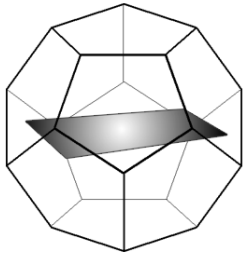
# IAIA '04

# Approaches to Integrated Sustainability Assessment:

## An Alignment of Ends and Means



*William Varey*

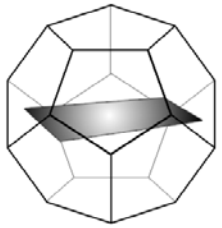
*Perth, Western Australia*

# Sustainability Based Assessment

Quote:

"Adoption of sustainability-based decision criteria therefore entails more or less profound rethinking of many aspects of environmental assessment design and implementation… Minimization of negative effects is not enough. Assessment requirements must encourage positive steps – towards greater community and ecological sustainability, towards a future that is more viable, pleasant and secure….A shift to sustainability-based decision criteria, and figuring out how to respond, is now an increasingly pressing imperative …" Gibson R. (2001)

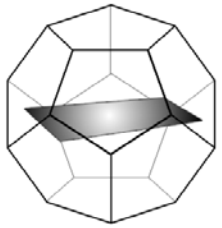
# Integrated Sustainability Assessment



## Research Overview

1. Definition of IAS – 3 Principles
2. Trial of IAS Model – 20 Components
3. IAS Case Studies – 12 IAS Projects
4. Findings and Observations – IAS Model
5. Wider Applications – IAS in the Future

# IAS Defined



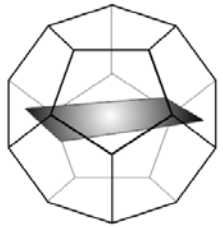
Distinction from Other Systems:

- Not an integration of Impact Assessments

But

- Sustainability Assessment that is Integrated.

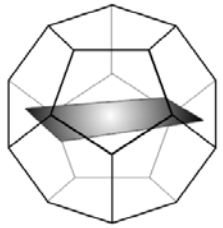
# IAS – Three Principles



IAS for the purposes of this research is:

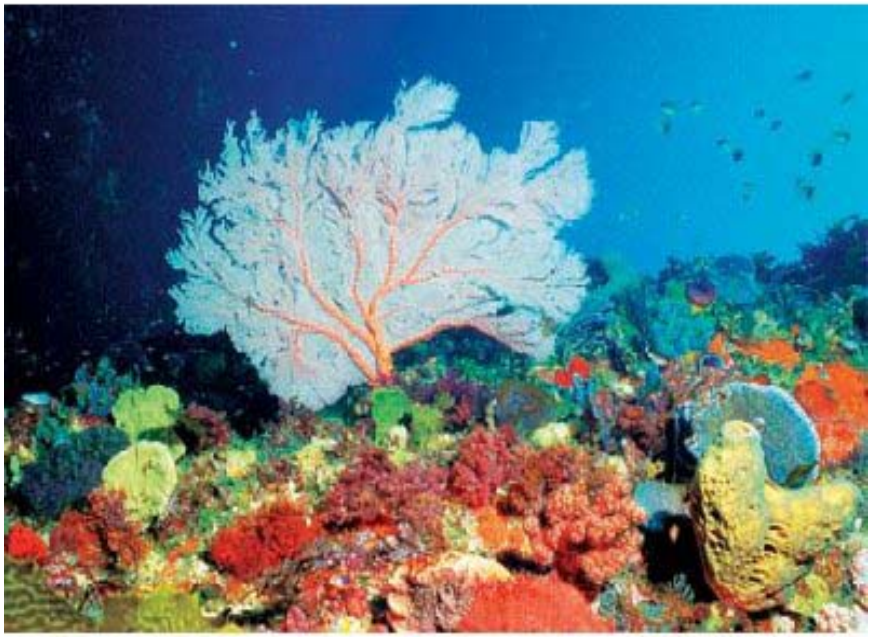
- 1. Sustainability Based – (not TBL elements)
- 2. Integrated into the Governance Framework
- 3. Determines the ‘Sustainability’ of a Proposal

# Research Opportunity

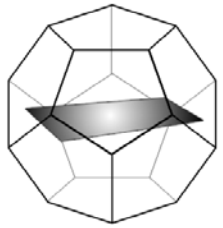


## Location of Study

- City Administration – 31,000 residents
- Development Proposals of $60 million+ pa
- Local Heritage, Unique Historical and Indigenous Values
- Urban Development, Industrial Renewal, New Economy
- Unique Biodiversity, Non/Renewable Natural Resources



