

# GreenCape

Driving a green economy

**Cathy Pineo**

22 May 2018



# GreenCape

## Background

- Registered not-for-profit organization
- Sector development agency established in 2010
- Work closely with tech providers, businesses, academia & government
- Help businesses identify opportunity areas for adopting economically-viable green tech & services
- Independent - do not endorse specific brands or companies

## GREENCAPE BY NUMBERS

**2010**

Established

**40+**

Multidisciplinary Staff

**600+**

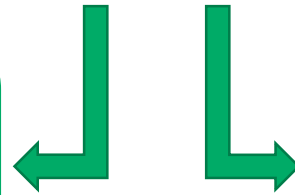
Members

**R13,7 bn**

Investments facilitated to date

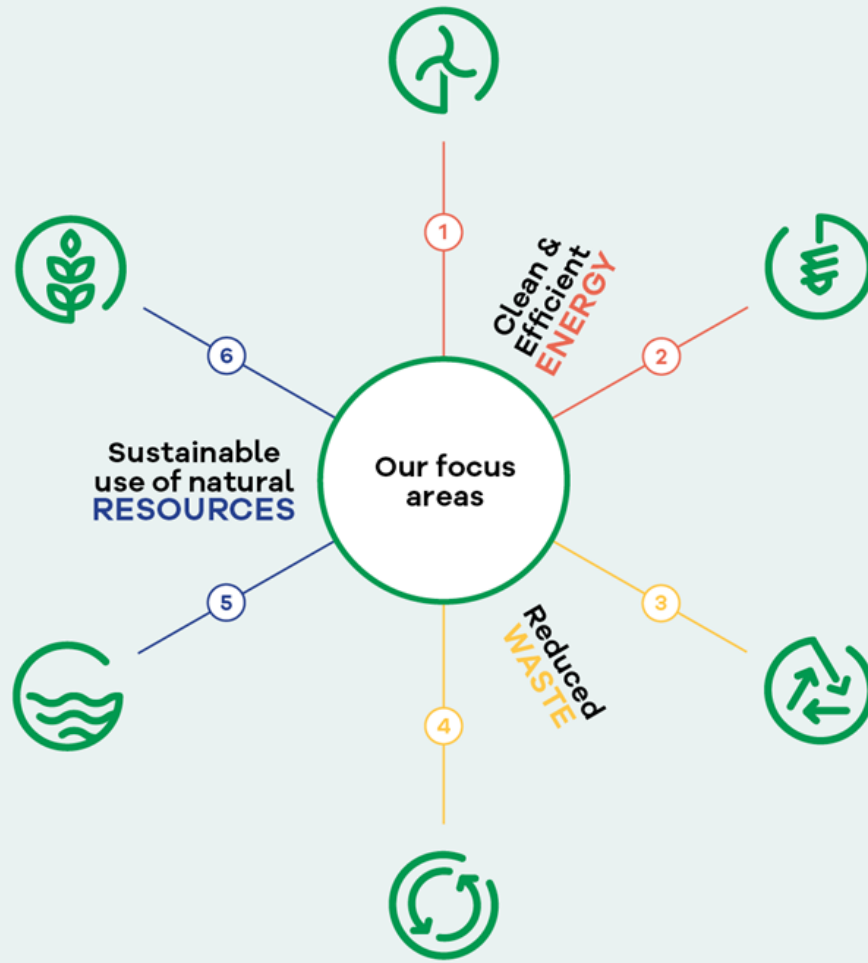
## Support the accelerated development of the Western Cape **green economy**

- Lower carbon
- More resource efficient
- Enabling resilient economy



- Economic growth
- Investment
- Job creation

# GreenCape focus areas



## — 1 Renewable Energy

Utility-scale projects, small-scale embedded generation, and localisation of component manufacture.

## — 2 Energy Efficiency

Energy efficient buildings and equipment, demand side management and financing contracting models.

## — 3 Alternative Waste Treatment

Municipal decision-making and policy and legislative tools on alternative waste treatment options; small-scale biogas, recycling and reuse (dry recyclables, construction and demolition waste).

## — 4 Western Cape Industrial Symbiosis Programme (WISP)

Free facilitation service that networks companies to exchange under-utilised resources (materials, energy, assets, logistics and expertise).

