

Plastics | SA

# Circular City Labs Textbook

*A digital guide to building a sustainable circular economy through reusable plastics, innovation, and inclusive collaboration in South Africa.*



Circular City Labs  
Testing Reusable Packaging Systems in Cities



Implemented by



# Introduction

This digital textbook contains consolidated training materials, based on the Accelerator programme training sessions that formed part of the *Circular City Labs: 'Testing Reusable Packaging Systems'* project.

The purpose of this textbook is to capture and consolidate lessons learned through the project's implementation to reach a wider audience along the circular economy value chain.





# Project Background

The *Circular City Labs: 'Testing Reusable Packaging Systems'* project was commissioned by the *German Federal Ministry for Economic Cooperation and Development (BMZ)* and funded through the *BMZ Initiative for Climate and Environmental Protection (IKU)*.

The project aimed to reduce greenhouse gas emissions through waste prevention, test reusable packaging systems, and strengthen women's participation in local circular economies.

Implemented by *GIZ* in partnership with *Plastics SA*, the project selected *Gcwalisa* as its pilot partner. In addition, three other businesses from the proposal pool were invited to join an accelerator programme designed to build their capacity in circular economy practices, reuse systems, and gender inclusion.



# Piloting Partner

*Gcwalisa*, a grocery outlet in Alexandra township, Johannesburg, operates on a weigh-and-pay model that enables customers to buy only what they need, helping to reduce the ‘poverty tax’ often faced by low-income households unable to buy in bulk.

During the pilot phase, *Gcwalisa* introduced reusable plastic packaging fitted with QR barcodes to track return cycles, replacing single-use packaging and promoting circular economy practices. The initiative also created jobs for 4 women through reuse ambassadors who engaged customers and raised awareness; two of the women were retained after the pilot.

With an average return rate of 35%, the project demonstrated strong community participation and delivered both environmental and socio-economic benefits, successfully meeting its intended objectives.

[www.gcwalisa.com](http://www.gcwalisa.com)



# Accelerator Programme

The **ACEN** study on scaling packaging reuse models in South Africa highlighted key challenges faced by reuse initiatives, including limited access to financing, difficulties in adapting supply chains for reuse, and the absence of clear health and safety standards.

Recommended interventions included collaborative learning, innovative funding mechanisms, stronger supply chain partnerships, and the development of operating standards for reuse models.

In response, the accelerator programme, implemented by **GIZ** and **Plastics SA**, was designed to address these barriers by providing targeted training and mentorship to selected businesses such as **Gcwalisa**, **Shix Mineral Ice**, **Reusify**, and **Smartfill**, strengthening their capacity to implement and scale circular packaging solutions across South Africa.

Read more about the [ACEN study](#).



Chapter 2  
**Circular economy  
& reuse systems in South Africa**



## Introduction

### *Bianca Robinson*

ALPAL is a company whose vision is to transform supply chains for circular efficiency. They specialize in the reusable, bulk packaging - the first of its kind.

As Chief Innovation Officer, Bianca is responsible for driving both Business Innovation and Sustainability at ALPAL. She ensures that the organization holds true to its vision of providing customer value that is transformative by nature and circular by design. To this end, she is pioneering ALPAL's digital strategy and steering the organization's sustainability agenda.





