DECIVIL
DEPARTAMENTO DE ENGENHARIA
CIVIL, ARQUITETURA E GEORRECURSOS
TÉCNICO LISBOA

Área Científica de Sistemas Urbanos e Regionais
Master in Engineering and Management of Innovation and Entrepreneurship
Master in Environmental Engineering
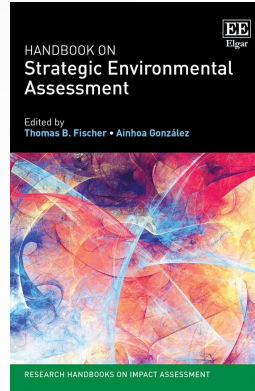Avaliação Ambiental Estratégica / Strategic Environmental Assessment
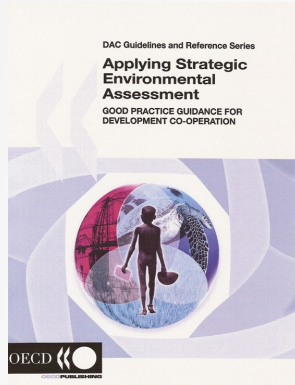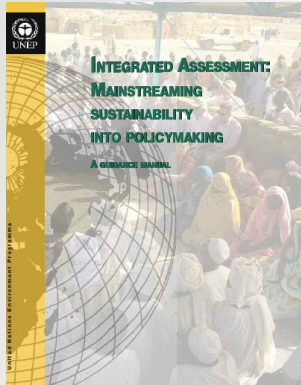
SEA in decision-making

Differences between policy, planning and programme

International models in SEA

Prof. Doutora Maria do Rosário Partidário

Bibliography

UNEP
INTEGRATED ASSESSMENT:
MAINSTREAMING
SUSTAINABILITY
INTO POLICYMAKING
A GUIDANCE MANUAL

DAC Guidelines and Reference Series
Applying Strategic
Environmental
Assessment
GOOD PRACTICE GUIDANCE FOR
DEVELOPMENT CO-OPERATION
OECD

EE Elgar
HANDBOOK ON
Strategic Environmental
Assessment
Edited by
Thomas B. Fischer • Ainhoa González
RESEARCH HANDBOOKS ON IMPACT ASSESSMENT

STRATEGIC ENVIRONMENTAL ASSESSMENT
PORT OF CAPE TOWN
Sustainability Framework
CSIR Report No. ENV-S-C 2003-074
FEBRUARY 2004
VERSION 2

Prepared for:
National Ports Authority
Port of Cape Town
Cape Town

Prepared by:
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SAKAZA
COMMUNICATIONS (PTY) LTD

National Ports
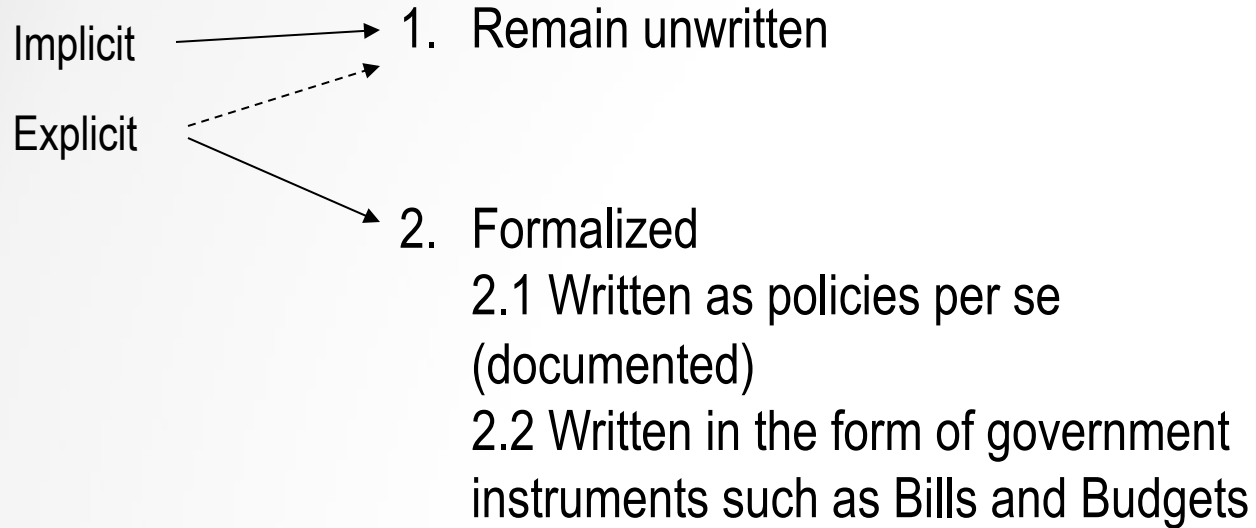Authority of South Africa

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ENVIRONMENTEK

Differences between policy-making, planning and project scale: scale, focus, detail

What are the PPP and P?

LEVELS OF DECISION-MAKING IN IMPACT ASSESSMENT

Policy	Road-map with defined objectives, set priorities, rules and mechanisms to implement the objectives – a statement of intent to direct actions
Planning	Priorities, options and measures for resource allocation according to resource suitability and availability, following relevant sectoral and global policies
Programme	Organized agenda with specification of activities and programmes investments, in the framework of relevant policies and plans
Project	Detailed proposal, scheme or design of any development action or activity, involves construction works and implements policy/ planning objectives

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Type of policies

Implicit ———————▶ 1. Remain unwritten

Explicit

2. Formalized
   2.1 Written as policies per se
   (documented)
   2.2 Written in the form of government
   instruments such as Bills and Budgets
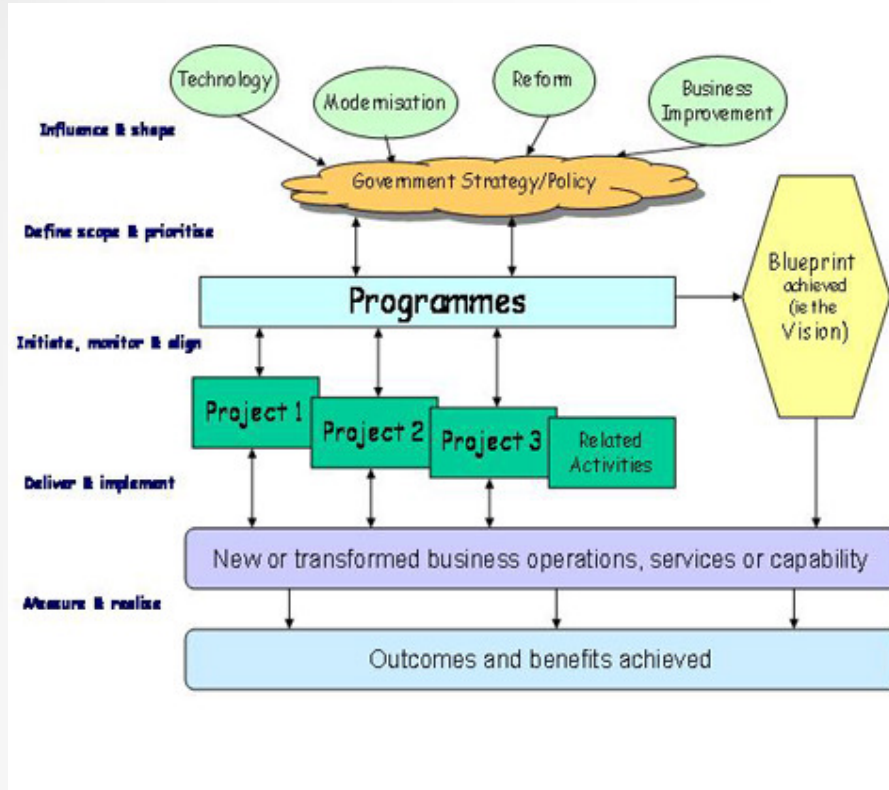
What is planning?

