

Strategic Environmental Assessment for Shale Gas Development in South Africa

Project Introduction



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Prof. Bob Scholes (Wits/CSIR)

Tuesday 12 May

GCIS Media Room Parliament



Council for Geoscience



CSIR

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In Brief

The Strategic Assessment will provide to South Africa, over a 24 month period, the evidence base it needs to make informed decisions regarding the exploitation of shale gas.

The assessment will do so in a rigorous, independent, participatory and transparent fashion.

Guiding Principles

- Satisfy the principles for SEA conveyed in the Guidelines provided by DEA & CSIR in 2000 & 2007
- Adopt the ‘three hallmarks of successful assessment’
 - **Salience**: must address all the material issues
 - **Legitimacy**: authorised and seen to be an independent, transparent and fair process
 - **Credibility**: Multi-Author Teams, expert reviewers and evidence-based

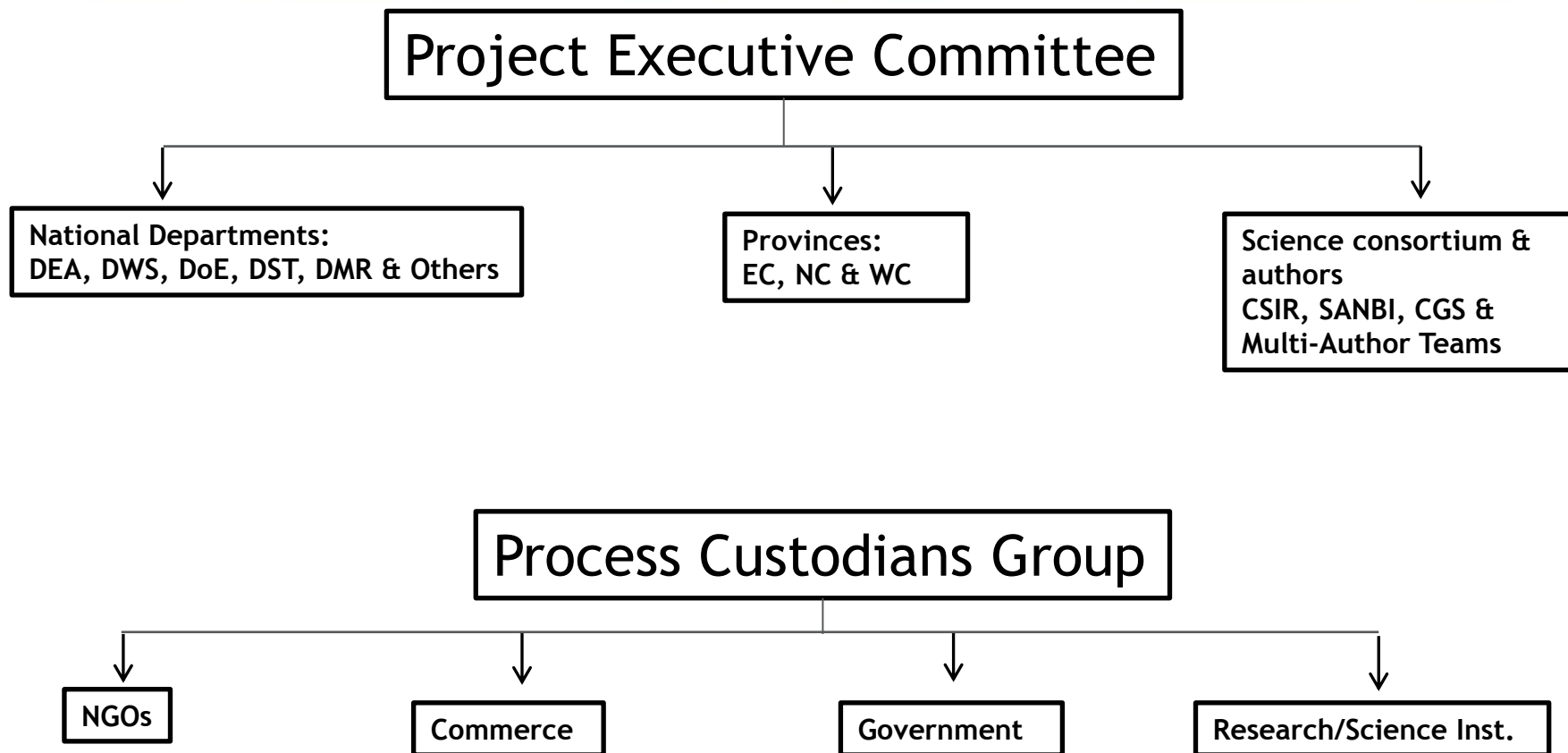
How a SEA differs from an EIA

A Strategic Environmental Assessment

- Builds an understanding of cumulative, indirect and complex risks and opportunities over a large region
- Uses sustainability objectives to set targets and limits
- Involves strategic and coordinated planning at a national level for large-scale projects
- Creates a public resource of credible, relevant information to broadly inform the discussion
- Is an inclusive process which can reveal the possibility of win-win as opposed to only win-lose outcomes

It creates the overarching framework within which site-specific appraisal guidelines, management principles and monitoring requirements for responsible environmental management can be placed.

How the assessment will be governed



Project Scope

- 24 month study, collating and synthesizing local and international information
- Includes the full life cycle: Exploration, Production, Closure
- Study area is that under Exploration Right consideration by DMR (125 346 km²)
- The 'Environment' includes social, economic and biophysical spheres. Provisional Strategic Issues include:

Water Resources (Surface & Subsurface)

Waste Management

Biodiversity and Ecosystem Services

Spatial Planning

Air Quality & GHG Emissions

'Sense of place' (incl. tourism)

