Wealth from Waste is a 3-year research program that aims to identify viable options for the recycling of metals from existing products in Australia.

Building on previous research undertaken by the Mineral Futures Collaboration Cluster (2009-2012), exploring complex future sustainability issues in the minerals industry, Wealth from Waste focuses on ‘mining’ above ground resources - metals contained in collections of discarded manufactured products and consumer goods.

The Wealth from Waste Cluster is funded by the Commonwealth Scientific and Industry Research Organisation (CSIRO) and partner universities, including the University of Technology, Sydney, Monash University, the University of Queensland, Swinburne University, and Yale University (USA).

The Wealth from Waste Cluster will run from 2013-2016, and will be seeking input from industry, research, government, community and other stakeholders at different times over this period.

Teams drawn from different universities and disciplines will undertake four distinct but interconnected research programs.

| P1 | Identify the most favourable systems for recycling and industrial ecology, and examine barriers, enablers and policy options for deployment in Australia. |
| P2.1 | What are the characteristics of waste stocks, what resource value do they represent? |
| P2.2 | What collection systems are used and what are the potential impacts of recycling? |
| P3 | Assess how different business models could capture the value of these resources for Australian firms. |
| P4 | Guide initial research and bring together findings for analysis and development of potential transition pathways – initiatives that may be needed to help build value from urban mines, recycling and value chain services. |

Research Cluster Contacts: Principal researchers are listed overleaf. More information can be obtained by contacting Damien Giurco on +61 2 9514 4978 or visiting http://www.csiro.au/Portals/Partner/Collaborate/FCFclusters.aspx.
Wealth From Waste: Minerals Down Under Research Collaboration Cluster

**Research Leadership**

The research team involves academics from a range of disciplines working together to create a better understanding of this complex landscape and the possible pathways for change. An international review panel of 12 industry, government, and research organisations has been established to help guide the direction of the work and provide expert review.

**Program Leader (P1) - Dr. Glen Corder**
Glen is an expert in industrial ecology, and a Principal Research Fellow at the Centre for Social Responsibility in Mining at the University of Queensland. His research interests are in the area of responsible resource use and processing.

**Program Leader (P2.1) - Professor Tom Graedel**
Tom is the Director of the Center for Industrial Ecology at the Yale School of Forestry & Environmental Studies. Tom’s most recent projects have concerned mapping stocks and flows of metals at the global scale.

**Program Leader (P2.2) - Dr Ruth Lane**
Ruth is based at Monash University with research interests in the area of environmental governance, and the social and cultural dimensions of environmental sustainability. Her current research engages with ecological modernisation as a strategy for more sustainable use of material resources.

**Program Leader (P3) - Dr Samantha Sharpe**
Samantha’s research at UTS focuses on regional economic development, innovation and technology development within firms, and science based commercialisation of technology.

**Program Leader (P4) – Dr Damien Giurco**
Damien has worked with CSIRO, government, and industry clients spanning the minerals, water, waste and energy sectors. He led the Commodity Futures program of research within the CSIRO Mineral Futures Collaboration Cluster (2009 – 2012).

**Cluster Leader - Professor Stuart White**
Stuart is Director of the Institute for Sustainable Futures and brings his experience of leading the Intelligent Grid Cluster (2008-2011) within the Energy Transformed Flagship.

**Principal Researcher (Business Systems)**
Dr Renu Agarwal leads research in Innovation and Service Operations Management at the UTS Business School. Her work promotes services science, innovation and entrepreneurship, operations and supply chain management.

**Principal Researcher (GIS)**
Dr Xuan Zhu is the Director of the Centre for GIS at Monash University. His areas of expertise include GIS theory, techniques and applications, decision support systems for regional sustainable development and environmental decision analysis and modelling.

**Principal Researcher (Advanced Metal Refining and Extraction)**
Dr M Akbar Rhamdhani is Director of Pathways to Engineering at the Faculty of Engineering and Industrial Sciences at Swinburne University of Technology. He has significant experience in metals processing and recycling through his work with industrial clients.

**Principal Researcher (Resources modelling & impact assessment)**
Dr Gavin Mudd, was appointed Course Director for the University’s Environmental Engineering course in early 2006. Gavin’s research interests concern sustainability, mining, groundwater and environmental impact assessment and management.