The 15 ha site of the new Woolworths Distribution Centre in Montague Gardens originally contained buildings which had to be removed. A quick demolition would have generated more than 16 000 m³ of mixed waste, which would have cost R12.3 million to landfill, with transport costs exceeding R64 000.

The project developers ensured that the buildings were carefully deconstructed to preserve the highest material value of the rubble. All concrete, mortar and brick were processed and reused, with 90% of the demolition waste being reused. Consequently, the participating projects saved money on raw materials and landfill airspace and they avoided greenhouse gas emissions associated with the extraction, processing and transport of virgin construction materials (higher than emissions associated with the processing of demolition waste). Only PVC piping, roof insulation and sheeting were landfilled.

By re-using 4 500m³ of old concrete, Woolworths saved R649 000 on construction materials and transport-to-landfill fees.

Business benefits
Through the application of demolition waste the project reused 4 500m³ of concrete, which resulted in the following financial savings:

- R585 000 saved in material costs (excluding transport)
- R64 000 saved in fuel costs for transport of ‘waste’ to landfill

For more information or advice on how your company can reuse builders’ rubble...

1. Visit our website for other case studies and support: https://www.greencape.co.za/content/focusarea/construction-and-demolition-waste
or contact Dr Kirsten Barnes (Kirsten@greencape.co.za)

2. Become a GreenCape member and receive industry updates, news and events info: https://www.greencape.co.za/become-a-member/