

Dr Selwyn Tucker, B.Sc., Ph.D.

Dr Selwyn Tucker is a Research Consultant, whose most recent work has been in the environmental impact of materials used in buildings, both residential and commercial. He worked in CSIRO for almost 30 years, the last 10 years of which were as Senior Principal Research Scientist and Project Leader in the Urban Systems Programme of CSIRO Sustainable Ecosystems before becoming a Research Consultant. Among his most recent major projects are:

- Project Leader for a project to develop a Life Cycle Inventory of timber products used in construction for Forest and Wood Products Australia (2006-2008) as the standard setting inventory for the Australian Life Cycle Inventory (AusLCI).
- Project Leader for the Automated Eco-efficiency Assessment of Commercial Building project which developed a prototype environmental assessment tool (LCADesign) for commercial buildings direct from 3D CAD for the Cooperative Research Centre for Construction Innovation (CRC CI) (2002-2004). The software and databases have since been commercialised.
- Leading a successor project to LCADesign to demonstrate a model of estimating indoor air quality in an office building direct from a 3D CAD for the CRC CI (2007-2008).
- Consulting on a survey to determine core indicators for reporting sustainability of buildings to UNEP (2008).
- Developing a guideline to environmental design and assessment tools for the RAIA (2004).
- Determining a life cycle cost analysis procedure for a pipeline network project (2003).
- Project leader for a housing component life cycle study for the Construction Industry Institute (2002).
- Project Leader for a greenhouse efficient design of houses for the Australian Greenhouse Office (2001-2002) to investigate actual implementation of sustainability issues in new housing.
- Development and implementation of a Property Condition Index for the Queensland Department of Housing (1997-2001).
- Project Leader for investigation of life cycle energy analysis of Australian housing for the Australian Housing and Urban Research Institute (1999).

Dr Tucker has a long research experience in such areas as building performance indicators, embodied energy in construction and recycling of building material. His current work is on sustainable construction, environmental impact assessment tools and life cycle inventories of building materials.