



# Implementing Sustainable Development Using the Accountable Development Model.

Ken Banister, BAIE, A.Sc.T.

Tristan Goodman, Ph.D.



# Accountable Development Model

- Sustainable Development.
  - development that “meets the needs of of the present without compromising the ability of future generations to meet their own needs”.
  - has evolved from a specific concern for the environment to a high level, vague concept that encompasses many environmental, technical and management issues.



# Accountable Development Model

- The diversity of definitions is overwhelming; it is appropriate for organizations to define sustainable development on their own terms.
- While defining sustainable development is important, exactly how sustainable development is defined within an organization is not as important.
- It will depend on who is doing the defining.



# Accountable Development Model

- Whatever the definition, the biggest challenge to implementing sustainable development has been putting the defined term into an organizational structure.



# Accountable Development Model

- Many tools, techniques and procedures have been developed to measure environmental components.
  - Base line assessment: EIA.
  - Economic assessment: risk management, cost-benefit analysis, and full cost accounting.
  - Structured approaches: design for environment, life cycle assessment, P2, and environmental management systems.



# Accountable Development Model

- The principles of sustainable development give us the moral compass, but they do not give us the ability to make sustainable development occur.
- Environmental tools give us the ability to prevent or mitigate environmental concerns, but they cannot show us the way to sustainable development.



# Accountable Development Model

- Accountable development uses **STRATEGY** to tie the principles of sustainable development with the tools for preventing and mitigating environmental impacts.

# Accountable Development Model

Principles of Sustainable Development



Management Tools





# Accountable Development Model

- Strategy

- “The creation of a unique and valuable position involving a different set of activities” <sup>1</sup>.
- It is a deliberate trade-off of activities arising from an evaluation of the importance of the activity.
- It is choosing what not to do.

- 1. Porter, M.E., Harvard business review, November-December 1996.



# Accountable Development Model

- Strategy allows organizations to look at “environmental problems as business issues” <sup>2</sup>.
- It also allows organizations to look at business problems effecting the environment.

• 2. Reinhardt, F.L., Harvard business review, July-august 1999.



# Accountable Development Model

- The accountable development model strategy draws from an organization's business, social and environmental concerns using strategic environmental components (SEC).

# Accountable Development Model

## Step One

Strategic Environmental  
Components defined



# Accountable Development Model

- Strategic environmental components are the specific ideas and activities used to describe sustainable development, or specific parts of sustainable development.



# Accountable Development Model

- The accountable development model begins with a radar diagram, where each arm of the radar diagram is a strategic environmental component.
- Strategic environmental components are common to all organizations and drawn from internal and global concerns.



