

2003 - C2P2 Conference - Calgary

# **P2, EMS and Sustainability - How Do They Fit Together????**

Colin McKean

Global Environmental Management Systems Ltd.

# About Today

- Background and Definitions;
- Basic Model that integrates P2, EMS and Sustainability (and other “buzz” words);
- Application of Model at SABIC:

# Background

- Long been frustrated at the:
  - lack of clarity and understanding of the alpha-bet soup of “buzz” words that we use in our business;
    - P2, DfE, ISO 14001; GRI; TNS, Sustainability . . . . .
  - competition between different elements in the soup;
  - lack of a mechanism to implement the elements of the soup;
- As such, organizations are frequently confused, uncommitted and undisciplined.
- Lots of organizational reasons not to do P2

# Solution

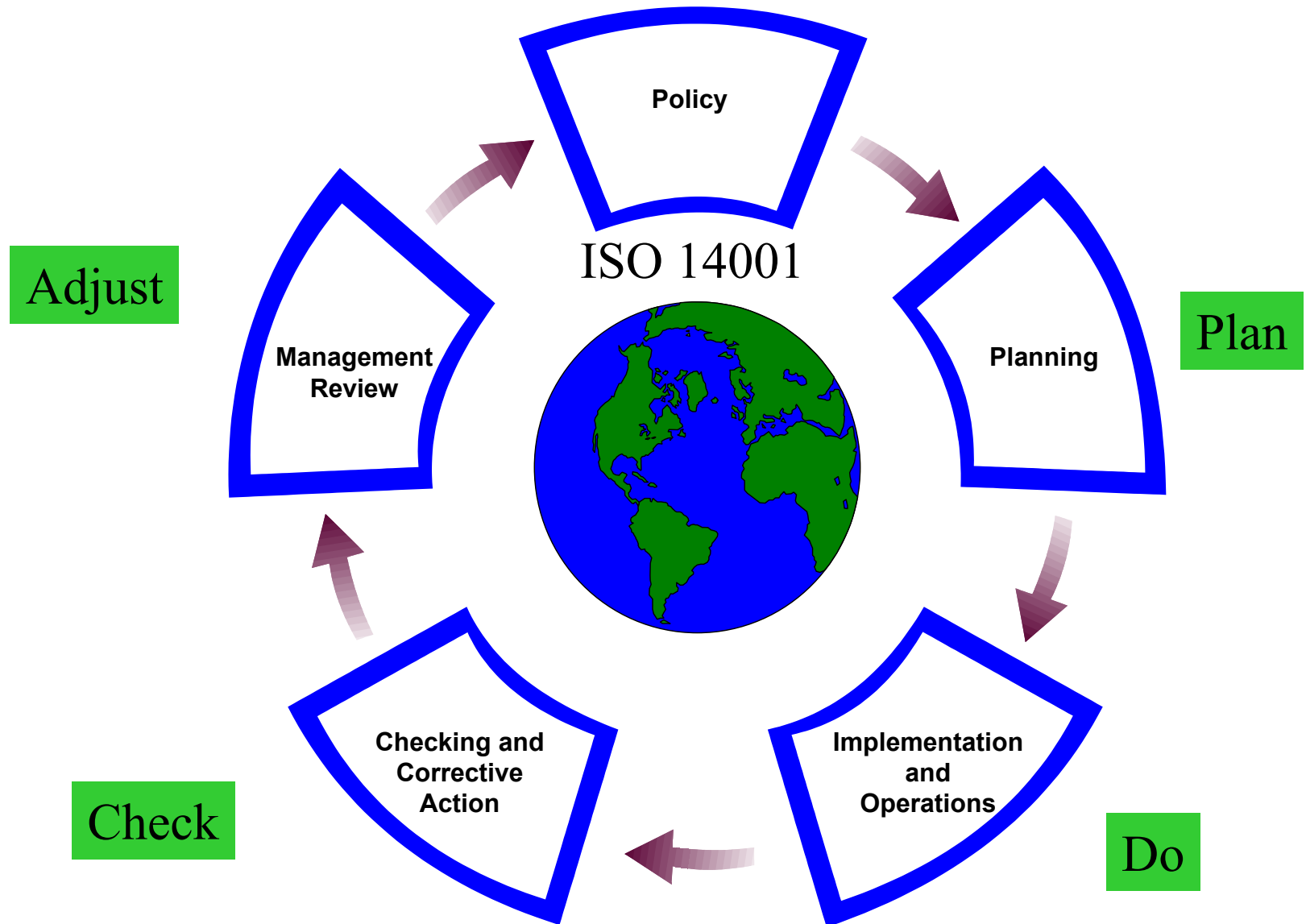


- Develop a model that simplifies and integrates the different “buzz” words within the soup;
- Allow organizations to evolve their thinking as their competency improves;
- Demonstrate to organizations that it is simple and to “get on with it”;

