The UK waste tyre sector faced pressure from the low-cost, high-volume export of baled End-of-Life Tyres car (ELTs), a practice that undermines domestic recycling capacity and carries significant environmental risk overseas.

Australia faced this exact challenge. By being bold and implementing a policy to **prohibit the export of whole and baled ELTs** and mandate shred for export, Australia successfully created a stable domestic materials stream. This legislative certainty has driven private investment in domestic processing infrastructure - accelerating the circular economy and moving the country closer to a **net-zero waste** future.

Policy innovation with shred-only for export

Four years ago, recognising the environmental impact of allowing ELT tyres being exported to countries like India for use in rudimentary Batch Pyrolysis plants, the Australian Government decided on meaningful reform. In 2020 they introduced the *Recycling and Waste Reduction Act*. ELT tyres now had to be shredded before they could be exported. It also created a new system of notification and licencing for exporters.

The subsequent regulations giving effect to the change were the Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021. The new provisions in Australian law firstly required operators to have a waste export licence in order to be able to export waste tyres at all. Secondly, it required that tyres could only be exported in a form that had been processed to shreds or crumbs of not more than 150mm. These could either be used in modern pyrolysis to create tyre derived fuel or they could be used for other purposes but only under a scheme verified by Tyre Stewardship Australia's Foreign End Market program so that the fate of exports was known.

On 1 December 2021 the export of whole used and baled tyres from Australia was banned. Exports were restricted only to materials that had been properly processed into **shreds**, **crumbs**, **granules**, **or Tyre Derived Fuel (TDF)**, or used for verified retreading purposes.

This mandate effectively eliminated the simple, low-cost practice of baling and shipping whole tyres, forcing greater accountability and investment in domestic processing.

"Australia's prohibition of whole waste car tyre exports in favour of a shred-only policy in 2021 has clearly had a restorative effect on our domestic recovery infrastructure. This policy initiative has led to improved market confidence and investment in new recycling projects in Australia."

Rob Kelman, Executive Officer, Australian Tyre Recycling Association

The result: secured domestic infrastructure and confidence

By securing the national waste tyre resource, the ban immediately stimulated the market, rewarding companies willing to invest in high-value, environmentally sound domestic recovery.

In addition to removing an environmental hazard from countries like India, the regulatory change also created additional feedstock for the domestic recycling industry in Australia which was a spur to the circular economy and created the confidence for investors to increase capacity in domestic production of asphalt and in a new generation of modern pyrolysis plants that can use shredded tyres and which have a positive environmental impact.

New South Wales: From Waste Export to Local Resource

The state of New South Wales (NSW) quickly became a case study for success. The ban, combined with state-level regulation and the use of the **Integrated Waste Tracking Solution (IWTS)** for tracking large waste tyre loads, triggered a wave of infrastructural development:

- £5.3 million investment: Shortly after the ban, a \$10 million state-of-the-art processing facility was commissioned in NSW.
- Creating high-value products: Tens of thousands of tons of ELTs, previously shipped abroad are now transformed by domestic operators into high-grade rubber crumb for use in roads, playgrounds, construction and Tyre Derived Fuel (TDF).
- **Circular Economy engine:** the new tyre recovery plants represent a "massive win for the environment and for Australia's circular economy" by giving end-of-life tyres a new lease on life within Australia.

Driving the Circular Economy

The policy change aligns with the wider NSW **Waste and Circular Infrastructure Plan**, which seeks to use domestic waste streams to meet local material demand. By mandating shredding, the ban ensures that:

- 1. **Local job creation:** Processing jobs are created in Australia, not overseas.
- 2. **Environmental quality is assured:** Waste is managed to Australian environmental protection standards.
- 3. **Net-Zero transition is supported:** The resulting crumb and TDF products displace virgin materials, supporting the transition toward net-zero waste goals.

Why the UK must follow Australia's example

Australia's success provides a clear, proven pathway for the UK to address its well documented crisis of undocumented and environmentally harmful ELT exports:

UK Challenge	Australian Solution	UK Action Required
Illegal Exports & T8 Operators	Ban whole/baled exports (Dec 2021).	End the T8 Exemption for whole tyre storage and processing and adopt a shred-only export policy.
Lack of export oversight (Annex VII)	Mandatory tracking and enforcement of processed materials.	Full implementation of the digital geotagged Annex VII and mandatory reporting for all waste tyre exports at each stage of the supply chain.
Idle Domestic Capacity	Policy certainty drives £multimillion investment in domestic tyre recovery operations, including shredding and crumbing plants as well as investments in processes like pyrolysis and products like sustainable aviation fuel (SAF).	Use policy certainty to unlock the UK's 250,000 tonnes of licenced idle domestic capacity and stimulate new private investment.

This Australian precedent demonstrates the potential for the UK to enable conditions so waste tyres are processed in the UK to support domestic concrete manufacture, to produce asphalt and also for the construction of modern, continuous pyrolysis plants which use treated, shredded tyres as their feedstock and create a genuinely renewable

fuel without the environmental harm and risk to operator safety inherent in batch pyrolysis.

The Australian experience demonstrates that regulatory certainty – eliminating the export of unprocessed whole tyres – is the single most effective lever for protecting the environment, generating investment and establishing a robust, truly circular economy for ELTs in the UK.