

# Green innovations for socio-economic development

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# Why are green innovations important

- Climate & demographic change
- Resource scarcity
- Business risk
- Comparative advantage/leadership

# Corporate Motivation

- Reactive response to operational ***crisis***
- Strategic ***risk*** to operations or supply chains
- Comparative advantage ***marketing*** of the company
- ***Leadership*** related to corporate responsibility

# Basic concepts

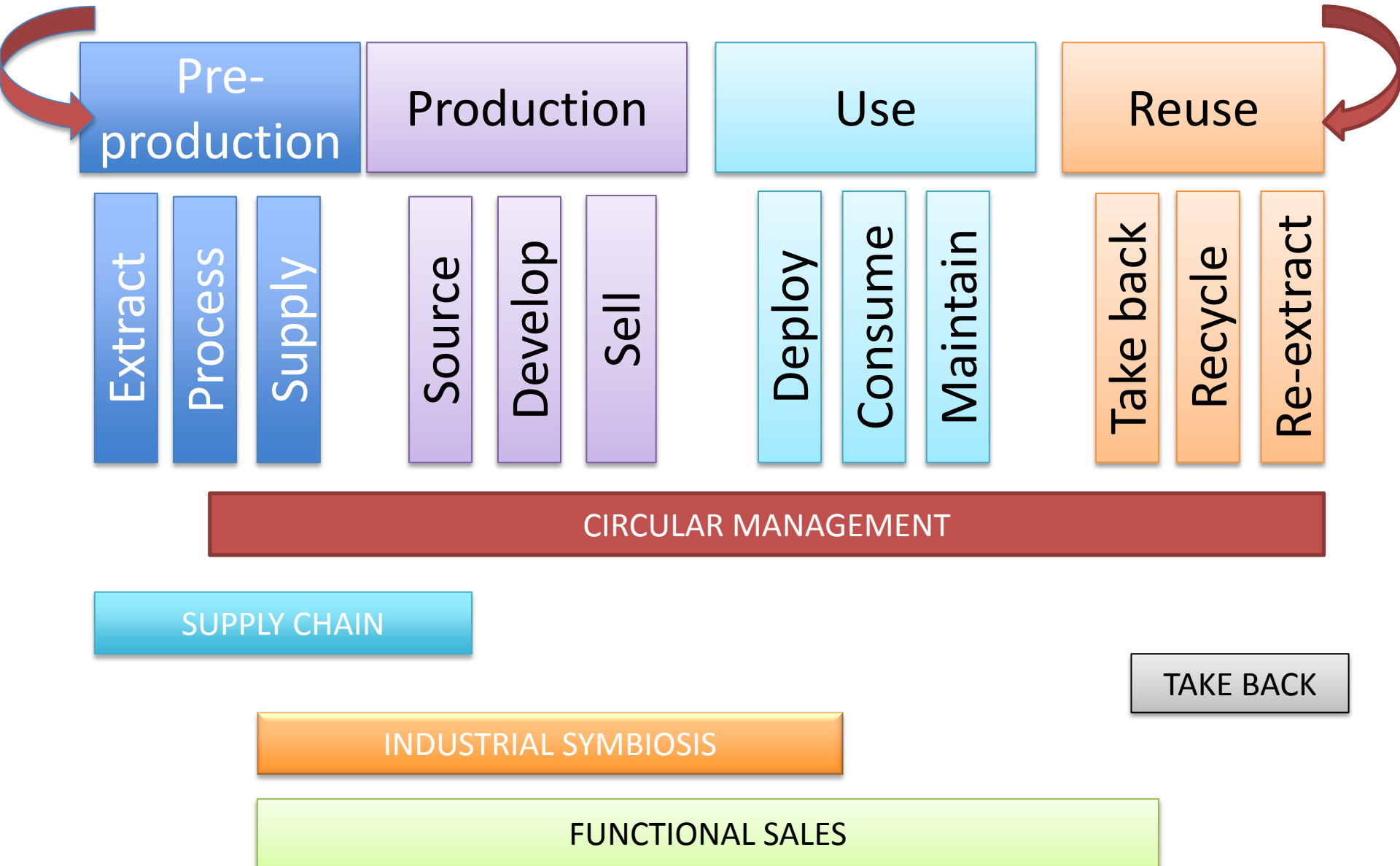
## Green innovations

Activities that produce goods and services to measure, prevent, limit, minimize or correct env'tal damage to water, air, soil...reduce waste, noise, and protect ecosystems

# What makes a business green?

- Green products or services
  - *Products for others e.g. selling of energy efficient cars, renewables*
  - *Service for others e.g. training*
- Greening processes
  - Own company e.g. pollution control, cleaner production methods
  - Life cycle e.g. setting standards for suppliers
  - Incentive models e.g. design-build-finance-operate (DBFO)

# Greening a value chain



# GREEN-INNOVATION TARGETS

Non- technological

Technological

Institutions

Marketing  
methods

Processes

Products

Industrial  
Ecology

Closed loop

Life-cycle

Eco-  
efficiency

Cleaner  
production

Pollution  
control

ECO-INNOVATION IMPACT

Modification

Redesign

Alternatives

Creation

GREEN-INNOVATION MECHANISMS

# Business model innovation

Business model explains how:

- Value is created for customers, company & stakeholders

Elements of a business model e.g.

- Revenue & costs
- Resources
- Value proposition etc.

Analyzing the BM is critical for performance assessment



# Business model innovation:

BMI enables a firm to:

- Uniquely deploy available alternatives with respect to product, technology, process and markets;
- Creates a new value proposition and appropriate value arising out of competitive advantage

# Implications of green water innovations

- Reduce corporate water risks:  
#Physical, #reputational, #financial
- Reduced cost of production:  
#ResourceEfficiency
- Creates new business opportunities:  
#NewProducts; #GreenEntrepreneurs
- Unlocks resources for water management:  
#Finance, #HumanResourcesa

## Project: Investigating green water innovations in South Africa

1. Impact of green innovations on water resources & corporate performance;
2. Metrics or indicators for green innovations;
3. Recommend specific green innovations that companies should adopt to