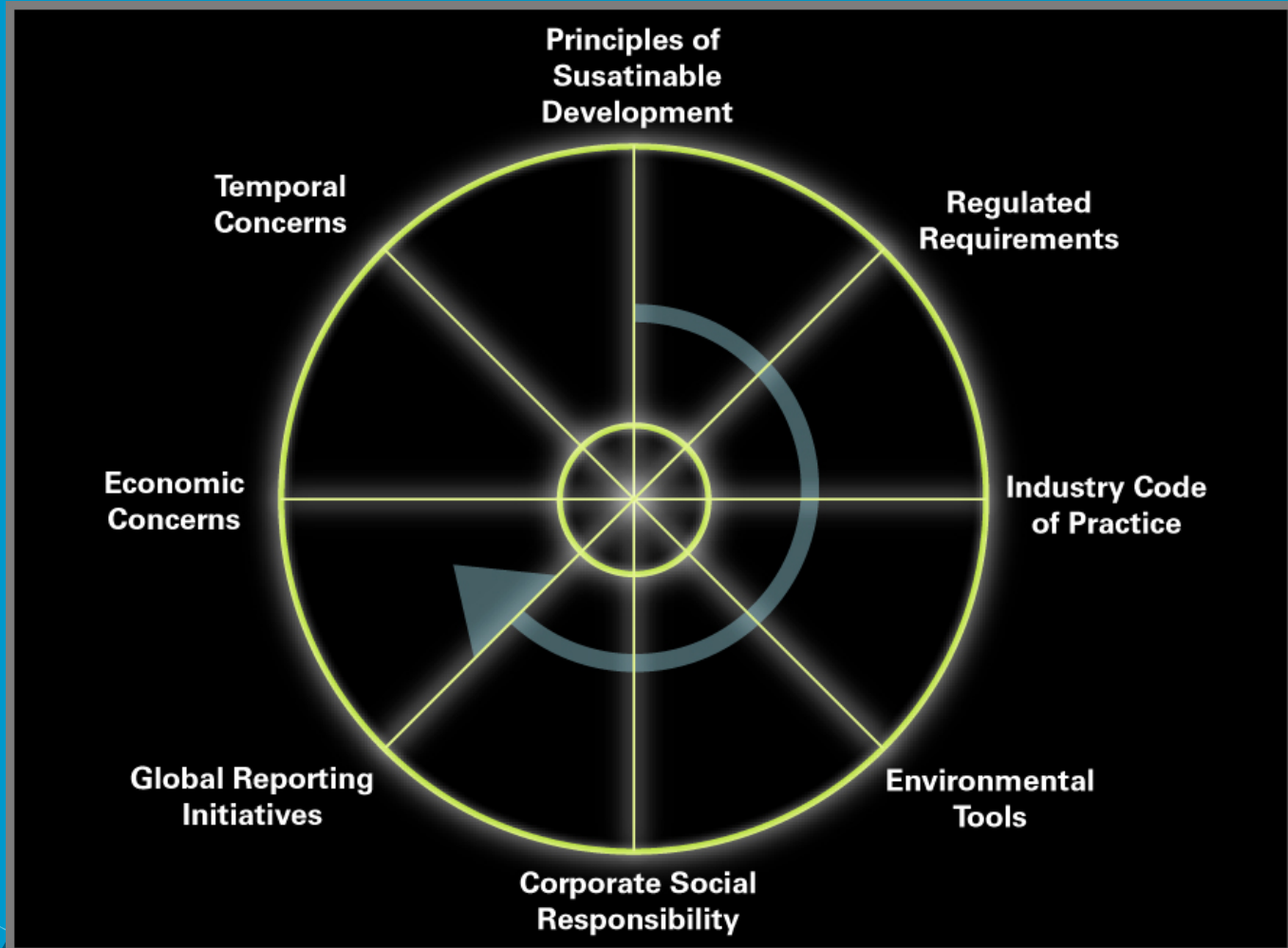
# Accountable Development Model

## Strategic Environmental Components

The Principles of Sustainable Development	Regulated Requirements
Industry Stewardship Initiatives	Environmental Tools
Corporate Social Responsibility	Global Reporting Initiatives
Economic Concerns	Temporal Concerns