To make development objectives and strategies explicit into strategic actions; and/or
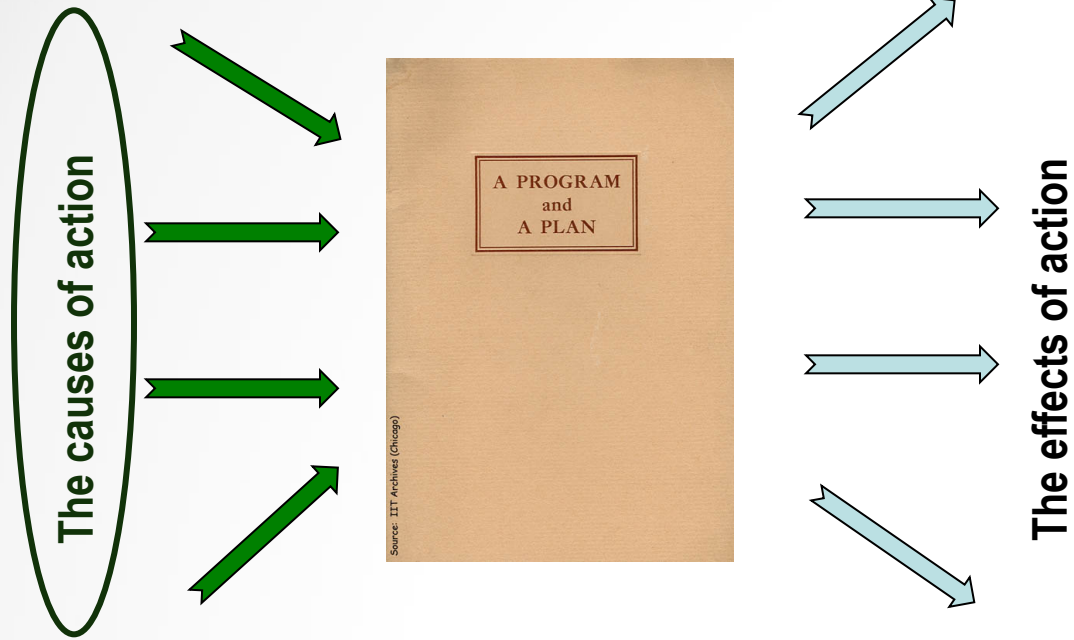
To allocate resources to activities and determine the use of different areas; and/or

To establish rules for development and zoning regulations; and/or

To set up an action programme

What is programming?

The causes of action

A PROGRAM
and
A PLAN

Source: IIT Archives (Chicago)

The effects of action

Strategic-Based

Effects-Based
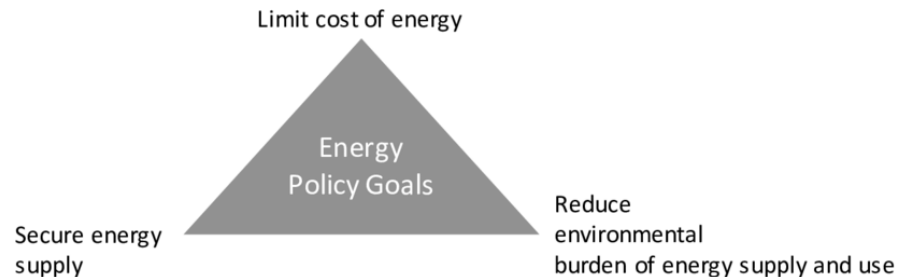
Strategic Environmental Assessment @ MRPartidário

How can SEA be used?

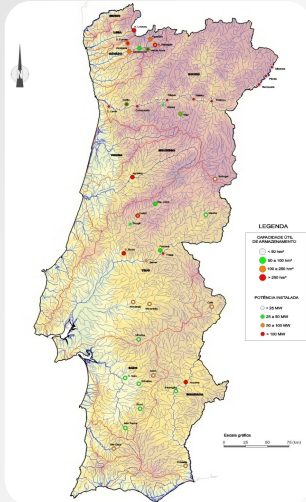# 1.The territorial area for action is known but not the proposals / sectoral intentions

2. Proposals / sectoral intentions are known but not the territorial area for action

-Energy policy

-Wind power programme

-Waste rehabilitation, reutilization and recycling programme

-Etc.

3. The territorial area for action and the proposals / sectoral intentions are known

National hydropower development programme

Decision on the strategic location of new airport in Lisbon

- Poceirão
- Ota

Análise de dominância territorial (Poceirão - Ota)

- Ota
- Poceirão
- Indeferença
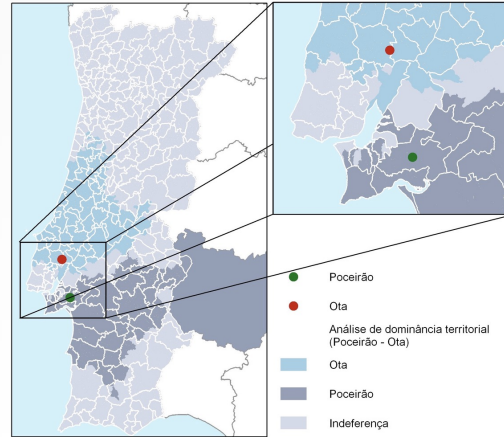
Investment strategy at Parque Alqueva, Alentejo

Strategic Environmental and Social Assessment of Oil and Gas Development in Mauritania

June 2011

70484

République Islamique de Mauritanie
Honneur – Fraternité – Justice

June 2010 Acre

Bassin Côtier
Superficie Totale: 160.000 km²

Bassin de Taoudéni
Superficie Totale: 500.000 km²

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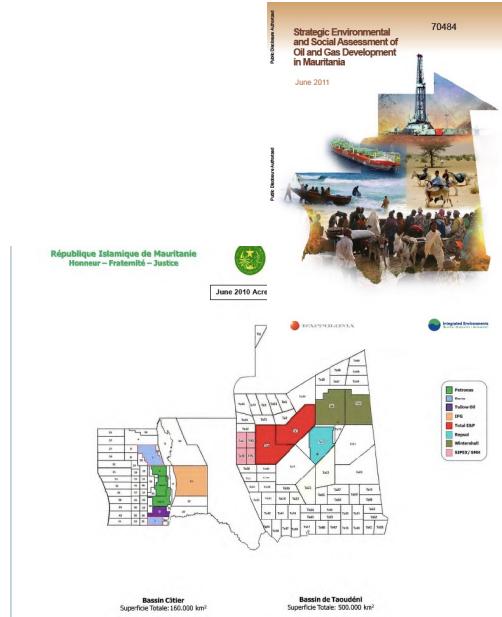
4. Sectoral policy is known but it does not have territorial materialization

-Health policy (eg. who gets vaccinated for COVID'19)

-Education policy (e.g. senior education, free education,…)

-Emigration Policy (e.g who is accepted and in what conditions)

-etc.

