# Conceptualising Sustainability Assessment: Three Models and a Case Study

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## Overview

- What is sustainability assessment?
- Conceptual framework consisting of three process models:
  - EIA-driven integrated assessment (from project EIA)
  - Objectives-led integrated assessment (from SEA)
  - 'Assessment for sustainability' (something new)
- Case study:
  - Strategic integrated assessment of the Gorgon gas development in Western Australia



### murdochuniversity Gorgon Assessment Process

- Proponent seeking access to Barrow Island (Class A Nature Reserve) for gas processing
- Assessment process to:
  - Assess veracity of site selection analysis
  - Consider environmental, social and economic implications
- Unique, Whole of Government process developed
- Modeled on project EIA:
  - Scoping by Government
  - Documentation prepared by proponent
  - Public consultation periods submissions made
  - Proponent response to public submissions
  - Government agency advice to Cabinet
  - Cabinet decision
- 8<sup>th</sup> September 2003 proponent granted access to Barrow Island



### murdochuniversity EIA-driven integrated assessment

- Project EIA extended to the Triple Bottom Line (TBL)
- Applied after proposal largely developed (i.e. proponent driven and reactive)
- Assesses whether TBL impacts are acceptable and considers how negative impacts can be mitigated
- Relationship to sustainability:
  - TBL interpretation of sustainability
  - Focus on minimising 'unsustainability'
- Benefits:
  - Makes social and economic issues more transparent than EIA
- Challenges:
  - Integration of 'three pillars' difficult
  - Trade-offs likely



### murdochuniversity Gorgon case study (1)

- Classic example of EIA-driven integrated assessment:
  - Proponent-driven
  - Reactive assessment by Government
  - EIA methodology extended to TBL
  - Based upon detailed scientific and analytical data
  - Issues:
    - Conflict between two 'camps' (green versus pro-development)
    - No attempt at integration of TBL considerations:
      - No weighting or multi-criteria analysis
      - No consensus among Government agencies
      - Cabinet left to make political (non-transparent) decision
    - Feeling by many that environment was traded off for economic gain
    - Is risking unique biodiversity values sustainable?



### **Objectives-led integrated assessment**

- Objectives-led SEA extended to the TBL
- Applied proactively as part of process that involves:
  - Establishment of aspirational environmental, social and economic objectives
  - Identification of options to meet these objectives
  - Assessment to determine the 'best' available option in terms of meeting these objectives
- Relationship to sustainability:
  - Reflects vision of sustainability as a series of TBL goals
- Benefits:
  - Focus on improving TBL outcomes
- Challenges:
  - Establishing integrated objectives 'up front'
  - Do TBL goals reflect sustainability?



## Gorgon Case Study (2)

- To assess Gorgon as an objectives-led integrated assessment would have required:
  - Government defining TBL policy objectives up front
  - Proponent developing proposal to meet Government objectives plus its own internal objectives
  - Assessment of preferred option against Government policy objectives
- However, in reality:
  - Government policies and objectives not clearly defined up front
  - Implicit Government objectives not holistic and do not define sustainability
  - Many options already eliminated by proponent before approaching Government (esp. site selection)
  - Proposal not assessed proposal against policy objectives (missed opportunity?)
- Consideration now being given to establishing up-front objectives for major projects



### murdochuniversity 'Assessment for Sustainability'

- Asks the question: Is this initiative (proposal or existing practice) sustainable? (compare with previous 'direction to target' approaches)
- Requires very clear vision of what sustainability really means, in the form of sustainability criteria that are acceptable to society
- Relationship to Sustainability:
  - Perceives sustainability as a societal state to be achieved
- Challenges:
  - Agreeing on an interpretation of sustainability
  - Defining 'sustainability criteria' (TBL versus principles)
  - Politically difficult
- Benefits:
  - Potentially makes most positive contribution to sustainability of models discussed



#### murdochuniversity Gorgon Case Study (3)

- To assess Gorgon 'for sustainability' would have required:
  - Government developing appropriate sustainability criteria based upon Western Australia's sustainability principles
  - Assessment to determine whether the proposal met the sustainability criteria
- Proponent did conduct its own internal 'assessment for sustainability' by:
  - Establishing sustainability principles and criteria
  - Demonstrating how criteria would be met
- However, contrast between Corporate and Government (societal) principles and criteria



## Conclusions

- 'Sustainability Assessment' means different things to different people
- EIA-driven integrated assessment (from EIA) too reactive and focused on minimising the negative
- Objectives-led integrated assessment (from SEA) more positive and proactive but is it really sustainability?
- 'Assessment for sustainability':
  - A new way of thinking about impact assessment
  - Challenging
  - Potentially makes the most positive contribution to sustainability
  - Implementation in practice?