# CIRCULAR ECONOMY & REUSE SYSTEMS IN SOUTH AFRICA

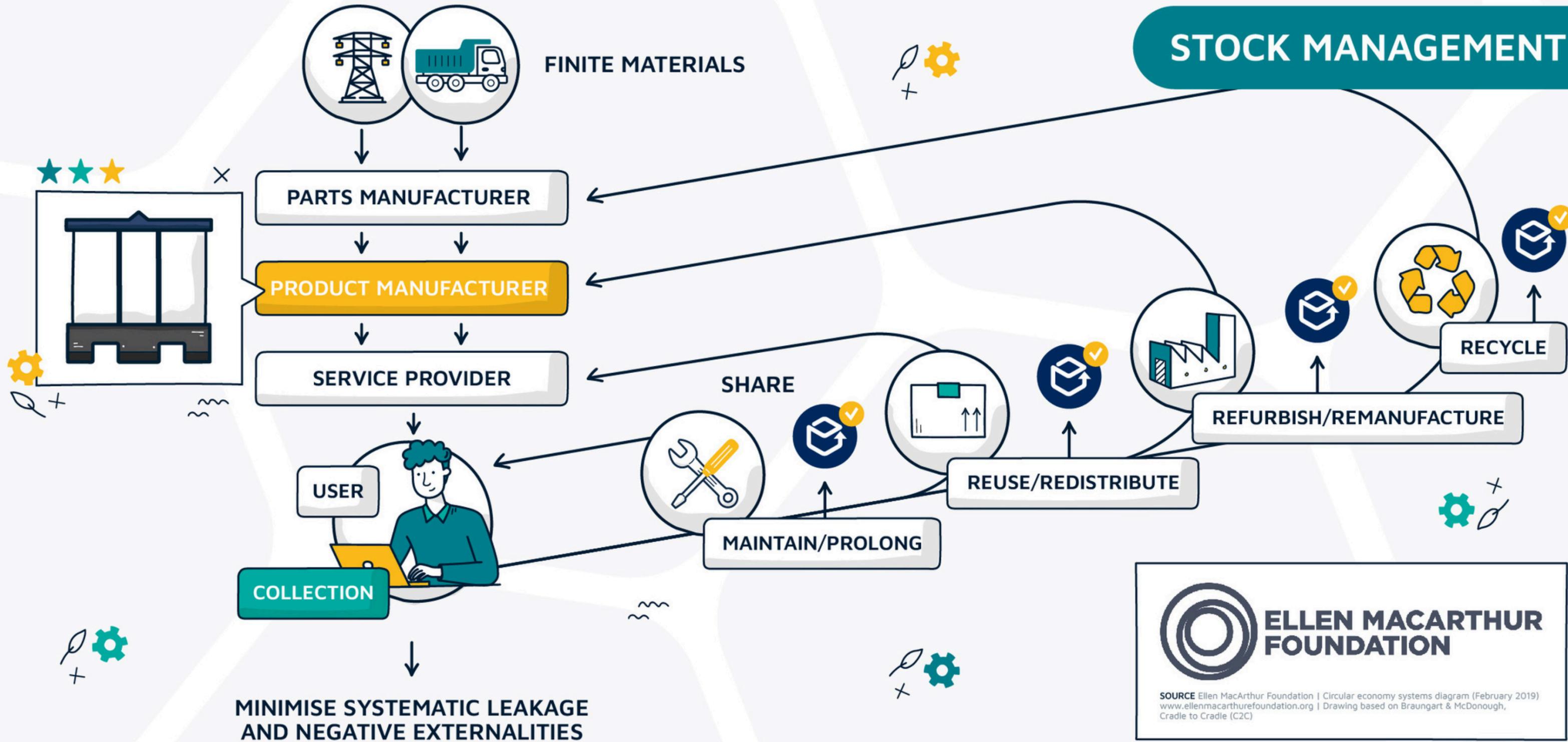


# WHAT IS ALPAL?



[OR CLICK HERE TO WATCH THE VIDEO](#)