What can trigger an SEA?

A PPP with or without a strategy (often because it is required by law) (see OECD-DAC entry points)

A strategy (poverty reduction strategy)

A problem that requires a strategy (accelerated loss of given resources, equity problems, etc.)

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What can not be an SEA is when there are no strategic options

Industrial plotting
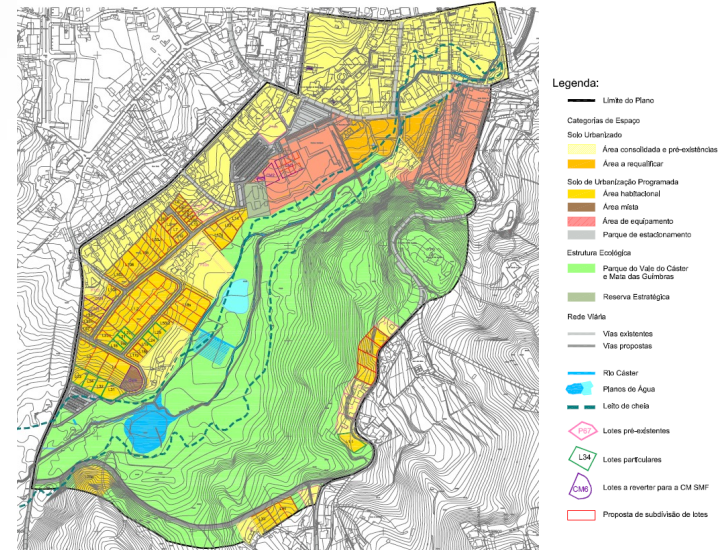
Urban detailed plan

International systems of SEA

International systems on SEA

Effects
Impacts
EIA-type

Sustainability
Capacity
Strategy

SEA - From "big EIA" to strategic thinking

Different interpretations of SEA

How the world see SEA

The elephant metaphor of reality

SEA steps

- Screening
- Scoping
- Considering alternatives and assessing effects
- Environmental reporting, providing information and consultation
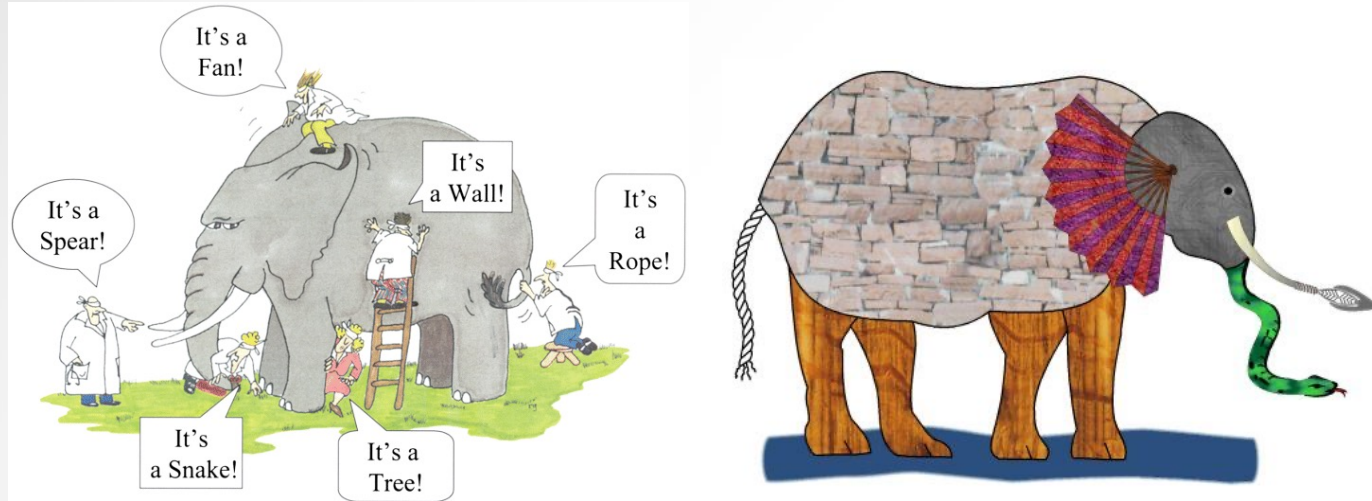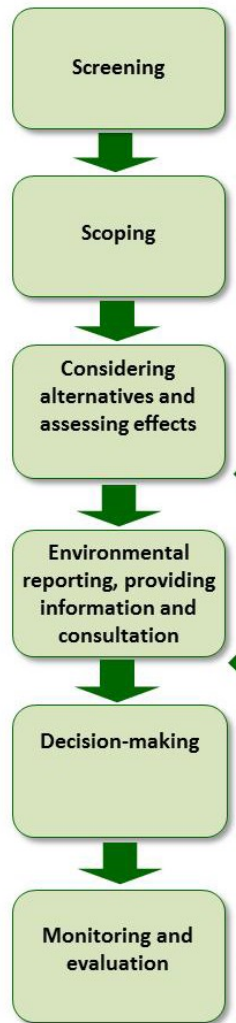- Decision-making
- Monitoring and evaluation

European Commission, 2013

Standard process for impact assessment SEA

European Commission

(Beacon Manual, 2005)

Stategic decision making	SEA Stages
A Identify aims and objective of strategic action	Screening: is SEA likely to be necessary
B Identify alternative ways to achieve objectives	Scoping: issues to be considered; baseline, objectives and targets
C Fine tune alternatives and choose preferred alternatives	Assessment: avoid, minimize, mitigate, compensate
D Prepare draft plan and have it reviwed	SEA Report and Review
E Decision Making - Approve Plan	Decision Making - Approve SEA
F Project Implementation and monitoring actions	Estabilish env. implementation guidelines; monitor env. impacts

CONSULTATION & PARTICIPATION

Fig. 2 3. Steps in the SEA process and integration with decision making

Strategic Environmental Assessment @   MRPartidário

The Netherlands Commission on Environmental Assessment (NCEA) describe differently the same steps for EIA and SEA
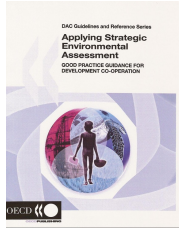
Initial Dutch impact assessment model for SEA