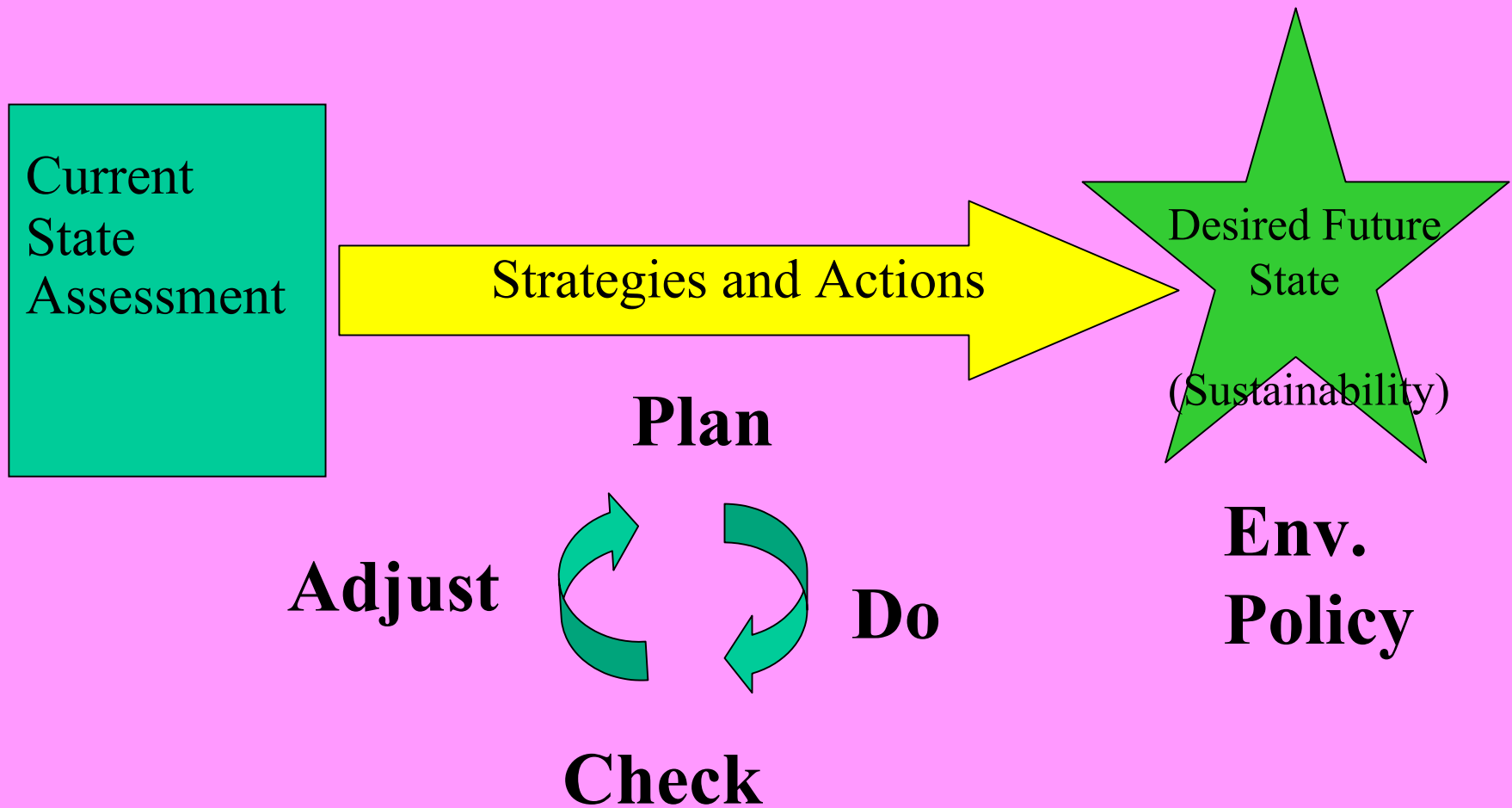
# Three Parts to Model

- **Part 1: EMS and Basic Change Management Model;**
- Part 2: Different types of EMS's;
- Part 3: Evolution of an Organization's Sophistication

# Basic Elements of an EMS



# Basic Change Management Model within an EMS



Based on the concept of continual improvement

# Part 1: So What is an EMS?

- Continual Improvement Process to achieve Environmental Policy (Ideal Future State);