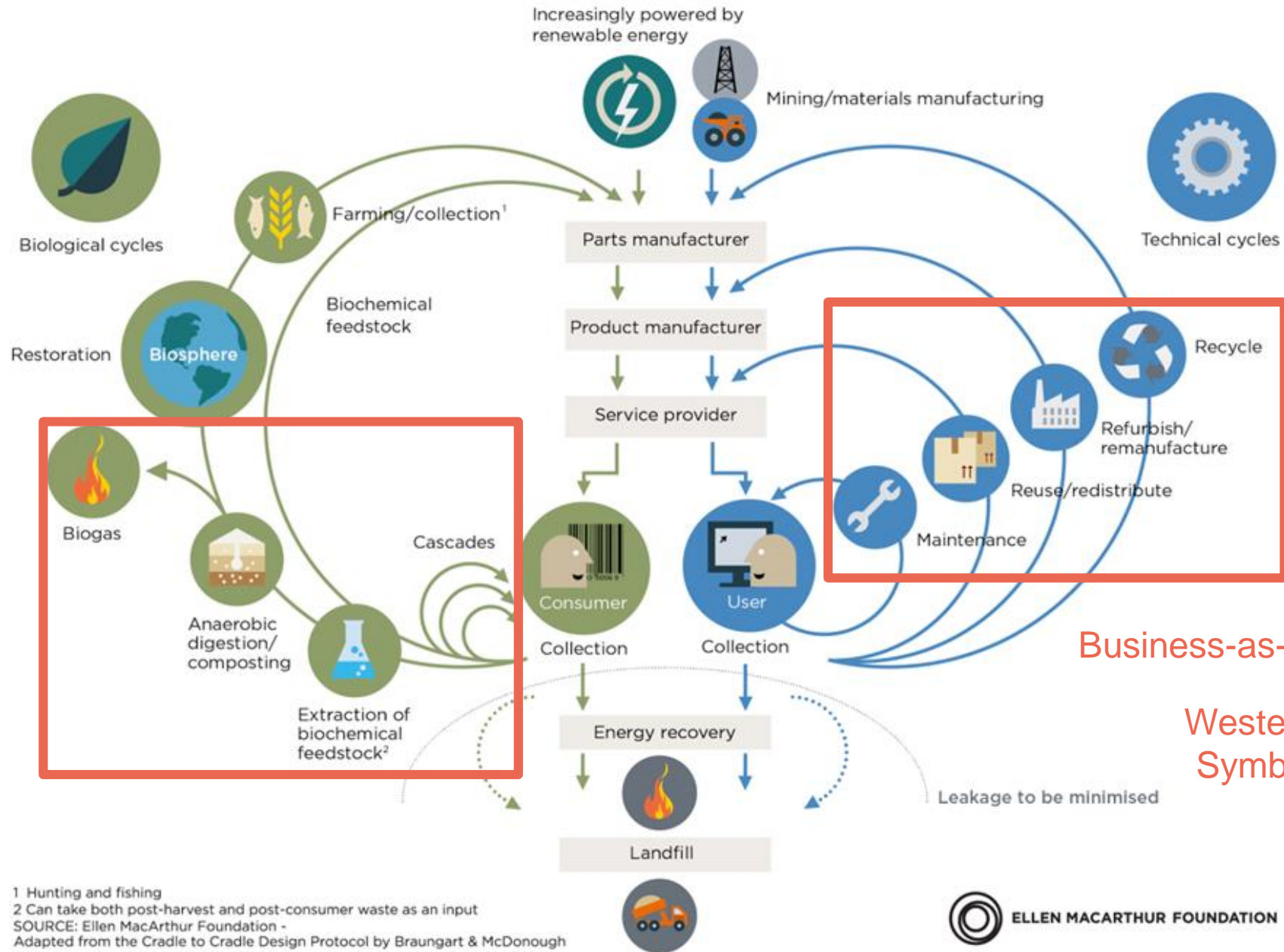
## — 5 Water

Water provision and economic development; greentech opportunities for water use efficiency, treatment and reuse.

## — 6 Agriculture and Bio-Based Value Chains

Sustainable agriculture, valorisation of wastes to high value bio-products, including bio-energy.

CIRCULAR ECONOMY - an industrial system that is restorative by design



Bioeconomy Programme

Business-as-usual

Western Cape Industrial Symbiosis Programme

1 Hunting and fishing  
 2 Can take both post-harvest and post-consumer waste as an input  
 SOURCE: Ellen MacArthur Foundation -  
 Adapted from the Cradle to Cradle Design Protocol by Braungart & McDonough