# STOCK MANAGEMENT



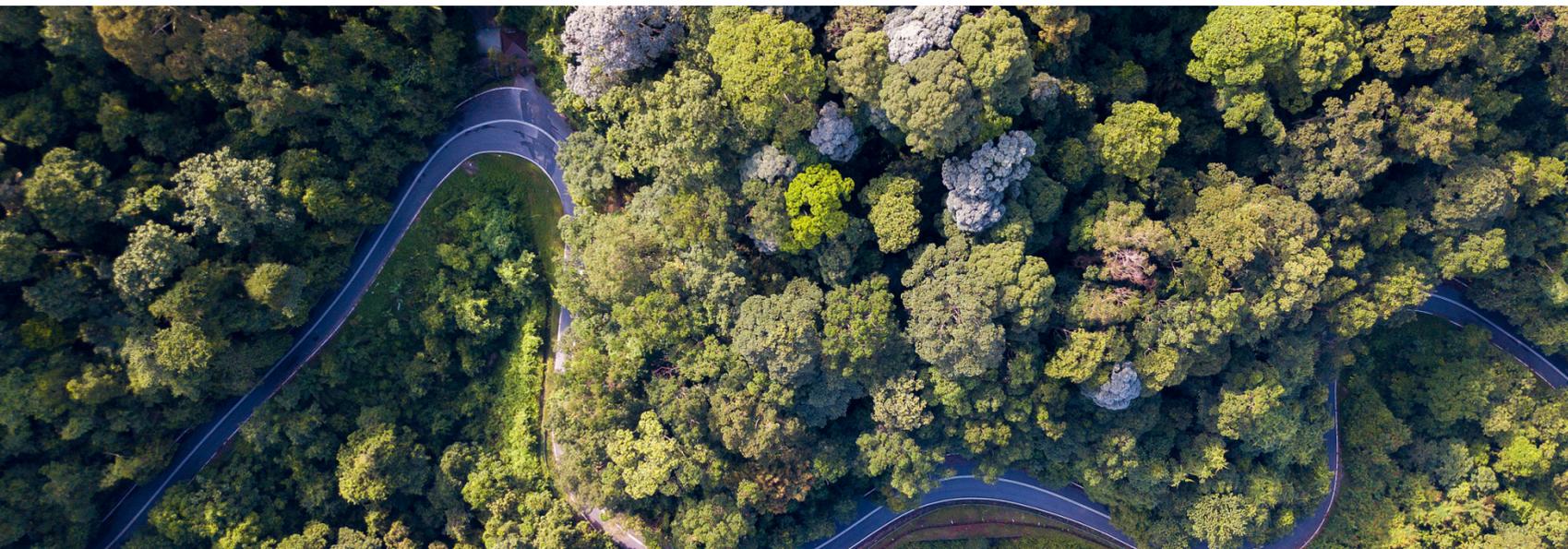
**ELLEN MACARTHUR  
FOUNDATION**

SOURCE Ellen MacArthur Foundation | Circular economy systems diagram (February 2019)  
www.ellenmacarthurefoundation.org | Drawing based on Braungart & McDonough,  
Cradle to Cradle (C2C)



