

## **A Comparison of Archival versus Perceptual Measurement of the Impact of Voluntary Environmental Instruments on Corporate Environmental Performance**

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### **Project aims**

- Revisit work undertaken in 2001/2 which used perceptual measurement to examine the effect of environmental management systems (EMS) and corporate environmental reporting (CER) on the environmental performance of 40 corporations operating in Western Australia.
- Undertake archival measurement to determine the 'accuracy' of the original survey.

### **Archival versus perceptual measurement**

- *Archival measurement* is steeped in the idea that 'accurate' research must use 'objective' measurement techniques to prove accuracy.
- With *perceptual measurement*, the point is not to assume that there are necessarily 'objective' or 'accurate' measures of performance, but rather to elicit the perceptions of senior managers.

### **Main findings**

- Almost all perception-based statements made in the 2001/2 survey of 40 companies were verified as accurate by the 2003 archival survey.
- Where specific examples of improved performance were given, documented evidence was available to support the claims.
- This conclusion supports the argument that perception-based empirical research can be as 'accurate' as objective-based research.
- Improvements can be categorised as:
  - *system-based* – non-specific qualitative changes (eg culture, awareness, management systems approach/effectiveness);
  - *performance-based* – improvement of existing actions (eg quantifiable measures of emissions, energy use, waste volume etc); or
  - *new action-based* – quantifiable examples of specific new actions (eg recycling or waste segregation) instigated after EMS implementation.
- While some interviewees were of the view that the influence of EMS is small, there is no question that it is possible to trace an objective link between existence of an EMS, and improved environmental performance.