	SEA	EIA
Screening	Mostly decided case by case	Projects requiring EA are often listed
Scoping	Combination of political agenda, stakeholder discussion and expert judgement	Combination of local issues and technical checklists
Public participation	Focus on representative bodies	Often include general public
Assessment	More qualitative (expert judgement)	More quantitative
Quality review	Both quality of information and stakeholder process	Focus on quality of information
Decision making	Comparison of alternatives against policy objectives	Comparison against norms and standards
Monitoring	Focus on plan implementation	Focus on measuring actual impacts

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Phases in SEA (OECD-DAC, 2006)

1. Establishing the context for SEA
   - Screening
   - Setting objectives
   - Identifying stakeholders

2. Implementing the SEA
   - Scoping (in dialogue with stakeholders)
   - Collecting baseline data
   - Identifying alternatives
   - How to enhance opportunities and mitigate negative impacts
   - Quality assurance
   - Reporting

3. Informing decision making
   - Make recommendations (in dialogue with stakeholders)
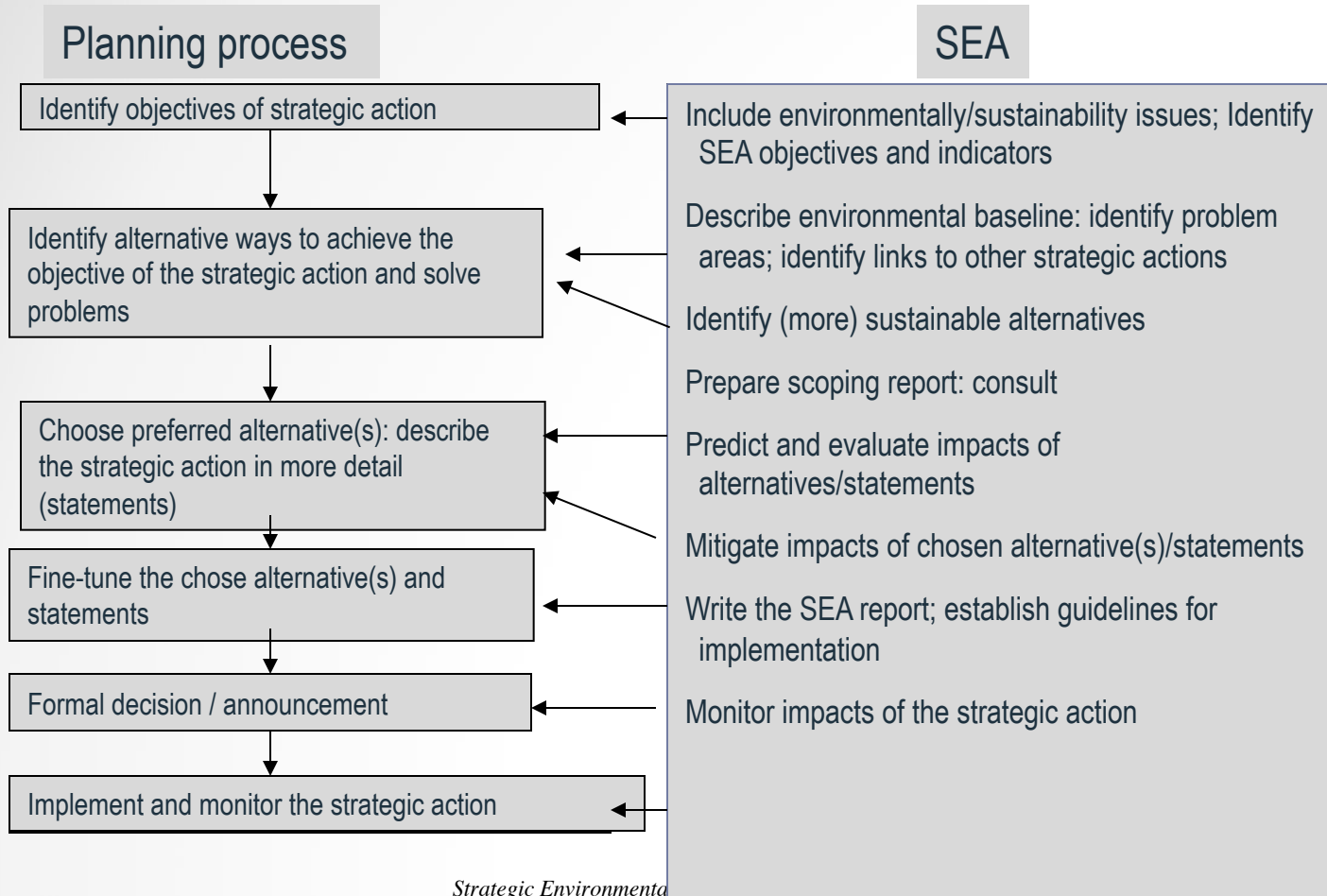
4. Monitoring and evaluation

OECD-DAC, 2006
(http://www.seataskteam.net/guidance.php)

mostly technical

	S...
Screening	M
Scoping	C st e
Public participation	F
Assessment	M ju
Quality review	B s
Decision making	C a
Monitoring	F

Phases in SEA (OECD-DAC, 2006)

1. Establishing the context for SEA
   - Screening
   - Setting objectives
   - Identifying stakeholders
2. Implementing the SEA
   - Scoping (in dialogue with stakeholders)
   - Collecting baseline data
   - Identifying alternatives
   - How to enhance opportunities and mitigate negative impacts
   - Quality assurance
   - Reporting
3. Informing decision making
   - Make recommendations (in dialogue with stakeholders)
4. Monitoring and evaluation

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Riki Therivel suggested methodology for SEA in the UK (2004)

Planning process

SEA

Planning process	SEA
Identify objectives of strategic action	Include environmentally/sustainability issues; Identify SEA objectives and indicators
Identify alternative ways to achieve the objective of the strategic action and solve problems	Describe environmental baseline: identify problem areas; identify links to other strategic actions
	Identify (more) sustainable alternatives
	Prepare scoping report: consult
Choose preferred alternative(s): describe the strategic action in more detail (statements)	Predict and evaluate impacts of alternatives/statements
	Mitigate impacts of chosen alternative(s)/statements
Fine-tune the chose alternative(s) and statements	Write the SEA report; establish guidelines for implementation
Formal decision / announcement	Monitor impacts of the strategic action
Implement and monitor the strategic action	

Strategic Environmenta

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Generic SEA steps in Hong-Kong