# Resource productivity & value-add

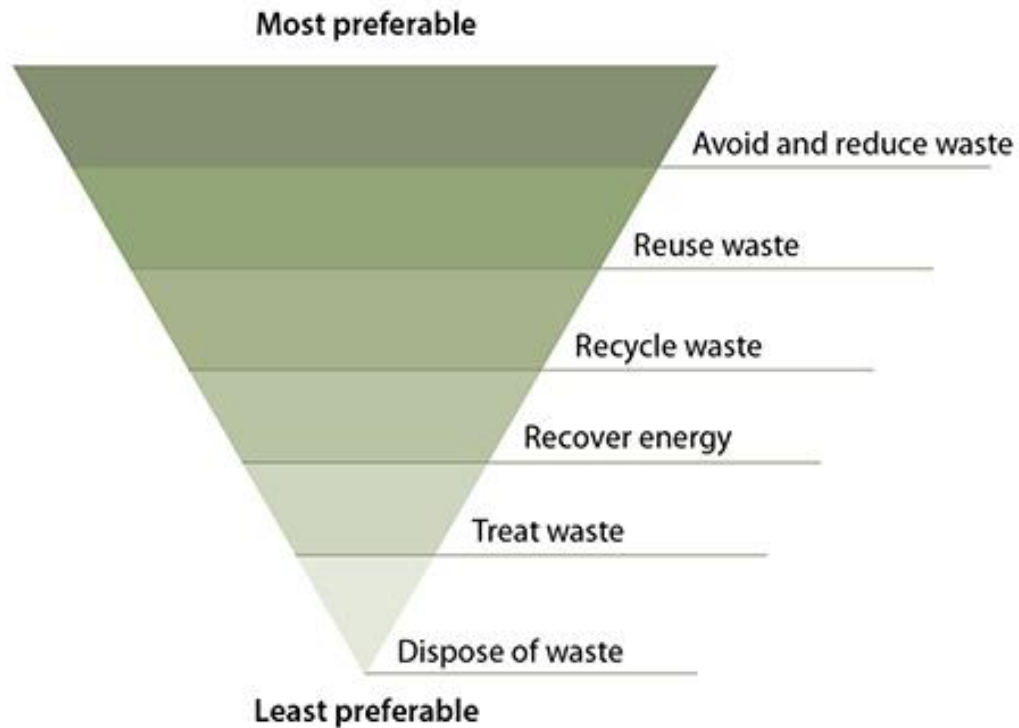
Why and how?

- Resources could become **constraints to economic development**
- Necessary to use **resource inputs** as **effectively** as possible for:
  - business viability / competitiveness
  - sustained & sustainable economic growth
- Two key strategies:
  - Improving **resource efficiency**
    - Using less land, energy, water or materials to produce the same outputs
  - **Value-add** or **waste beneficiation**
    - Recycling or producing new products from wastes

