

## Natural resources and the environment

### Aligning EIA and management processes in the energy sector

Researchers have undertaken a study to determine how environmental impact assessment (EIA) processes relate to the broader project management context typical of industries in the energy sector.



The researchers, Dr Alan Brent of CSIR Natural Resources and the Environment and Werner Petrick of the Graduate School of Technology Management at the University of Pretoria, conducted a literature review to compare current EIA processes with a range of international approaches. The research included a survey distributed among EIA consultants and environmental specialists, as well as discussions with technical project managers who are engaged with EIAs on a regular basis.

Among other issues, the research highlighted the concern from the consultants' perspective that an EIA should commence earlier in the project life cycle than is often the case, preferably in the prefeasibility and detailed design phases. Also, the consultants are seldom involved in project management gate reviews.

A vast majority of respondents indicated that the technical project management schedule is often subjected to the EIA processes and it is therefore crucial for general project management principles and EIAs to be aligned effectively.

"In the industry there is a perception that EIAs all too often play havoc with the scheduling of technical projects," says Brent, "and a clear need exists for structured project management frameworks that take into account EIA process requirements."

Based on the findings, the researchers have proposed a model that ensures detailed requirements are met for each specific gate in the project life cycle. Thereby, inefficiencies can be addressed and project management practices streamlined.

A paper, 'Environmental impact assessment during project execution phases: towards a stage-gate project management model for the raw materials processing industry of the energy sector', appeared in the June 2007 edition of the *Impact Assessment and Project Appraisal* journal.

The model has subsequently been adapted and applied by technical consultants to guide projects pertaining to new residue deposits in the mining sector.