Social Fabric

Economics

Geophysics

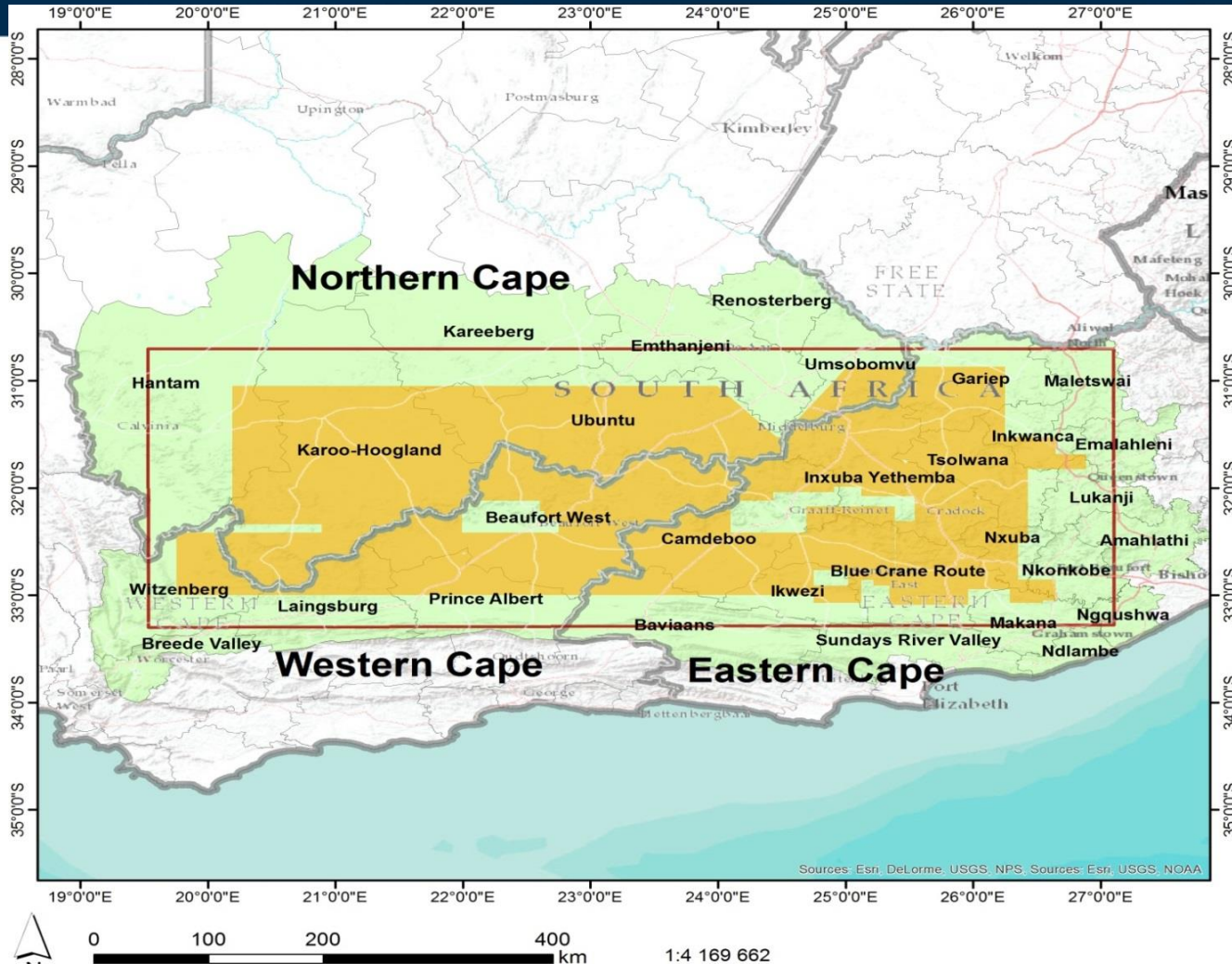
Energy Planning

Heritage Resources

Agriculture

Visual, Noise & Electromagnetics

Study Area



Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree



environmental affairs

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South African National Biodiversity Institute



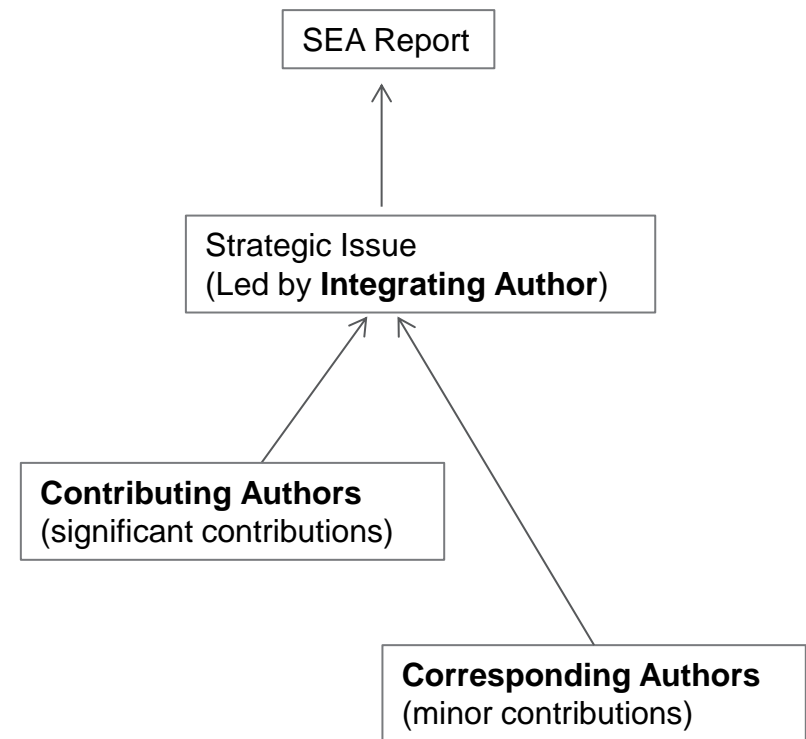
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Multi-Author Team Approach