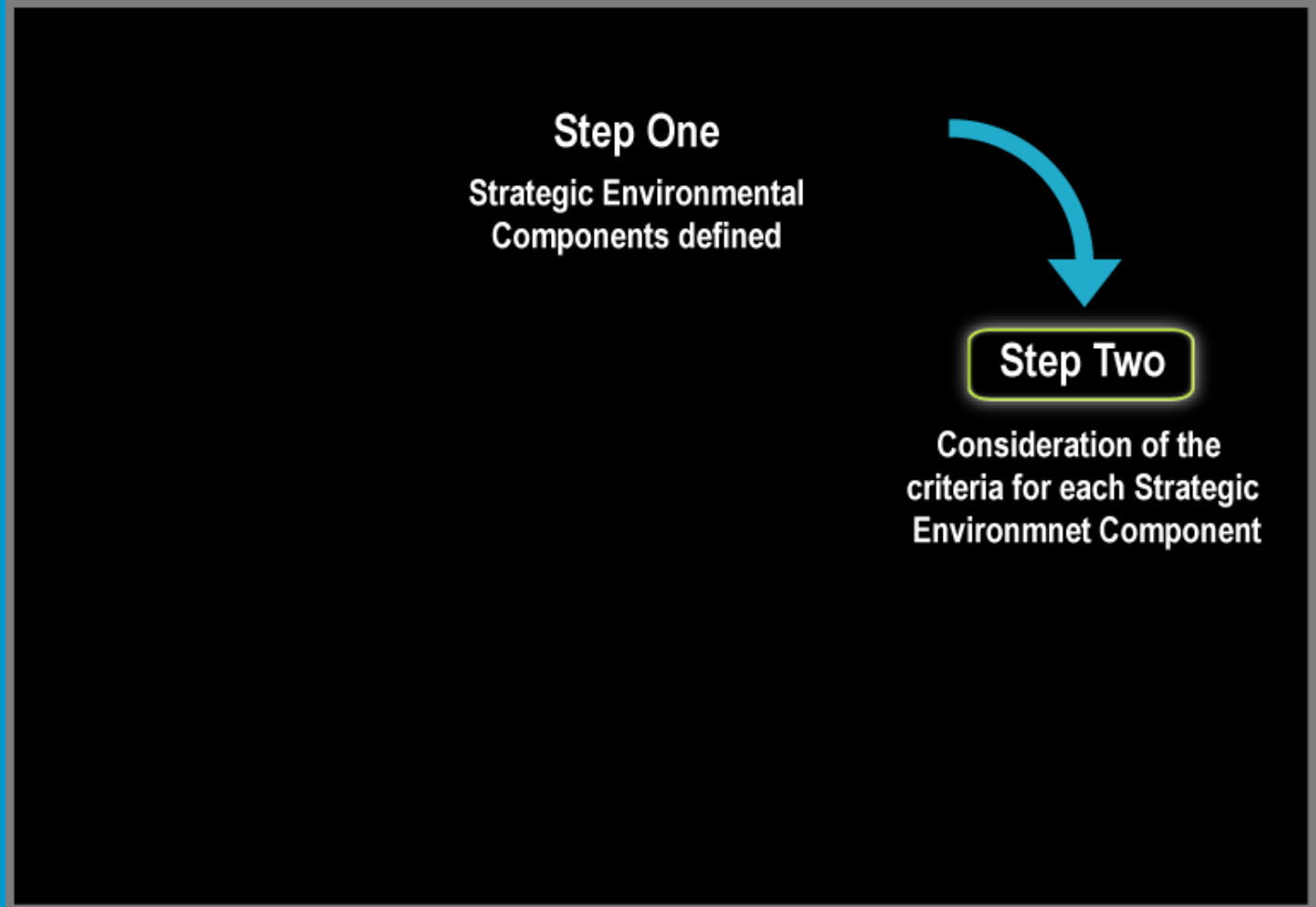
# Accountable Development Model

## Strategic Environmental Components





# Accountable Development Model





# Accountable Development Model

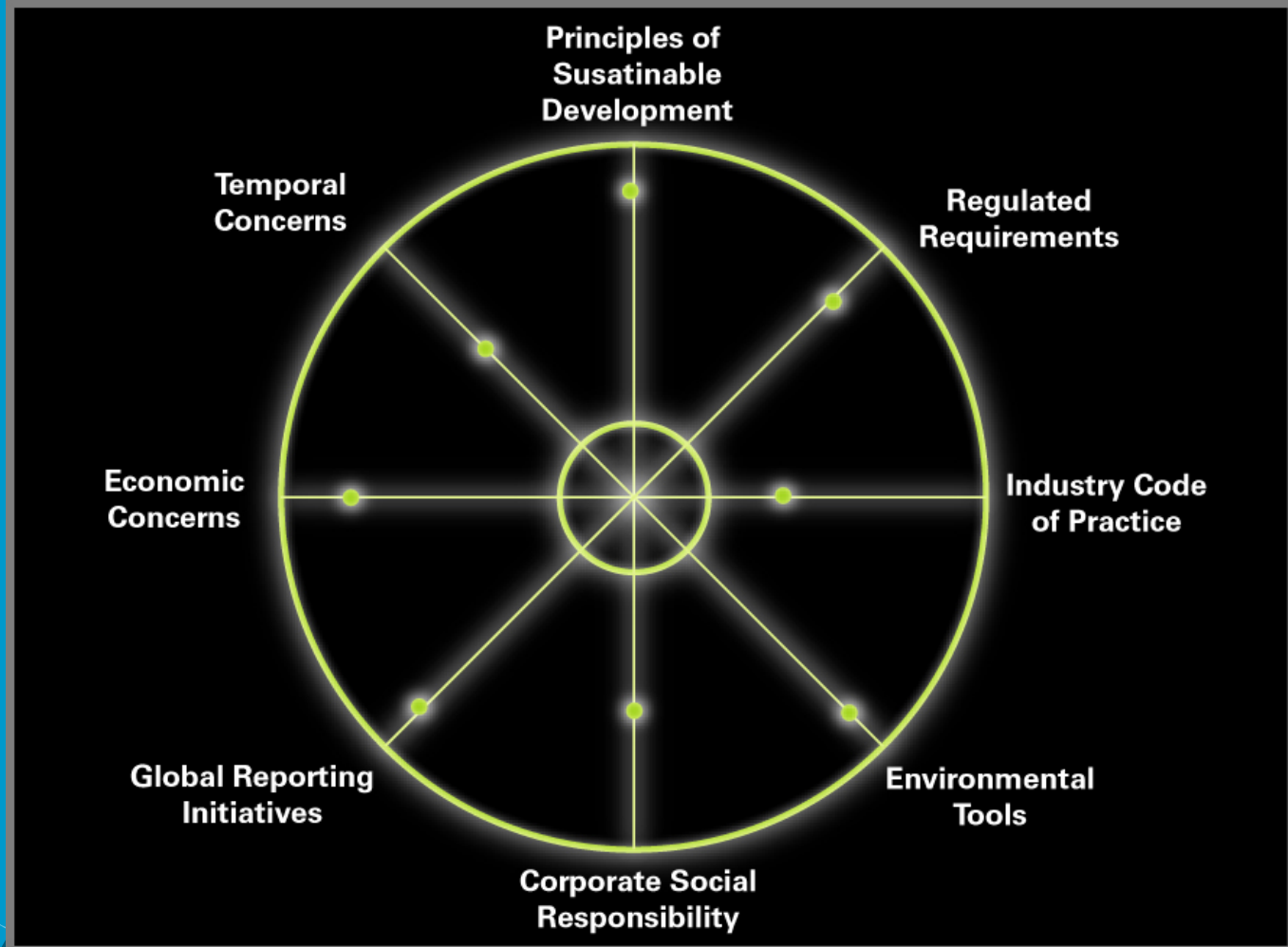
- Using a menu based approach, specific criteria for each SEC considered.
- The organization scores where it believes it rates on the scale for each SEC. A maximum of 100 points (100%) can be allocated to each SEC.