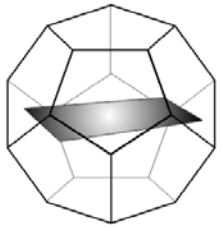
# Research Opportunity



## Sample Group

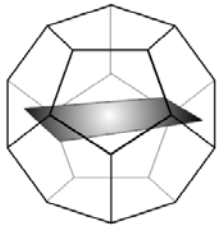
- 24 Executives, Directors and Senior Managers
- 14 Sustainability Proposals Assessed
- Integrated Sustainability Base Trialed
- Assessments Assessed on Application of IAS Principles

# 12 Case Studies



- Marina Development
- Community Cultural Arts Centre
- Ground Water Supply
- Youth Recreation Facility
- Street Trees Management
- Industrial Leachate Ponds
- Historical Landmark Preservation
- Underwater Tourism Site Upgrade
- Urban Development Subdivision
- Stockyard Waste Water
- Management
- Road Gravel Extraction
- Archive Records Storage

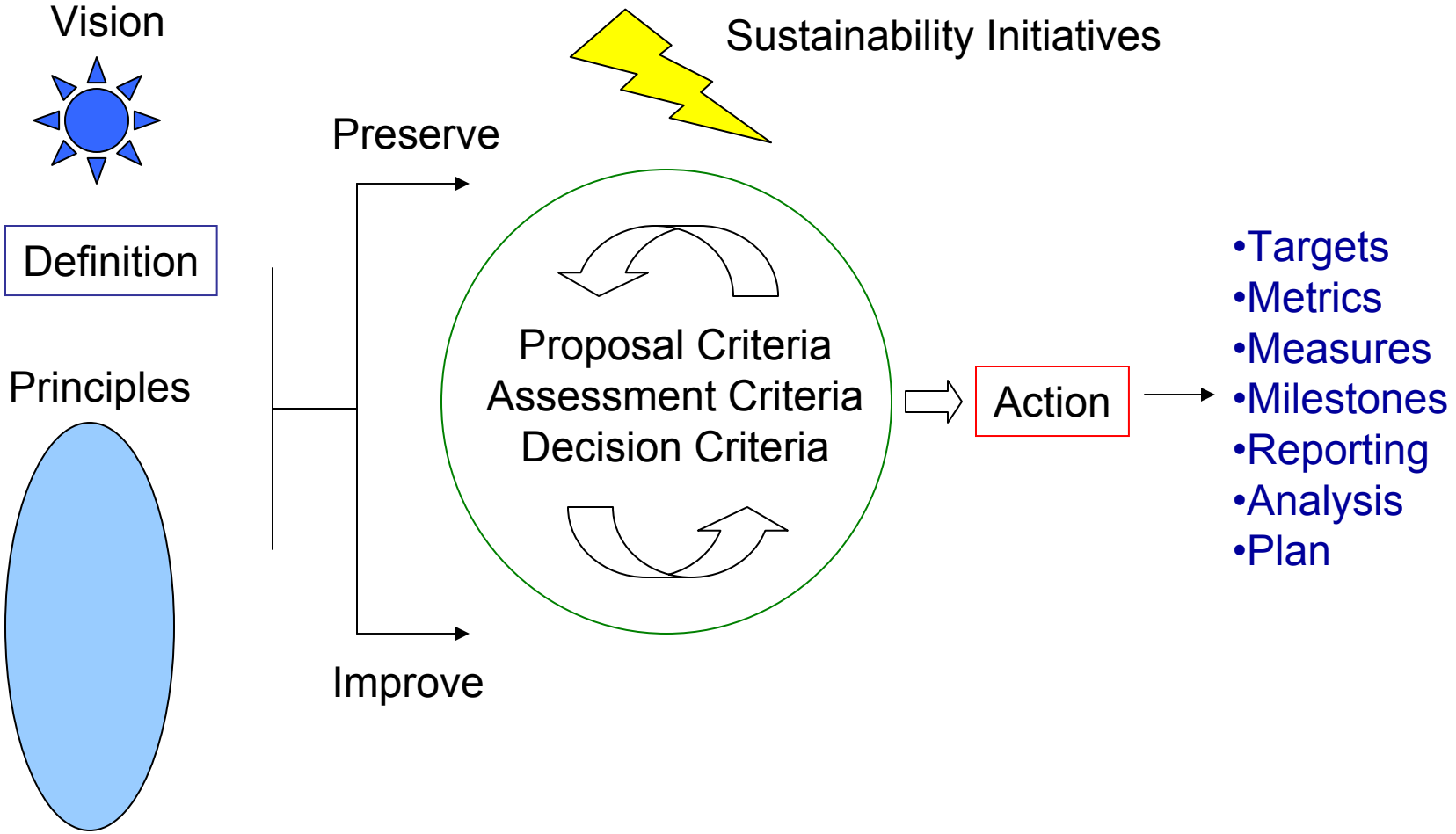
# Essential Elements



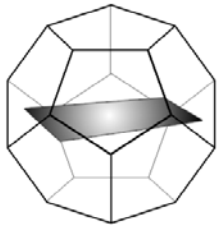
## Base Principles ~ Non-reducible sets

- Issues and Outcomes
- Principles and Parameters
- Impacts and Net Benefits
- Present and Future
- Local and Distant
- Multiple Bottom Lines