- Systematic Methodology to Manage Change;
- Vehicle that helps you get to where you want to go - hopefully that is Environmental Sustainability

# Three Parts to Model

- Part 1: EMS and Basic Change Management Model;
- **Part 2: Different types of EMS's;**
- Part 3: Evolution of “buzz” words.

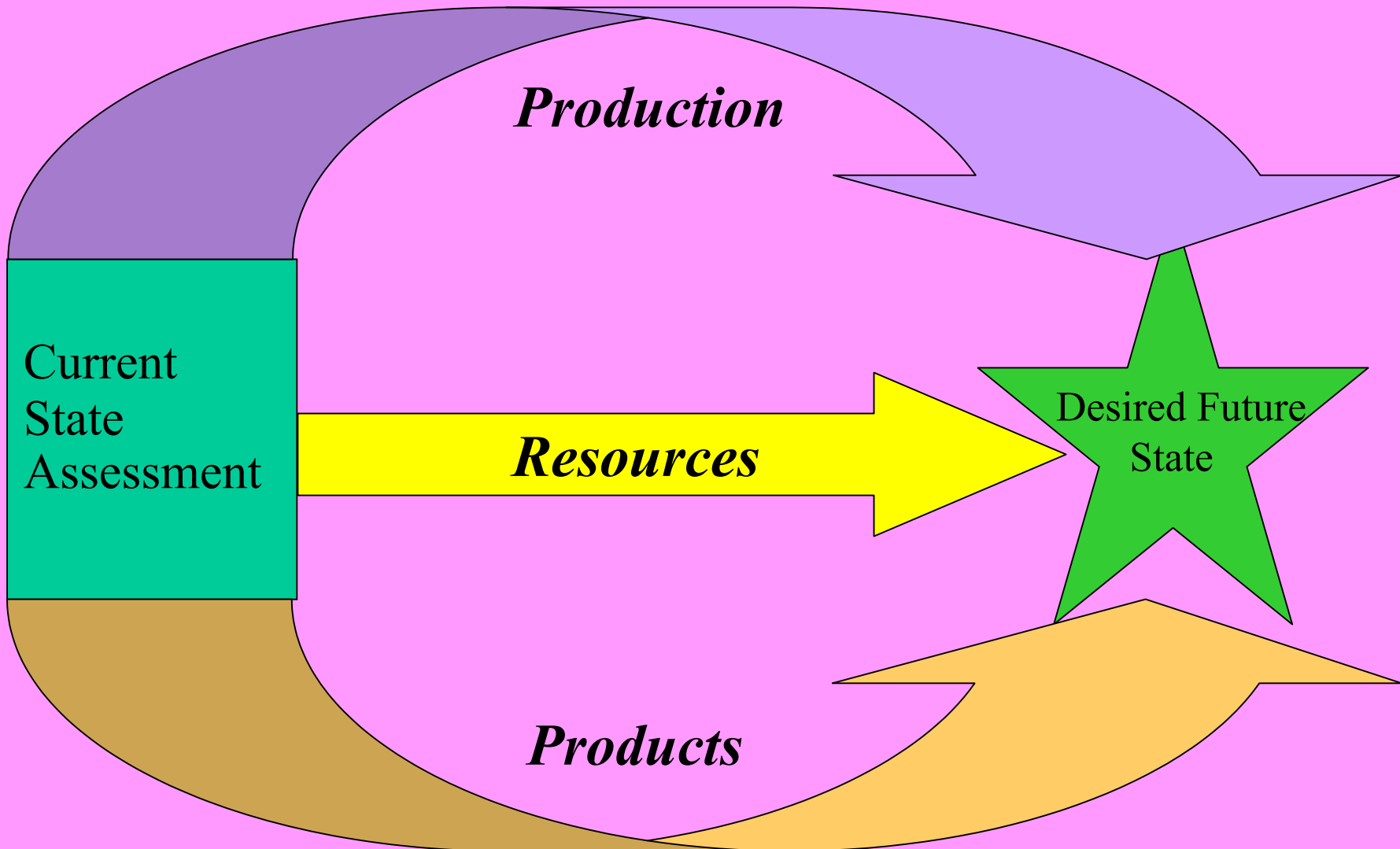
# Examples of Environmental Management Systems

