

# Innovative market-based policy instruments for waste management: a case study on shredder residues in Belgium

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## *Abstract*

In an increasingly complex waste market, market-based policy instruments, such as disposal taxes, can give incentives for sustainable progress while leaving flexibility for innovation. However, implementation of disposal taxes is often criticized by domestic waste handlers that fear to be outcompeted by competitors in other countries. The paper discusses three innovative market-based instruments that limit the impact on international competitiveness: Tradable Recycling Credits (TRC), refunded disposal taxes and differentiated disposal taxes. All three instruments have already been implemented for distinct environmental policies in Europe. In order to illustrate how these instruments can be used for waste policy, the literature review is complemented with a case study on shredder residues from metal-containing waste streams in Belgium. The analysis shows that a conventional disposal tax remains the most efficient, simple and transparent instrument. However, if international competition is a significant issue or if political support is weak, refunded and differentiated disposal taxes can have an added value as second-best instruments. TRC are not an appropriate instrument for use in small waste markets with market power. In addition, refunded taxes create similar incentives but induce lower transactions costs.

## *Keywords*

Waste, policy, market-based instruments, tradable recycling credits, tax, downcycling, international competition