Continuous interaction with public and stakeholders

Hong-Kong Manual for SEA, 2004

1. Understanding the needs, nature and objectives of PPP

2. Design/select SEA process and methods

3. Initial screening and scoping

INITIAL ASSESSMENT

4. Baseline / background studies

5. Identify and examine strategic environmental issues and linkages

6. Identify and evaluate possible options, alternatives means and resulting environmental implications

FINAL ASSESSMENT
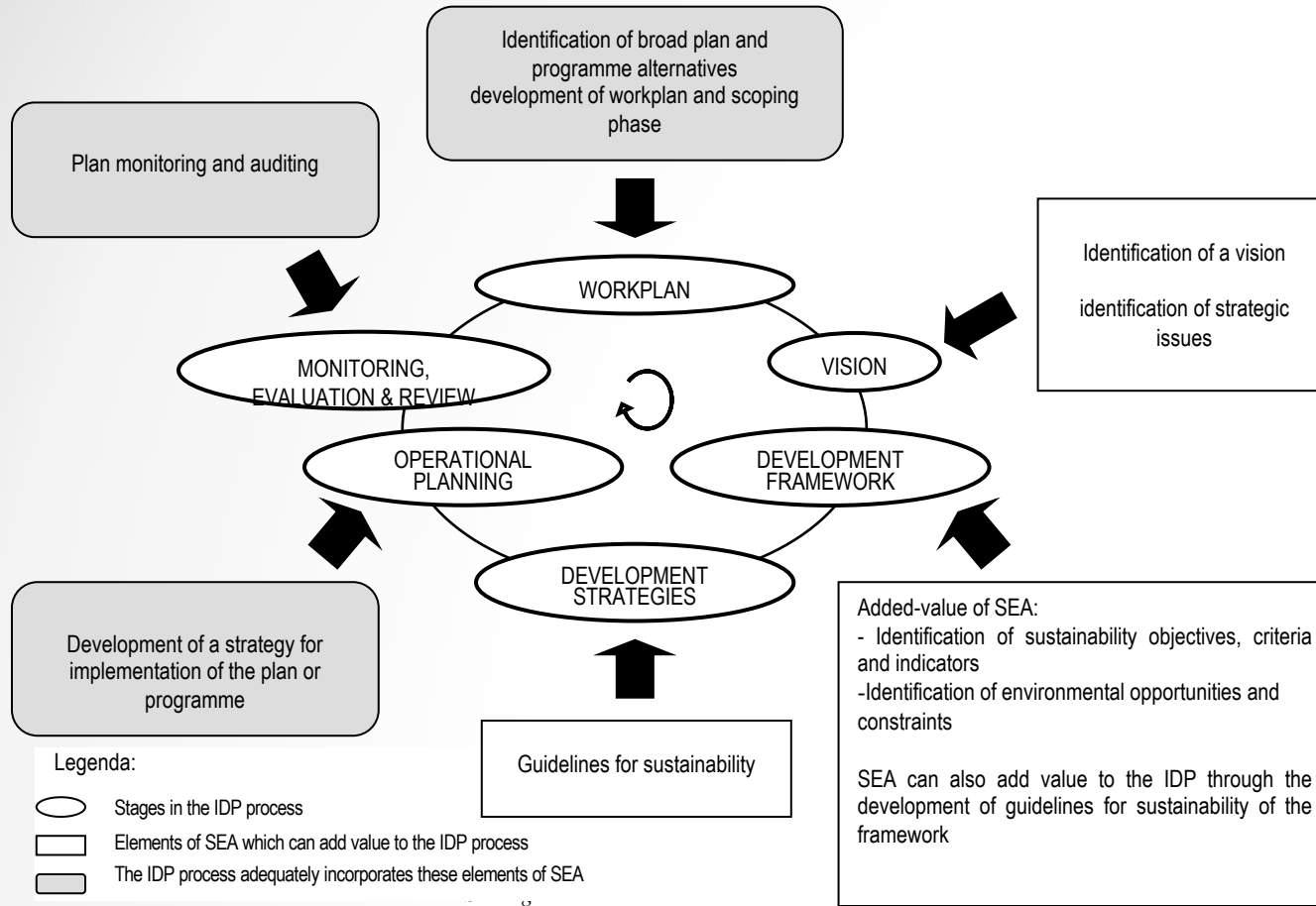
7. Identify and evaluate preferred options

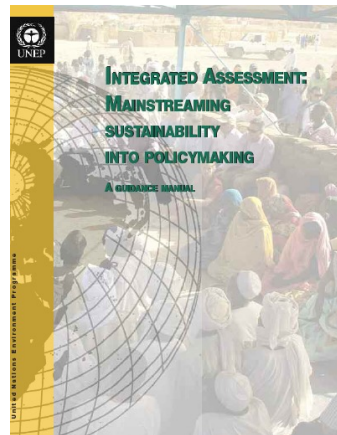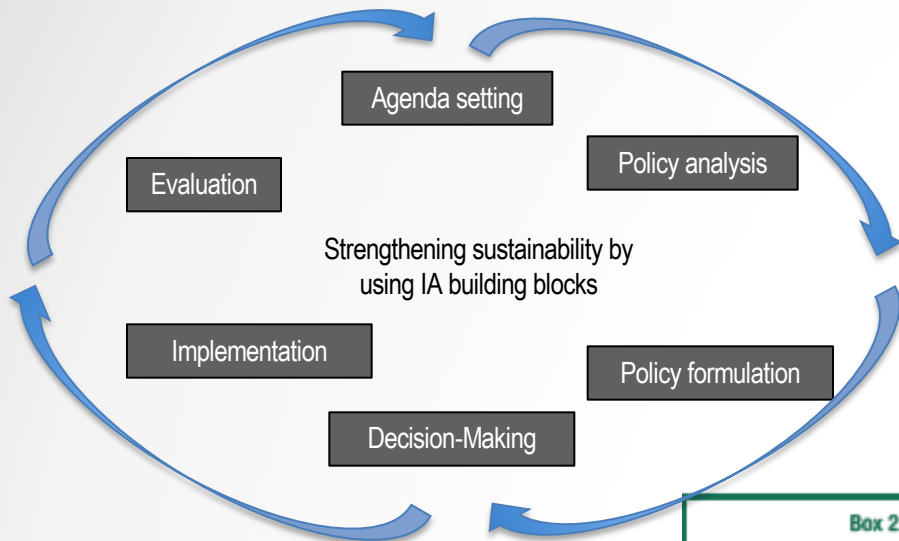8. Determine follow-up actions, monitoring requirements

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South Africa - Integrated Development Planning (IDP) Process and elements of SEA (DEAT-CSIR, 2000)

Identification of broad plan and programme alternatives development of workplan and scoping phase

Plan monitoring and auditing

Identification of a vision

identification of strategic issues

WORKPLAN

VISION

MONITORING, EVALUATION & REVIEW

OPERATIONAL PLANNING

DEVELOPMENT FRAMEWORK

DEVELOPMENT STRATEGIES

Development of a strategy for implementation of the plan or programme

Added-value of SEA:
- Identification of sustainability objectives, criteria and indicators
-Identification of environmental opportunities and constraints

SEA can also add value to the IDP through the development of guidelines for sustainability of the framework

Guidelines for sustainability

Legenda:

Stages in the IDP process

Elements of SEA which can add value to the IDP process

The IDP process adequately incorporates these elements of SEA

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UNEP, 2009 (http://www.unep.ch/etb/publications/index.php)