**ALPAL**<sup>TM</sup>

# OVERVIEW



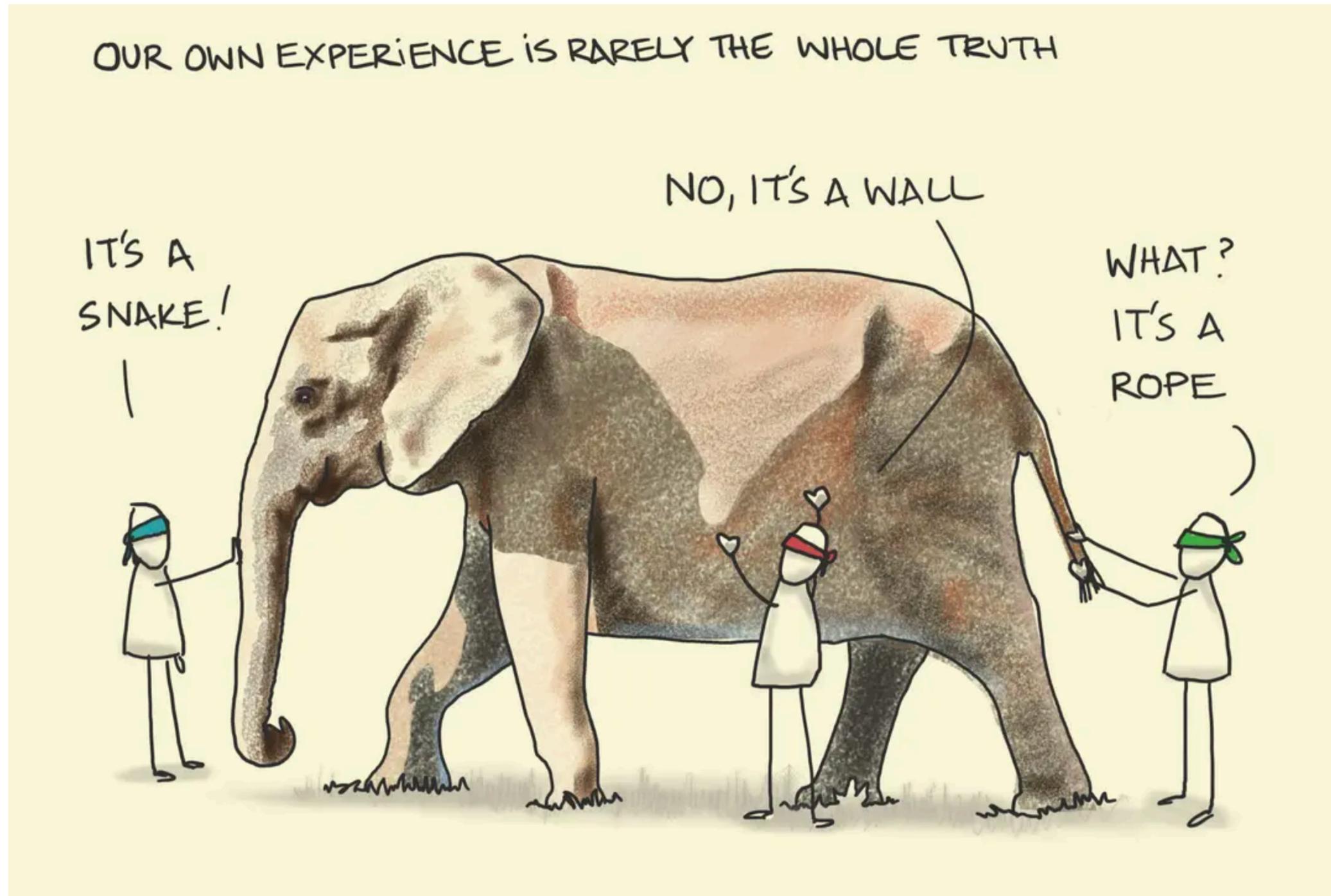
- 01** CONTEXT IS KING
- 02** SUSTAINABILITY TIMELINE
- 03** SOUTH AFRICA CURRENT POSITION
- 04** WHAT ARE THE DRIVERS
- 05** EPR
- 06** SA CHALLENGE & OPPORTUNITY
- 07** WHAT TO EXPECT IN THE FUTURE
- 08** WHAT BUSINESS/SA SHOULD BE AWARE OF