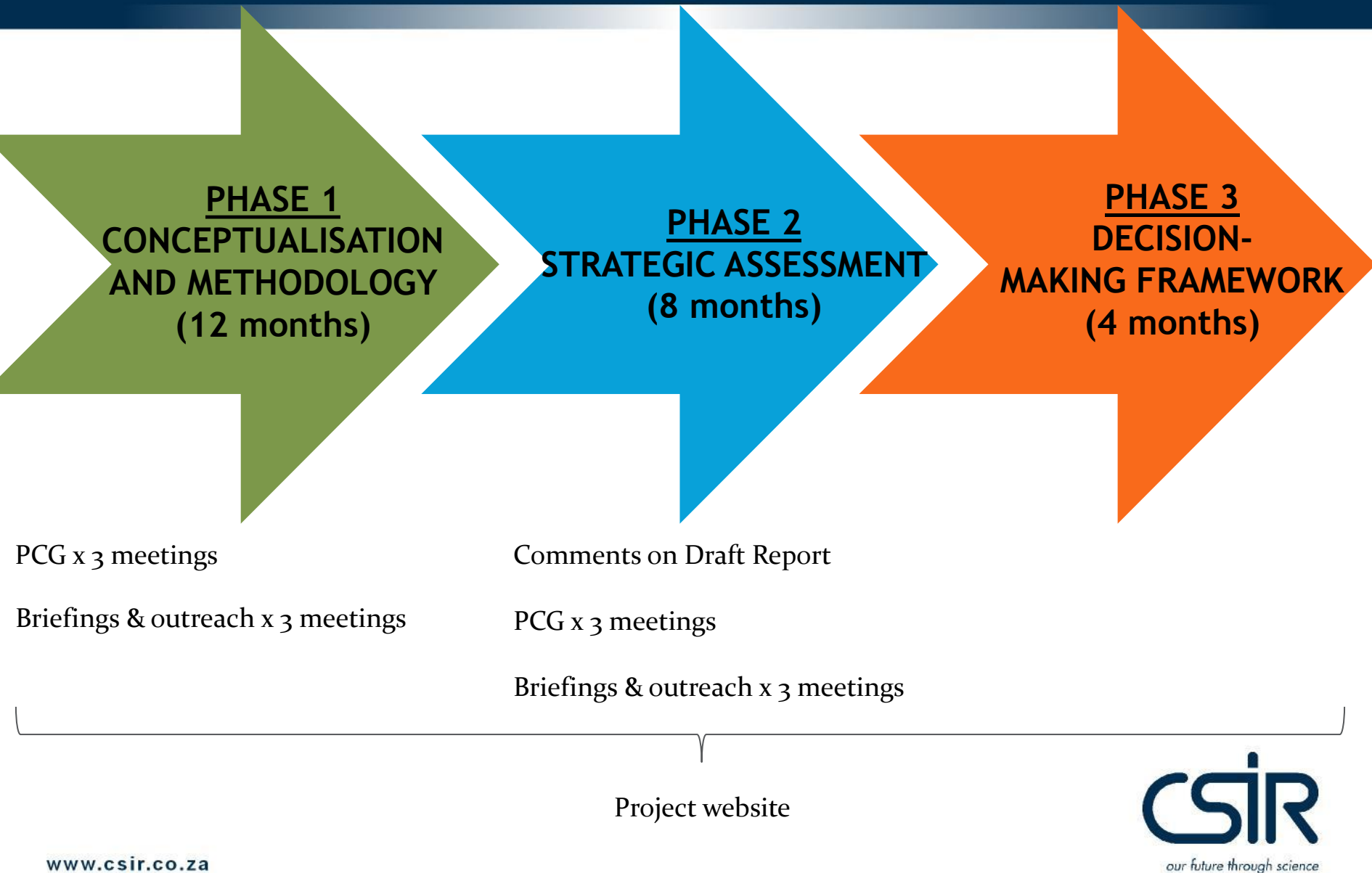
The assessment will be authored by acknowledged experts in their fields, from research organisations, academia, civil society and the private sector.

It will undergo two rounds of review: First by independent expert reviewers, then by stakeholders.

The review process will be in the public domain



Project Process and Timelines



www.seasgd.csir.co.za/