# Accountable Development Model

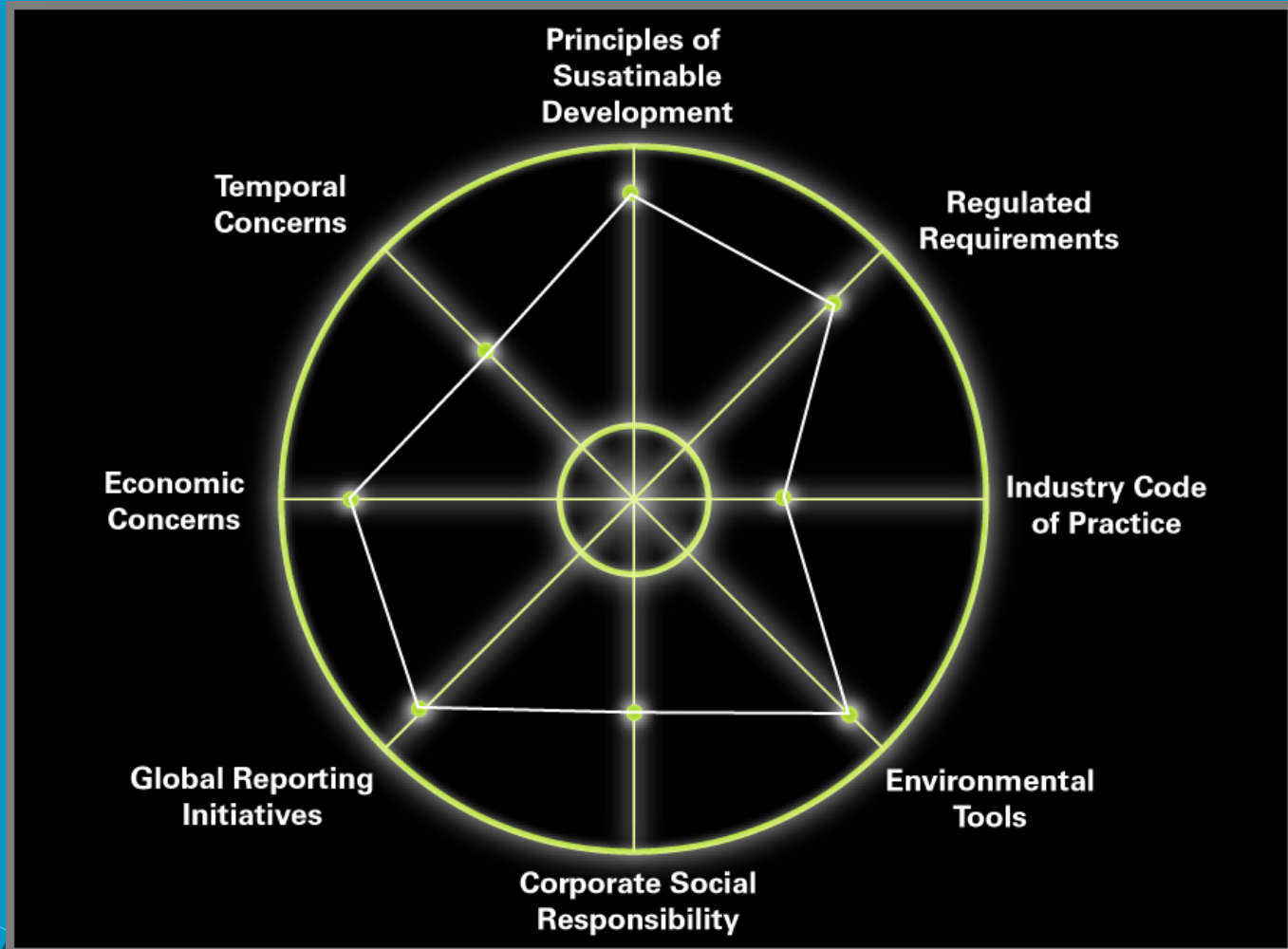
Examples of Criteria for the “Environmental Tools” SEC