- Responsible Care;
- ISO 14001;
- Forest Stewardship Council;
- Industry Stewardship Plans;
- Product Stewardship Plans;
- Resource Management Plans
- .
- etc.

# Three Basic Types of EMS

- EMS for Production Systems:
  - manage residuals from production processes;
- EMS for Products:
  - manage residuals resulting from the use of products;
- EMS for Resources (both renewable and nonrenewable):
  - manage resources used as inputs for Production Systems;

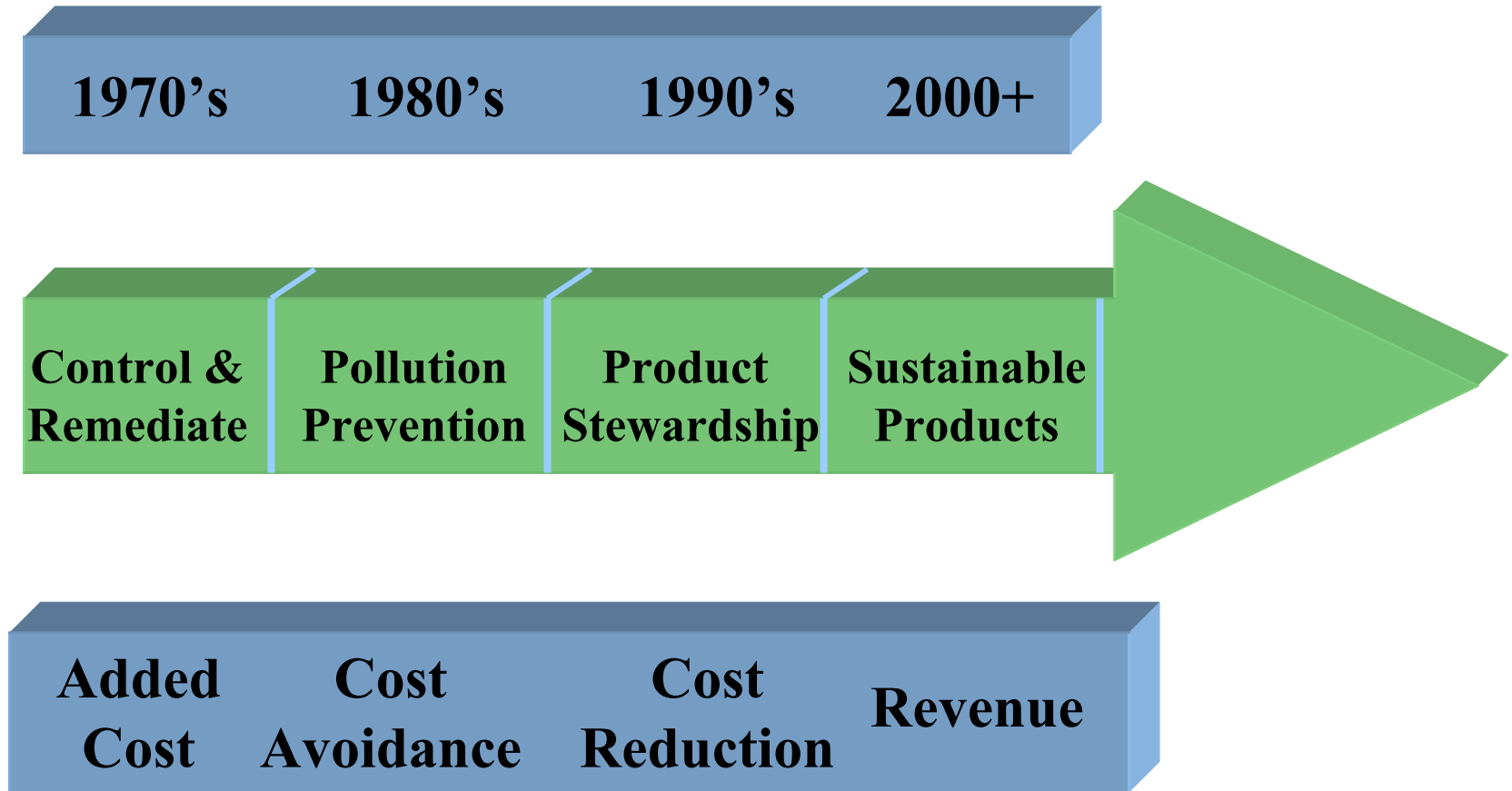
# Basic Model to Integrate Different Types of EMSs