Agenda setting

Policy analysis

Evaluation

Strengthening sustainability by using IA building blocks

Implementation

Policy formulation

Decision-Making

INTEGRATED ASSESSMENT: MAINSTREAMING SUSTAINABILITY INTO POLICYMAKING

A GUIDANCE MANUAL

Box 2.1: Integrated Assessment building blocks

A. Process	B. Policy Institutional context	C. Analytical Contents
A1: Process design and links	B1: Institutional analysis and change	C1: Strategic framework and identification of key sustainability issues
A2: Policymaking decision windows	B2: IA team organizational model	C2: Trends and scenarios
A3: Communication strategy formulating	B3: Stakeholder engagement and strengthening civil society	C3: Identification of opportunities and alternative policy option
	B4: Evaluation and learning	C4: Assessment of impacts/risks and benefits
		C5: Monitoring and evaluation

2009

Strategic Environm

UNEP (http://www.unep.ch/etb/publications/index.php)

Integrated Assessment: building blocks (UNEP, 2009)

Components of an SEA

A. Process

A1: Process design and links
A2: Policymaking decision windows
A3: Communication strategy formulating

B. Policy Institutional Context

B1: Institutional analysis and change
B2: IA team organizational model
B3 Stakeholder engagement and strengthening civil society
B4: Evaluation and learning

C. Analytical contexts

C1: Strategic framework and identification of key sustainability issues
C2: Trends and scenarios
C3: Identification of opportunities and alternative policy options
C4: Assessment of impacts / risks and benefits
C5: Monitoring and evaluation

SEA in decision-making

Four models of linking SEA and decision-making

1. One opportunity model

Planning Process   SEA Process

too late

2. Parallel model

Planning Process   SEA Process

one size fits all
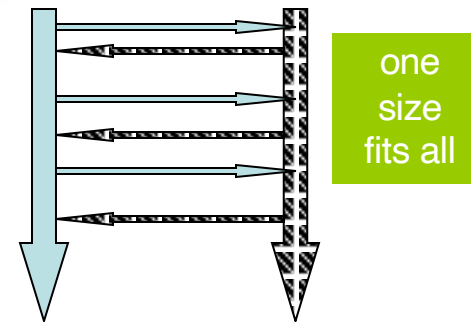
3. Integrated model

Planning Process +   SEA Process

what does what?

Which model enables more strategic thinking?

4. Decision-centred model

Planning Process

SEA - framework of key activities

taylor-made

(Partidário, 2007)

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How rational decision-making is made

Define the problem
Diagnose its causes
Design possible solutions
Decide which is best

And then
Implement the choice

Three (complementary) models of decision-making

Thinking first: science, planning, programming, the verbal

Seeing first: art, visioning, imagining, the visual, ideas

Doing first: craft, venturing, learning, the visceral, experiences

Henry Mintzberg and Frances Westley, 2001

Discussion

The three models from Mintzberg and Westley 2001

What does it mean for SEA?

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CASE-STUDY

CSIR, 2004

STRATEGIC ENVIRONMENTAL ASSESSMENT
PORT OF CAPE TOWN
Sustainability Framework

SEA of PORT of CAPE TOWN Sustainability Framework, 2004

SEA results from the need to ensure:

- Economic objectives of the Port
- Maximizing the benefits for the surrounding communities
- Minimizing the impacts on the biophysical environment

SEA of PORT of CAPE TOWN Sustainability Framework, 2004

Mechanisms used

- Port planning process

- Corporate social investment programme

- Environmental Management Systems

- Appropriate stakeholders engagement

SEA of PORT of CAPE TOWN Sustainability Framework, 2004

Mechanisms to promote appropriate stakeholders engagement:

- Port Consultative Committee

- Port-City Forum (public authorities)

- Port-users Forum

- Port-stakeholders Forum (broader forum)

SEA of PORT of CAPE TOWN
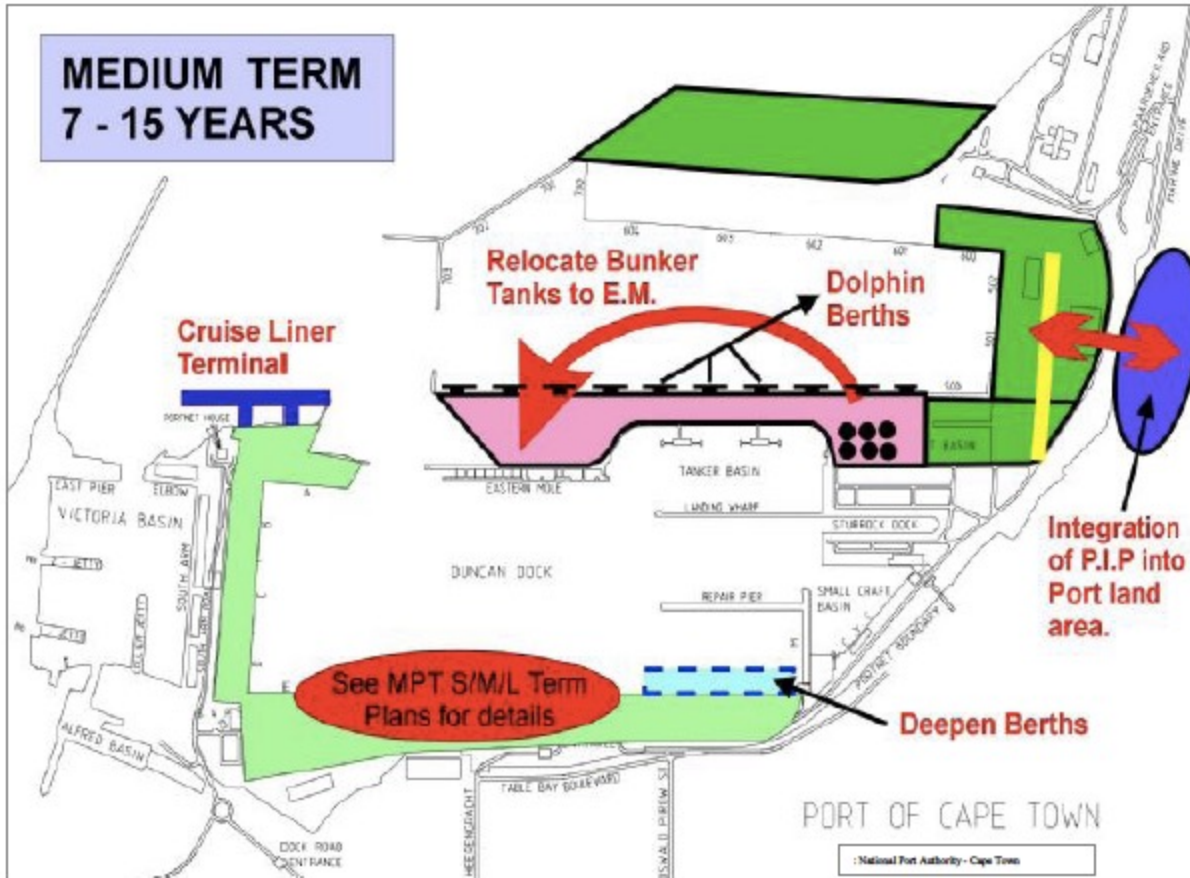# Sustainability Framework, 2004