Risk Management	Environmental Reporting
Life Cycle Assessment	ISO Standards
Cost – Benefit Analysis	Full Cost Accounting
Eco-efficiency	Pollution Prevention
Design for Environment	Environmental Impact Assessment

# Accountable Development Model



# Accountable Development Model

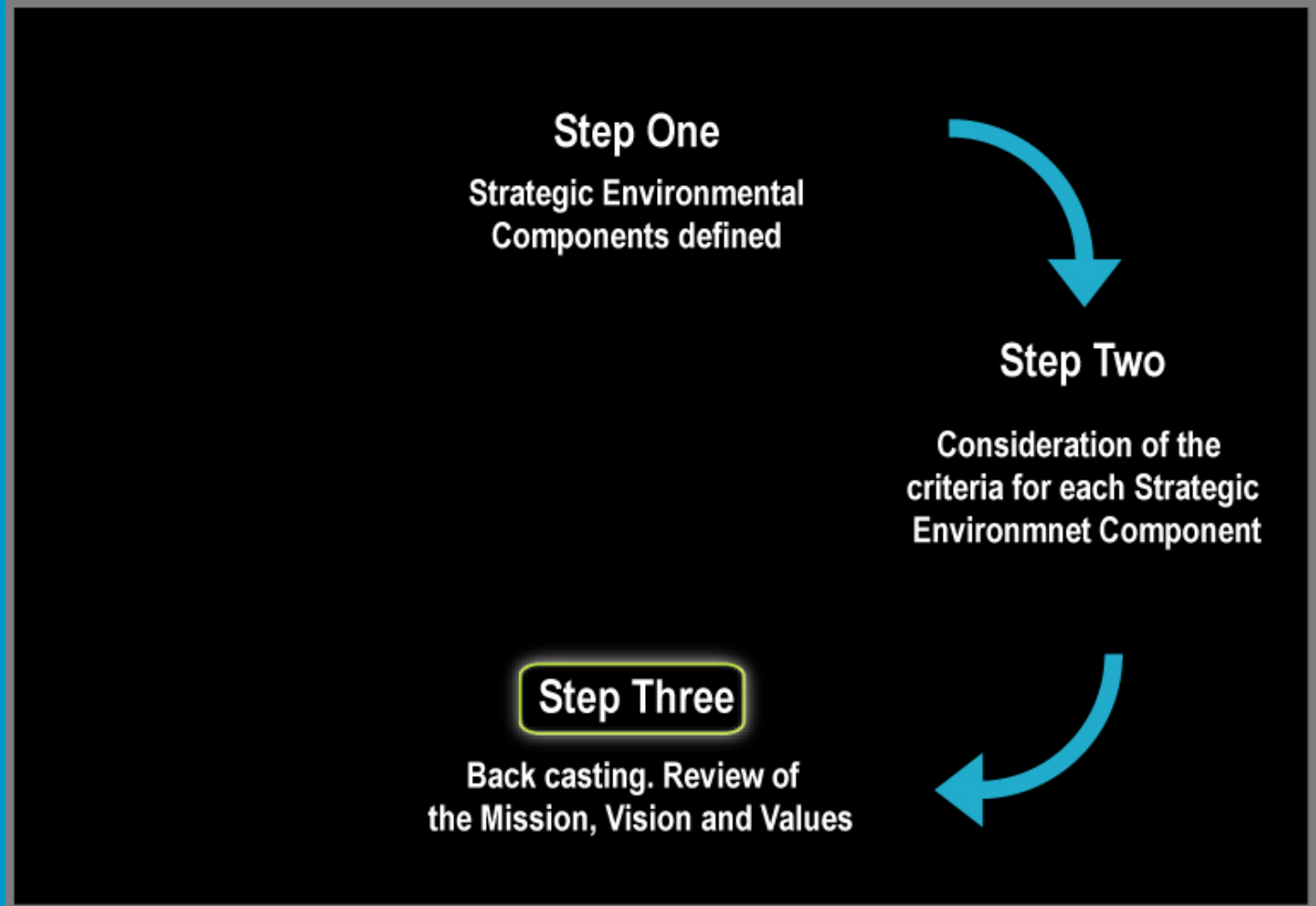




# Accountable Development Model

- This forms the basic shape of the radar diagram and is the baseline condition for the organization.