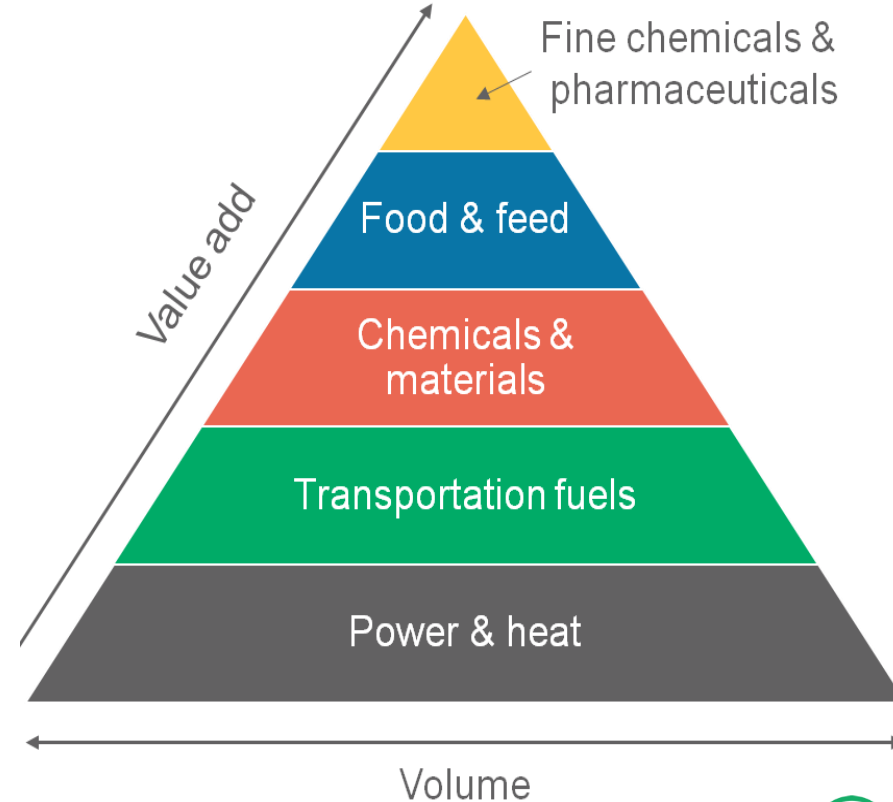
# Guiding principles

## Waste hierarchy & value add hierarchy

Waste hierarchy

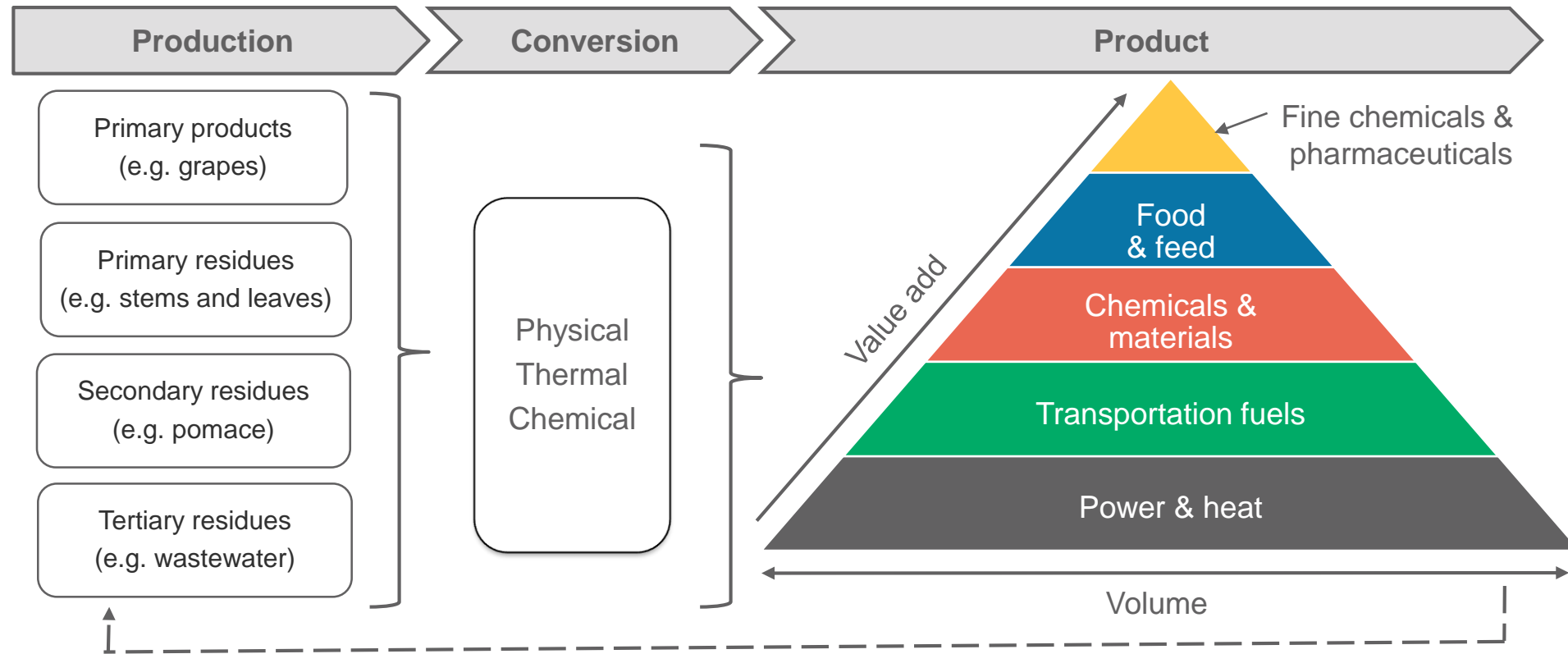


Value-add hierarchy



# Value-add hierarchy

## Framework



Source: Adapted from Bioeconomy Study Tour, Netherlands Department of Foreign Affairs (2015)



# Waste in the Western Cape

## Current landscape - barriers

- **General**

- Vast distances that materials may have to travel to find resources
- Low cost for landfill disposal
- Ambiguity around waste regulatory framework

- **Specific for organics**

- Increasing competition for easily available feedstock
- Lengthy timeframes associated with Public Private Partnerships for municipal solid waste
- More stringent norms & standards
  - Significantly increased costs e.g. for composting

# Waste in the Western Cape

## Current landscape – drivers / enablers

- **Government**
  - **Landfill diversion targets**
    - Organic waste: 50% reduction in 5 years, 100% in 10 years
  - **Changes in waste policy - more stringent regulations**
    - Banning of certain wastes (e.g. abattoir) at many regional landfills
    - Revised norms & standards
  
- **Industry**
  - **Increased cost of disposal to landfill**
    - Logistics often a key factor
  - **Increased interest in alternative waste management methods**
    - Comply with new legislation without compromising their profitability
    - Resource constraints
    - New markets, value addition & cost savings opportunities



# Thank You

Cathy Pineo

[cathy@greencape.co.za](mailto:cathy@greencape.co.za)

Tel: +27 21 811 0250