Methodology for SEA

- Defining a vision for the sustainable development of the port
- Defining SEA objectives and process
- Establishing an instituional approach and stakeholders envolvement
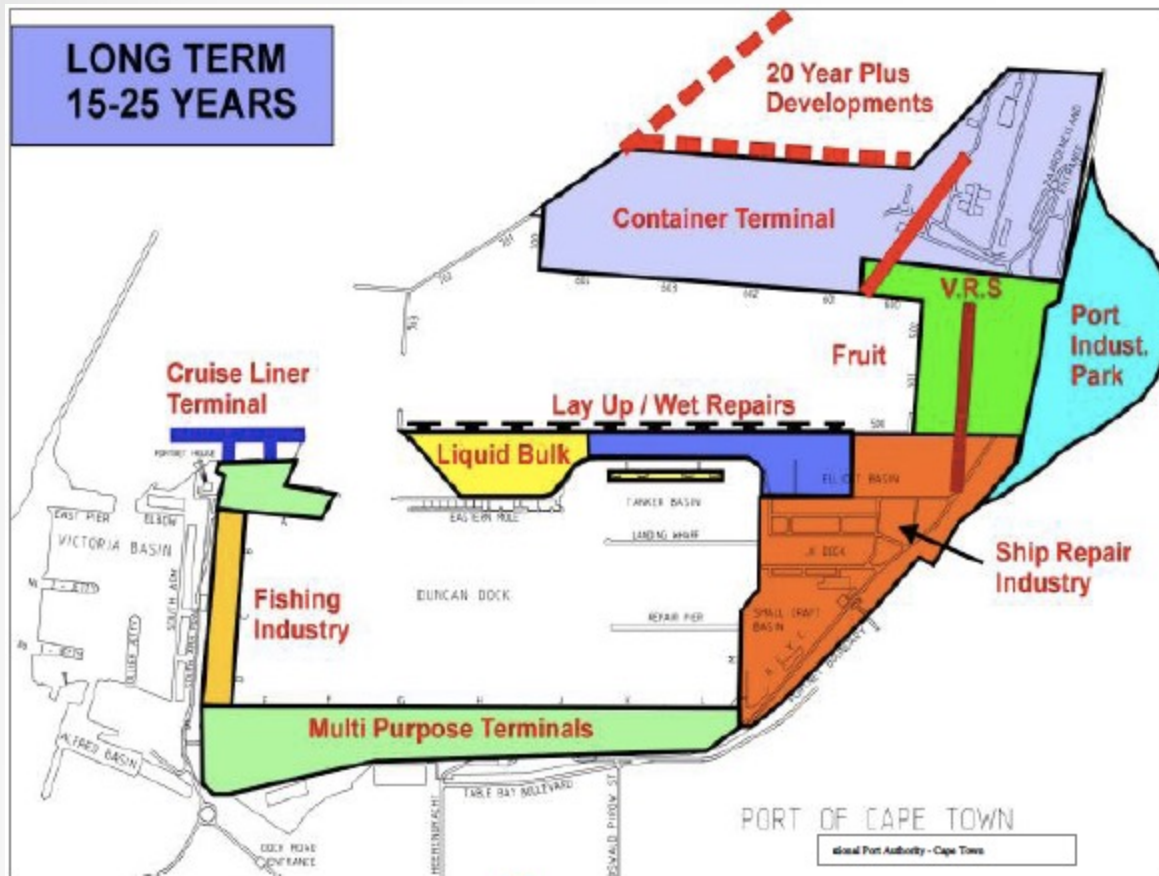- Assessment
- Guidelines

Strategic Environmental Assessment @   MRPartidário
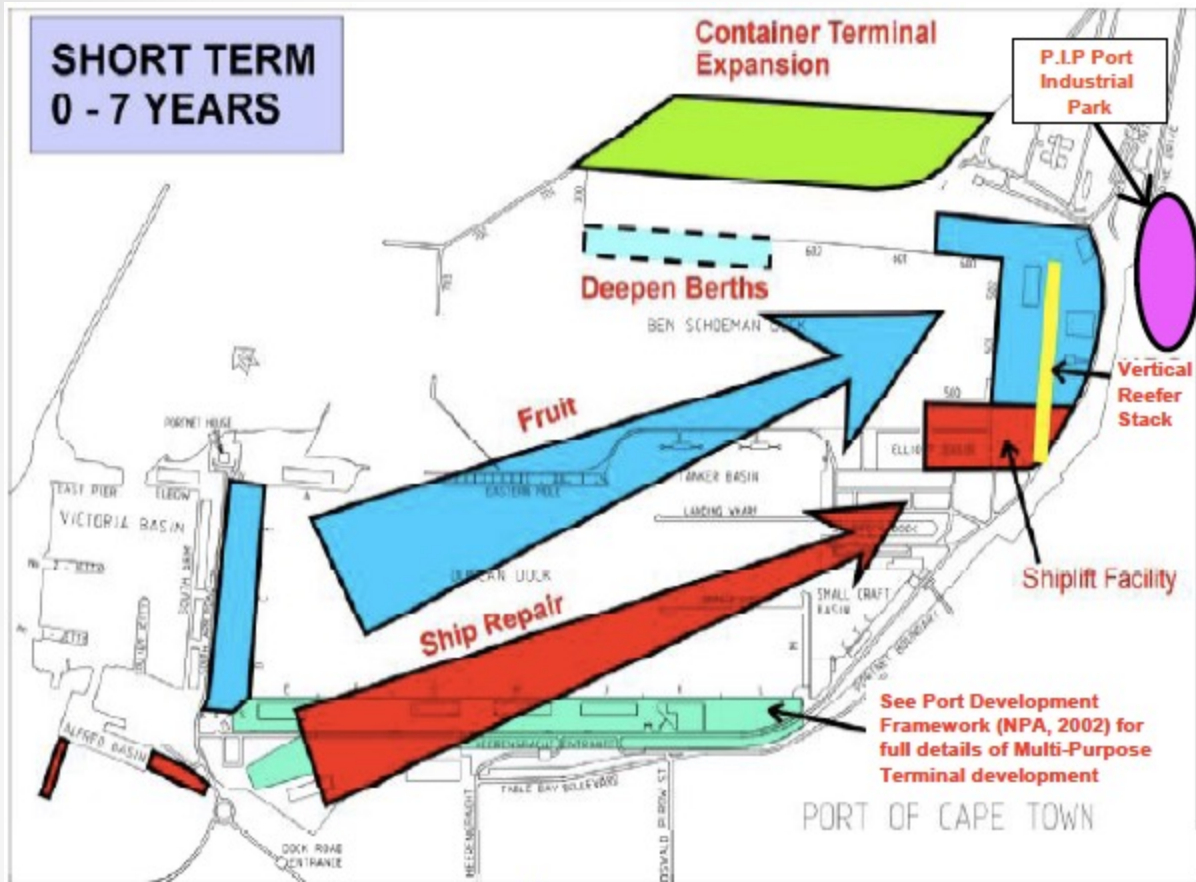
SEA of PORT of CAPE TOWN Sustainability Framework, 2004

