



THE SEAT FRAMES
Research into recycling the plastic seat frame took two years and numerous phases, including testing for toxic brominated fire retardant chemicals, which would have made the seats unrecyclable. Trials are now indicating over 90% of the seat materials can be recycled.

THE PLASTIC
The plastic goes into a specially-designed, mobile, generator-powered granulator (above), which reduces the seat frames to small 'grains' of plastic. Those are pumped into big bags and provided to recyclers, which mix the material with resins and make it into stabilising ground matting (below, centre left), and plastic caps for steel reinforcing bars on building sites.

RIP EM UP
Michelle Duncan (left) was the brain child behind the car seat reimagineering project. Here she's working with contamination remediation consultant Dr Ben Keet, who did x-rays to make sure the plastic was safe to use.

STRAIGHT WORK
During the SeatSmart trial, Abilities Group, a non-profit group giving meaningful work to people with disabilities, dismantled the seats for recycling. Now SeatSmart is fully operational, they are dismantled as part of Department of Corrections community work programmes.

THE SEAT BELTS
The belt buckles are separated from the seat belts, with the buckles sent off to scrap metal recyclers. Meanwhile, 3R is working with Karkt, which makes handcrafted bags from recycled materials. Karkt uses the child car seatbelts as handles or straps (far left) for its bags.

Sitting pretty

Recycling abandoned child car seats

When mother-of-two Michelle Duncan was told by Plunket to take her expired child car seat to the dump, she had other ideas.

Duncan works for Hastings-based "product stewardship" company 3R Group, whose *raison d'être* is working out how to make things from waste, and therefore keep it out of landfill.

Duncan did a bit of digging and discovered New Zealand car seat sales have risen from 40,000 in 2004 to 100,000 last year. But because the seats expire 6-10 years after manufacture (depending on the seat), there are lots of unuseable, out-of-date ones around.

3R's solution: "reimagineering", and the SeatSmart recycling project. With a funding grant from Auckland Council, and a cross-sector project team including councils, baby product retailers, NZTA and Plunket, 3R has come up with several things you never dreamed you could do with an unwanted child car seat.