# Accountable Development Model



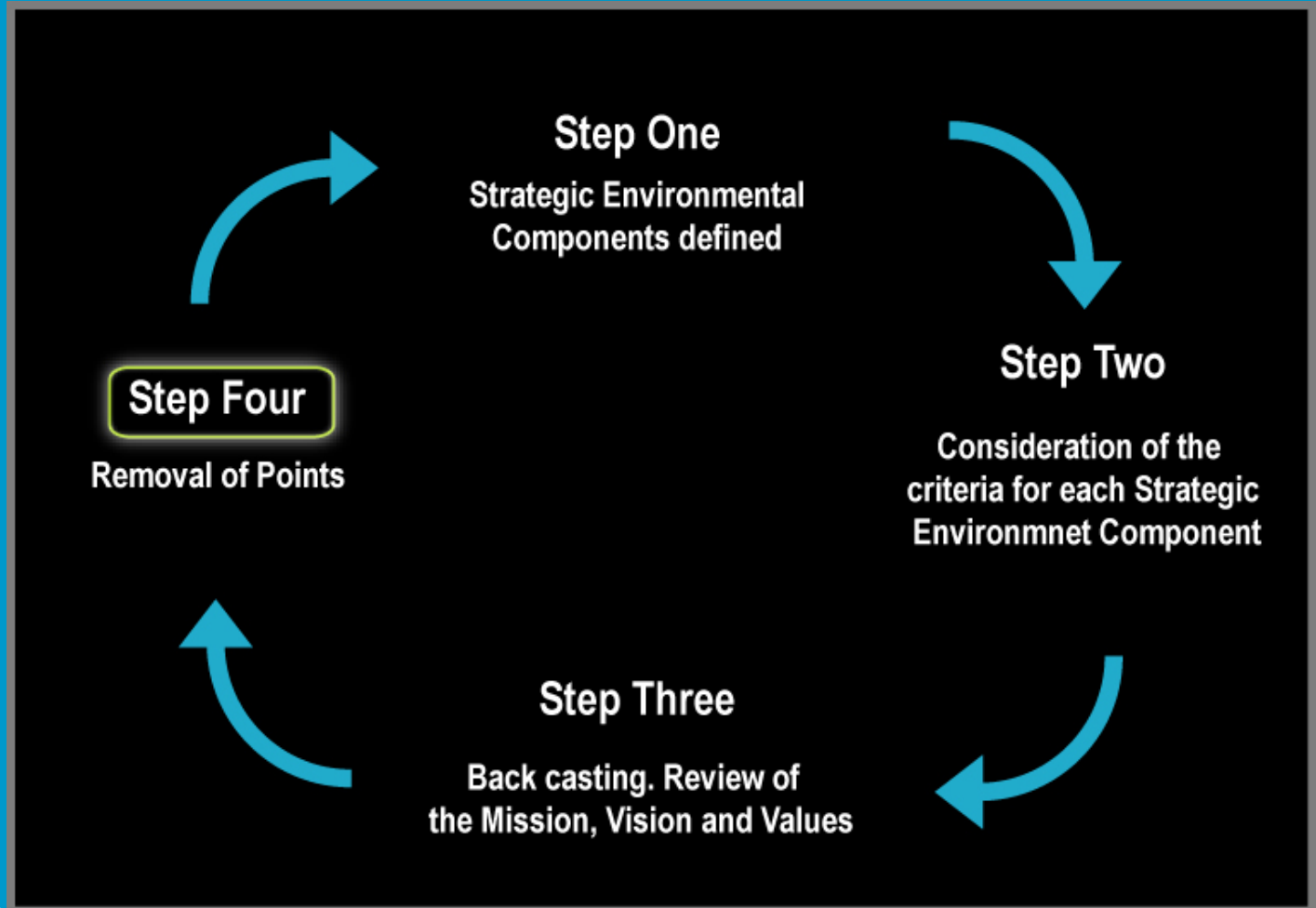


# Accountable Development Model

- Back casting is used here as a comparative test that allows the organization to check its assumptions with existing management thinking.
- By reviewing their mission, vision and value statements, organizations can ensure the strategic environmental components are consistent with other organizational goals.