SEA objectives - to improve:

1. Port-city relationships and cooperative decision-making
2. Relationships between the port authority and stakeholders (including users, NGOs and local communities)
3. Understand how the **surrounding biophysical environment** relates to and may impact on future port development and operation

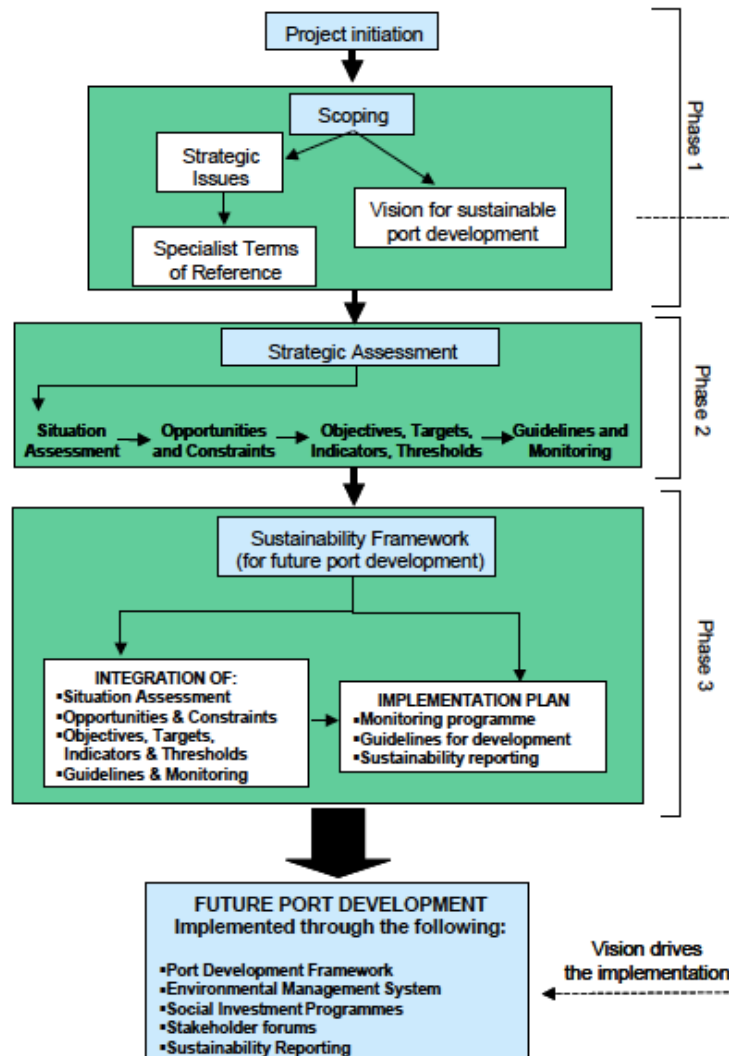# SEA of PORT of CAPE TOWN Sustainability Framework, 2004

SEA objectives - to improve:

4. Understanding of how **the livelihood and quality of life of local communities** surrounding the port may be influenced by and impact on future port development and operation

5. Understanding of how **relevant local, provincial, national and regional economic and other policies and plans** will influence the future port development

6. **Improve the collection of economic, social and biophysical environmental data** within the port sphere of influence, so that this information can be proactively used for environmental management, port planning and triple bottom line reporting.

SEA of PORT of CAPE TOWN
Sustainability Framework, 2004

SEA Process

- Phase 1: Scoping
- Phase 2: Strategic Assessment (specialist studies)
- Phase 3: Sustainability framework

ent @ MRPartidário

SEA of PORT of CAPE TOWN Sustainability Framework, 2004

Strategic issues - Scope of SEA

- Marine ecology
- Marine archaeology
- Shoreline stability
- Port accessibility
- Port-city land-use planning
- Socio-economics / Corporate and Social Responsibility
- Economic Impact of the Port

SEA of PORT of CAPE TOWN
Sustainability Framework, 2004

Structure of analysis of strategic issues:

- Issue statement
- SEA objectives
- State of environment and trends
- Objectives, targets and indicators
- Oportunities and constraints for future port sustainable development
- Guidelines for sustainable port development and operation

5. MANAGEMENT FRAMEWORK FOR SUSTAINABLE PORT DEVELOPMENT

Strategic issues are defined as issues, that if not addressed, will prevent the port from achieving its vision for sustainable port development as presented in Section 2.3. In developing a management framework for the strategic issues, each issue has been broadly discussed under the following headings:

Issue statement: Why the issue has been identified as a strategic issue.

SEA Objectives: Which SEA objectives, as presented in Chapter 2, are met by addressing the specific strategic issue.

State of Environment: The existing state of the environment and the trends in this regard that may be obvious. This allows for the identification of sustainability objectives, targets and indicators.

Objectives, targets and indicators: Sustainability objectives, targets and indicators to direct future port planning and development. Monitoring the indicators will assist with tracking the port's progress towards sustainable development. Monitored data can also assist decision-makers in identifying the consequences of earlier decisions, assisting them with continual improvement of future decisions.

Opportunities and constraints: Opportunities for and constraints to future port development and operation that fall within the bounds of the identified objectives and targets.

Guidelines for future port development and planning: Guidelines for port planners, environmental managers, human resource managers and others to exploit opportunities and overcome constraints, thereby achieving the objectives and targets and facilitating sustainable port development. The guidelines may include specific guidelines and/or monitoring guidelines.

To ensure effective implementation, each guideline is identified with a specific department within the National Ports Authority's management structure. Some of the guidelines, however, relate to both the port and the City of Cape Town, and effective management therefore requires close collaboration between and joint decision-making by both parties. The implementation framework for recommended guidelines and monitoring programmes is contained in Chapter 6.

The information contained in this Chapter is primarily sourced from the specialist studies as shown in Table 2.1, Section 2.2.2.

SEA of PORT of CAPE TOWN Sustainability Framework, 2004

Sustainability Framework
- guidelines prepared for:

- Research / baseline studies
- Considerations for port planning
- Considerations for port operations and management
- Monitoring
- Stakeholders engagement
- Sustainability reporting and data collection, storage, analysis and presentation

Lessons learned

+
Excellent example of private use of SEA for a major project strategic discussion
SEA was extremely iterative throughout the process
Excellent example of stakeholders involvement
Focus on 7 main relevant integrated themes that structure the assessment
Provides guidelines for planning, management and monitoring, with strong implementation mechanisms

-
Does not include options discussion in a formal way, even though people involved say it was informally addressed
Does not look much into the wider context in the long-term – what will the expansion of the port mean for the region?
Not much on public policy discussion either, particularly in the long-term, missing a governance dimension