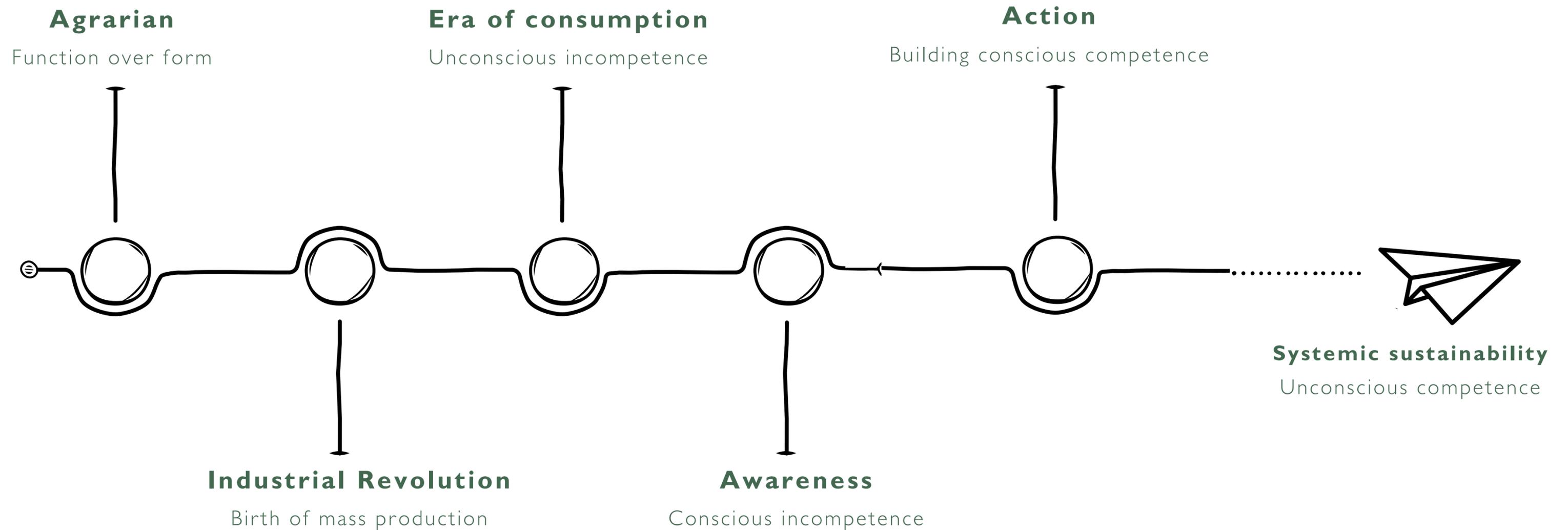
CONTENT



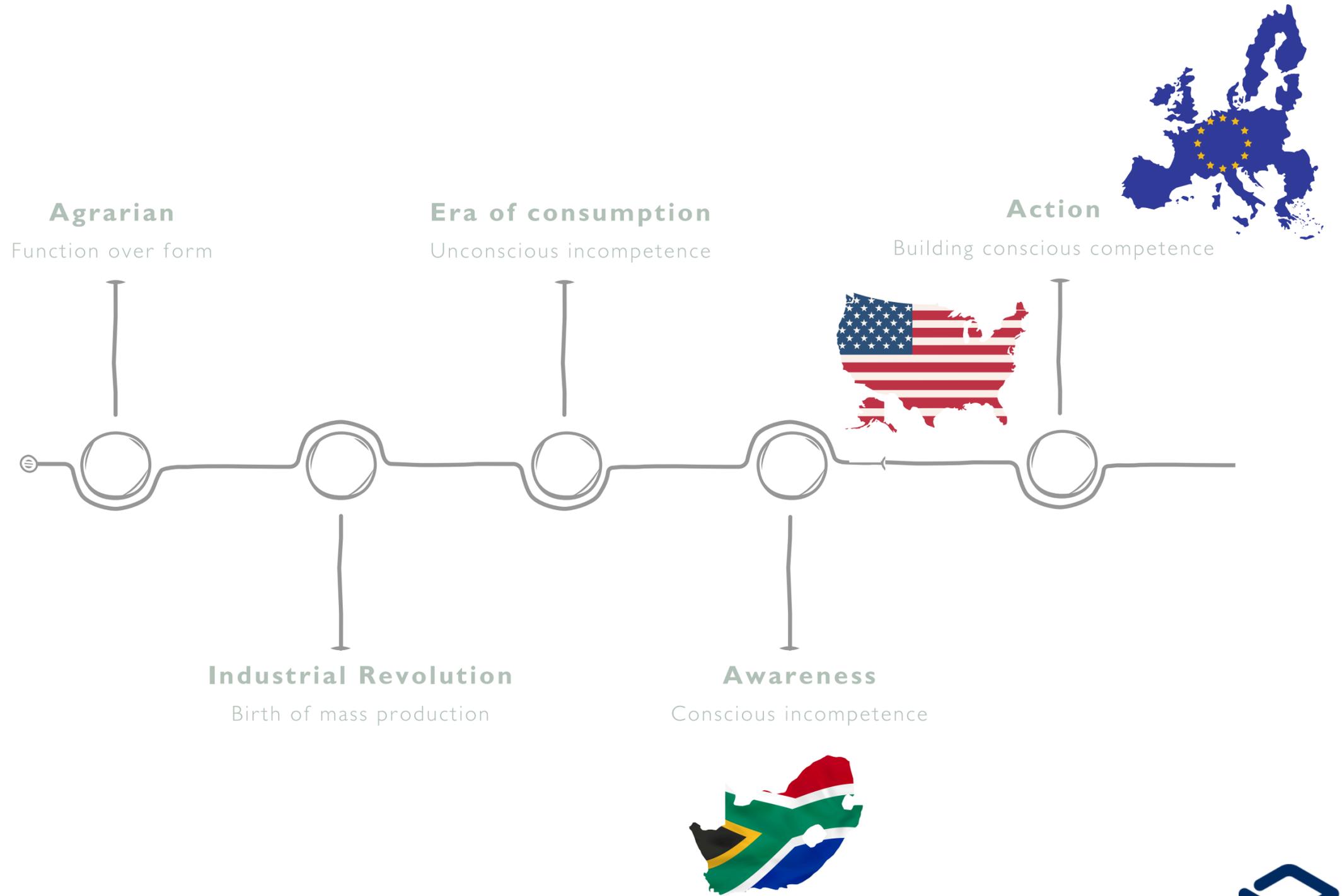
# CONTEXT PROVIDES THE WHOLE PICTURE