# Sustainability Framework in Practice



# 20 Components



1. Sustainability Definition
2. Sustainability Issue
3. Sustainability Outcome
4. Environmental Principles
5. Social Principles
6. Economic Principles
7. Ethical Principles
8. Initial Proposal
9. Final Proposal
10. No Action Alternative
11. Required Outcome Criteria (Eco-Econ-Social, Ethical- etc)
12. Adverse Impact Assessment
13. Benefit Assessment
14. Here - Local
15. Now - Immediate
16. There - Distant
17. Then - Future
18. Assessment Scoring Criteria
19. Decision Criteria
20. Timeframe

# Sustainability Proposal Thinking Tool

| Issue: | Outcome: |
|---|---|

| | | | Benefit | | Impact | | Score | |
|---|---|---|---|---|---|---|---|---|
| Economic | Required Criteria: | Proposal | Here | Now | Here | Now | | |
| | | | There | Then | There | Then | | |
| Social | | | Here | Now | Here | Now | | |
| | | | There | Then | There | Then | | |
| Environmental | | | Here | Now | Here | Now | | |
| | | | There | Then | There | Then | | |
| Ethical | | | Here | Now | Here | Now | | |
| | | | There | Then | There | Then | | |
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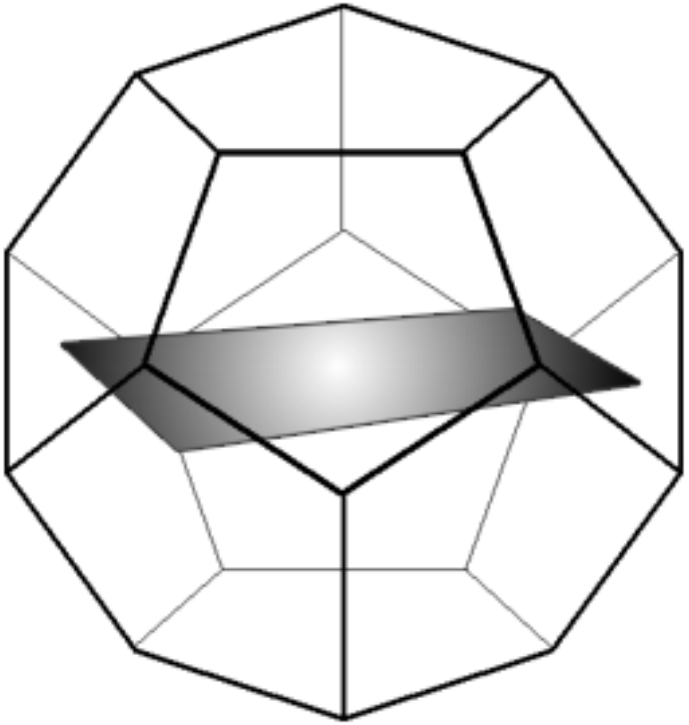
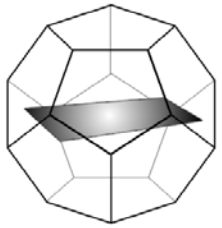
# Trial of Framework



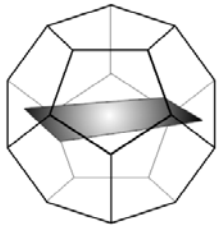
# 8 Definition Errors



A. Proposal=Outcome
B. Outcome ≠ Issue
C. Here=There
D. Benefits ~ Impacts
E. Merging Assessment
F. Post-Decision Criteria
G. Triple Accounting
H. No Sustainability Definition

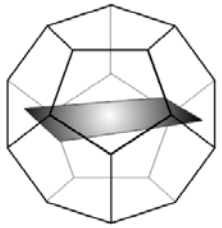
A. “Limited”
B. “Aimless”
C. “Bounded”
D. “Least Worse”
E. “Subjective”
F. “Hidden”
G. “Dehumanizing”
H. “Meaningless”