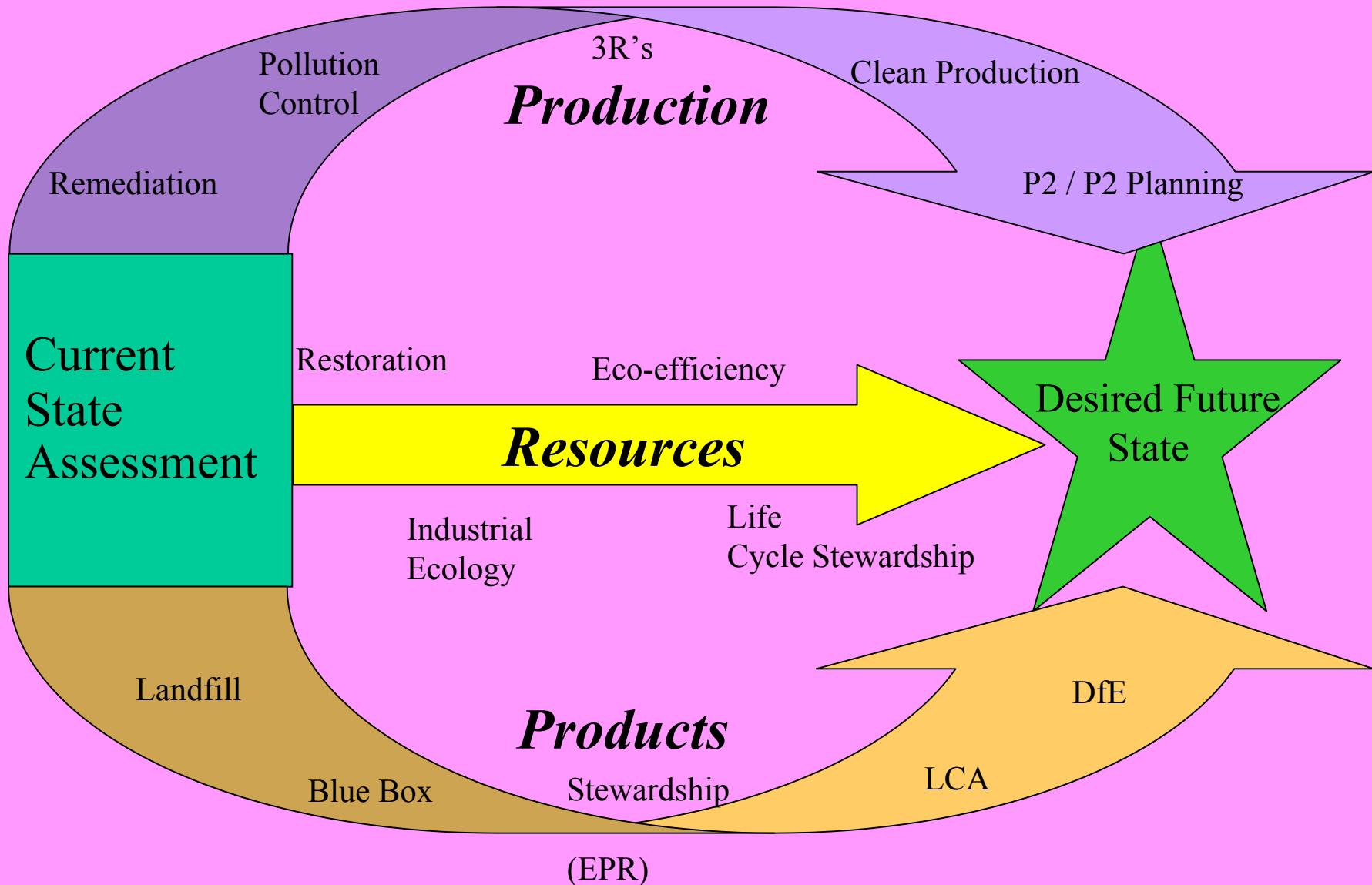
# Three Parts to Model

- Part 1: EMS and Basic Change Management Model;
- Part 2: Different types of EMS's;
- **Part 3: Evolution of Organizations.**

# Evolution of Nortel's Thinking



# Basic Model to Integrate “Buzz” Words



# Application of Basic Model

- Saudi Arabia Basic Industries Company (SABIC);
- 10+ Billion US in Annual Sales;
- 18 production facilities - mainly in Saudi;
  - phenols, methanol, plastics, . . . . . Etc.
  - steel production;
  - bulk transport;

# SABIC's

## Six Environmental Challenges

- 1) Increasing Legal Requirements;
- 2) Poor Corporate Image;
- 3) Not enough Professional Environmental Staff;
- 4) Need to be Competitive in World Markets;
- 5) Increasing Customer Requirements for “Green” Products;
- 6) Decreasing Availability of Resources.

# SABIC's Environmental Strategic Plan

## **Five Strategies to Address Issues**

- #1 Implement ISO 14001 EMS;
- #2 Develop Environmental Culture;
- #3 Implement Environmental Accounting Program;
- #4 Demonstrate Leadership;
- #5 Implement Sustainable Development Programs.

# SABIC's Environmental Strategic Plan

## **Strategy 5. Implement Sustainable Development Initiatives**

- 5.1 Implement pollution prevention programs to reduce discharges and improve production efficiency;
- 5.2 Develop eco-efficiency programs to reduce waste and improve resource utilization;
- 5.3 Design new “green” products to meet the growing demands of customers.

# Results at SABIC

- Model Simplifies Concepts for Senior Management - get buy in;
- Allows for organizations to evolve as their Management Systems and their competency improves;
- Encourages Facilities to get started (hopefully using P2).

# Broader Observations

- If you don't have an EMS - get one!!
  - Every organization needs an change management mechanism and continual improvement process;
- Be sure to include your Production Processes, Resources and Products within the EMS - don't ignore them.
- Try to integrate P2, Eco-efficiency and DfE within your EMS to achieve your ideal future state.