# Accountable Development Model

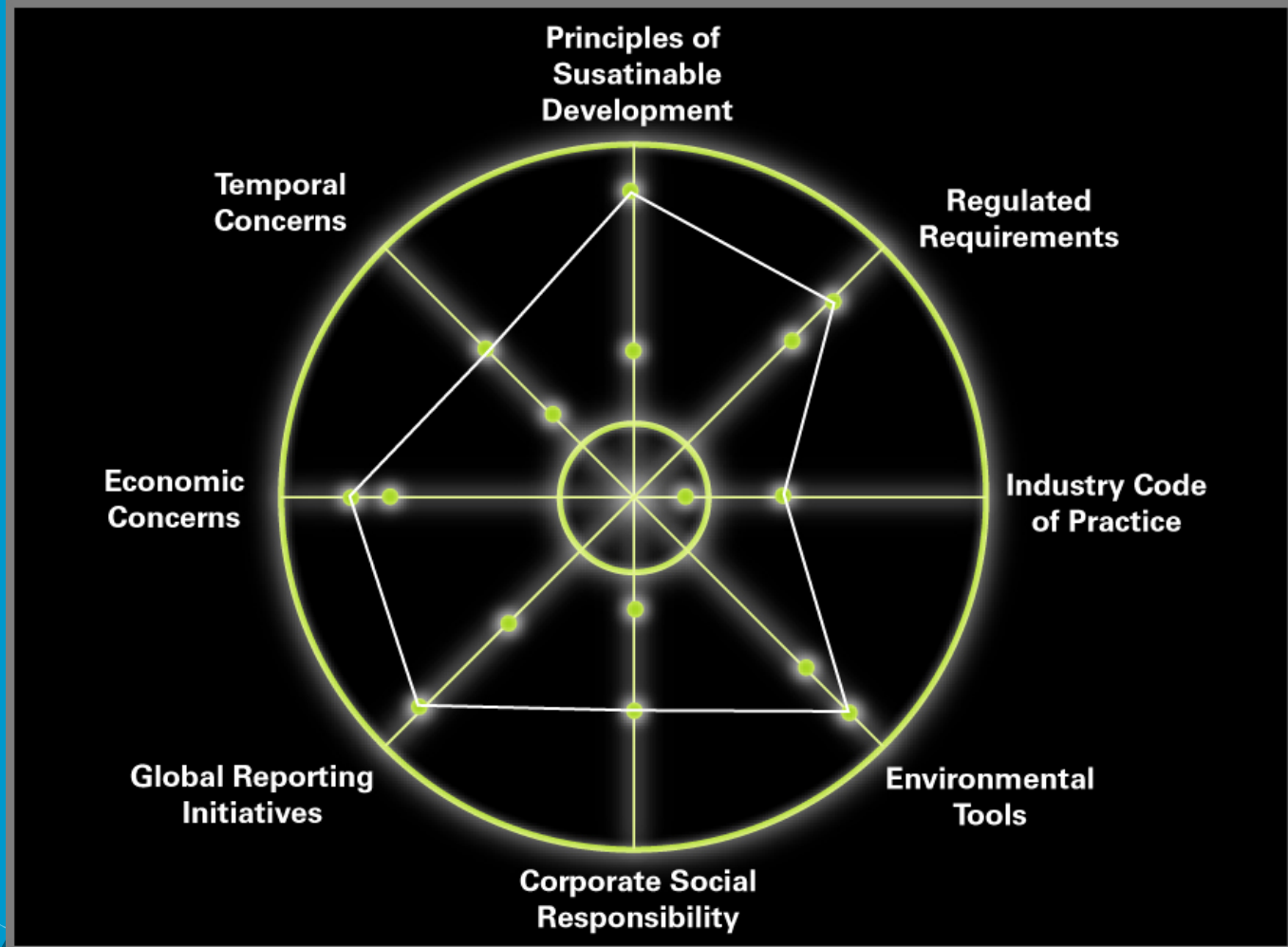




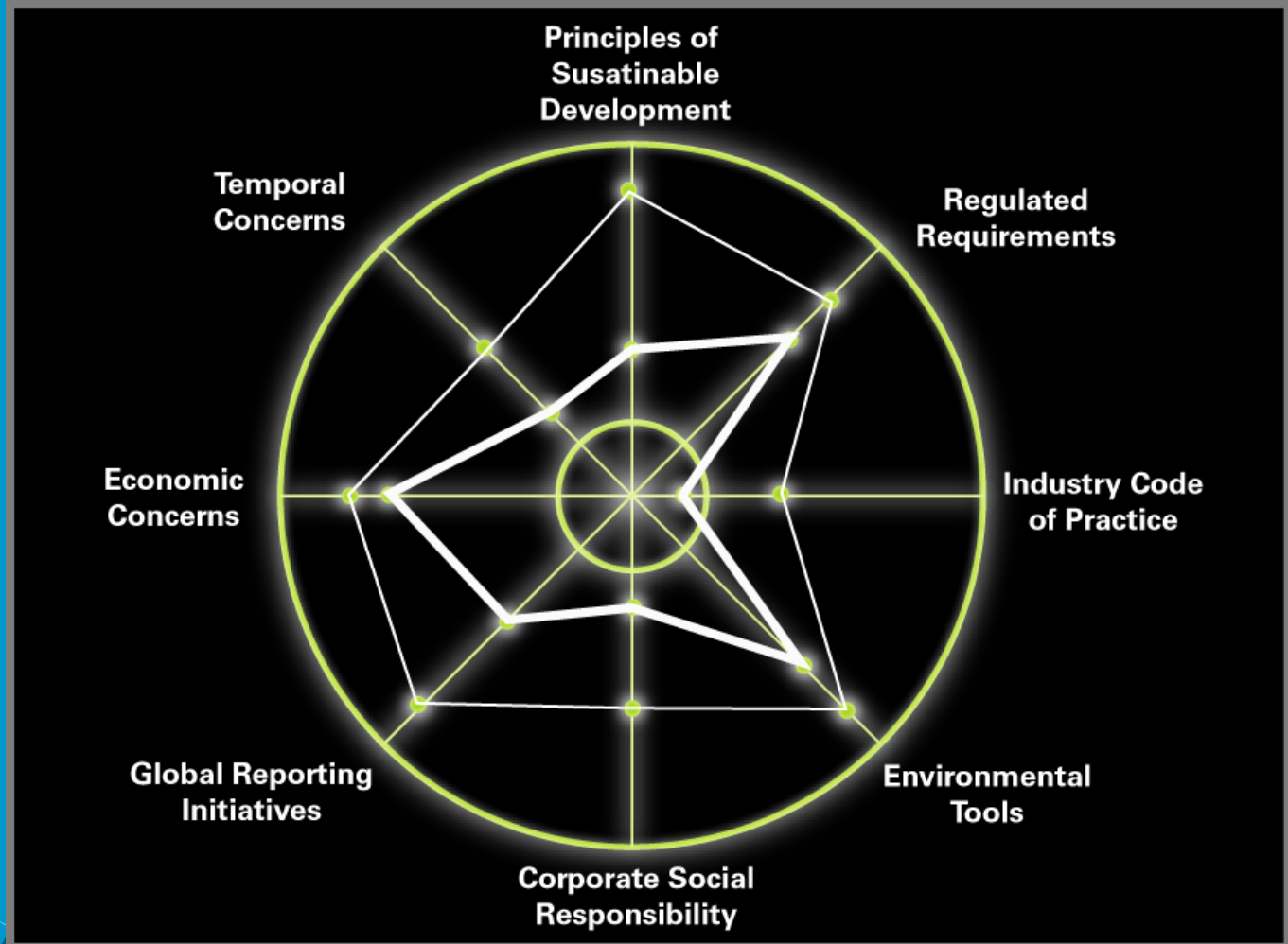
# Accountable Development Model

- To determine the organization's strategy, management is now required to remove points from the diagram.
- This requires the removal of 15% of the total points. (120 points)
- Point removal is a sensitivity analysis and shows the trade-offs required.

# Accountable Development Model



# Accountable Development Model





# Accountable Development Model

- The model can be used:
  - By senior decision makers to show transparency and accountability.
  - To determine which SECs to focus the organizations resources on.
  - To allow middle management and operational staff to see the trade-offs considered.
  - Allow a mechanism for staff to implement sustainable development.



# Accountable Development Model

- Growing pressure on the environment, increased public concern, and the advent of new regulatory systems requires organizations to re-examine how they make environmental decisions.



# Accountable Development Model

- Accountable development provides a strategic model that marries the principles of sustainable development with various environmental tools and management systems in a manner that is similar to the processes already used by decision makers.



# Accountable Development Model

Please provide comments to:

Ken Banister

[ken.banister@gov.ab.ca](mailto:ken.banister@gov.ab.ca)