# 20 IAS Types



1. Meaningless
2. Aimless
3. Limited
4. Impoverished
5. Dehumanizing
6. Multiple Earths
7. Ungoverned
8. Rubbery
9. Black-Box
10. Tardy
11. Perpetual
12. Least Worst
13. More the Better
14. Unbounded
15. Bounded
16. Longsighted
17. Shortsighted
18. Subjective
19. Hidden
20. Fated

# 5 Wider Applications



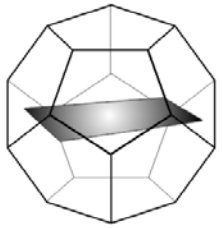
## IAS 20 Component Model

- Non-Expert Applications
- 20 Distinct Types of IAS (Defined by Omission)
- Assessment of Assessments – Feedback
- Prediction Process Problems
- Ends - Means Alignment – IAS Structuring

# Research Model Limitations

## IAS Model

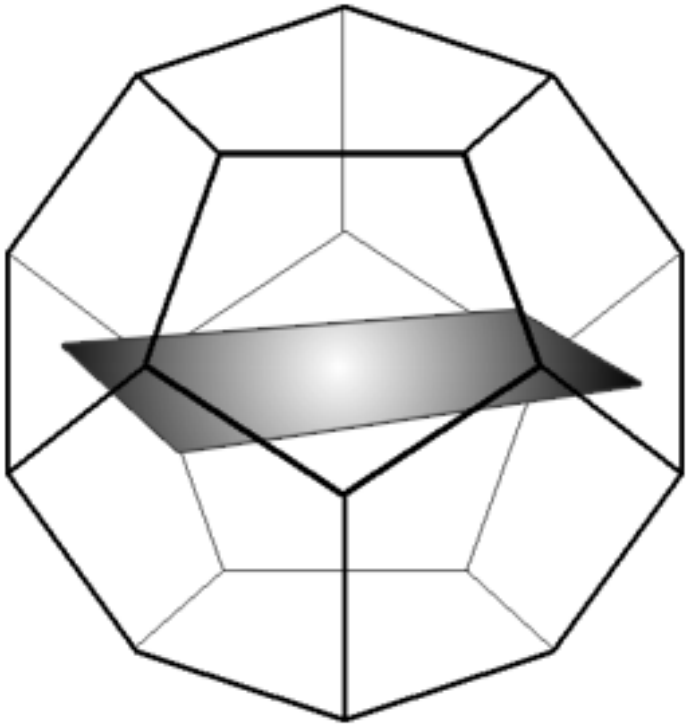
- Meta-Model – IA Expert Process Dependent
- Integrated Model – Non-Reducible Set
- Span Defined Within Wider Framework
- Scope Defined by Level of Issue
- Sustains Cognitive Conflict
- Transparency Dependent on Analysis



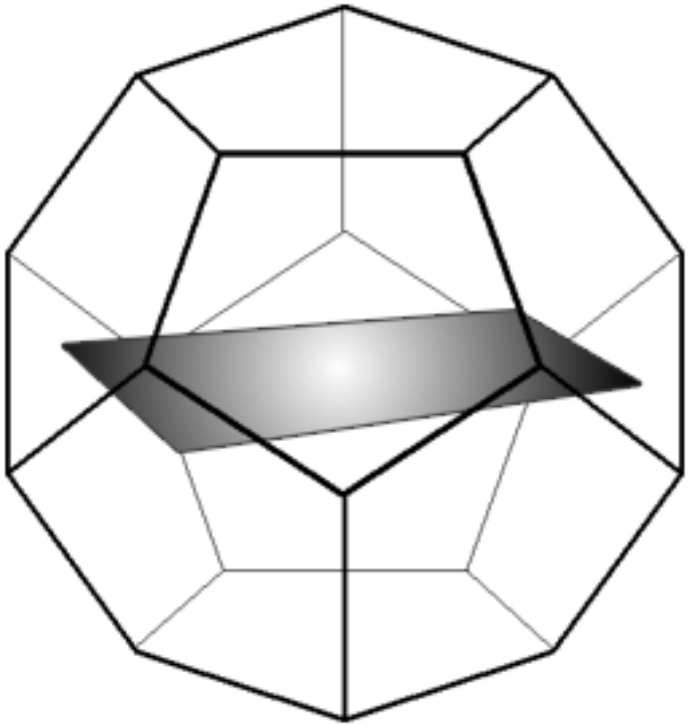
# Quote:

"In order to be a meaningful and worthwhile endeavour, impact assessment should contribute significantly to worldwide efforts to secure a sustainable future for the human race. This will likely be one of the most important criteria upon which the historical relevance of impact assessment is judged by future generations. …" IAIA

# Questions



# Conclusion



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