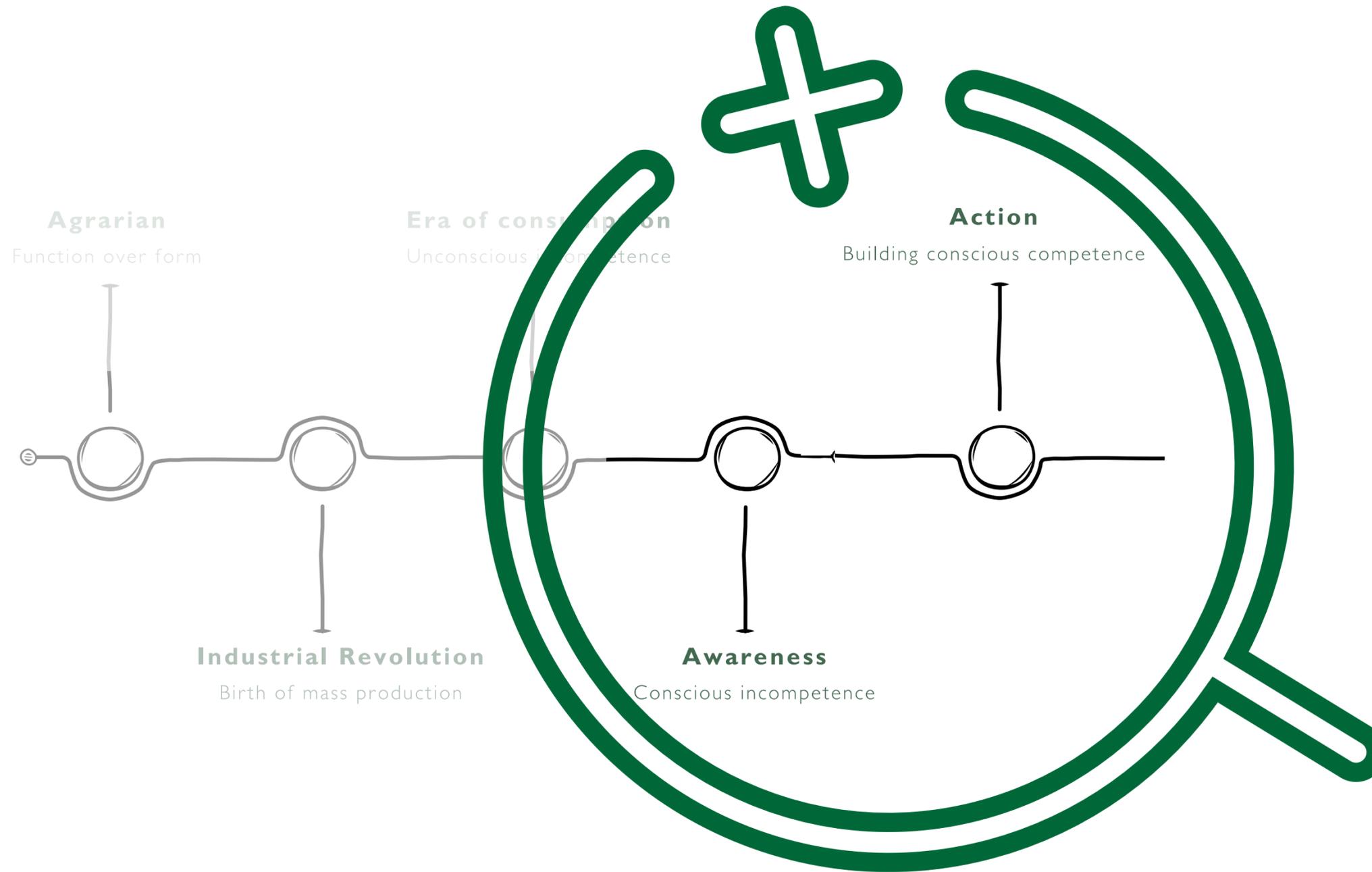
# SUSTAINABILITY TIMELINE



# SUSTAINABILITY TIMELINE



# SUSTAINABILITY TIMELINE



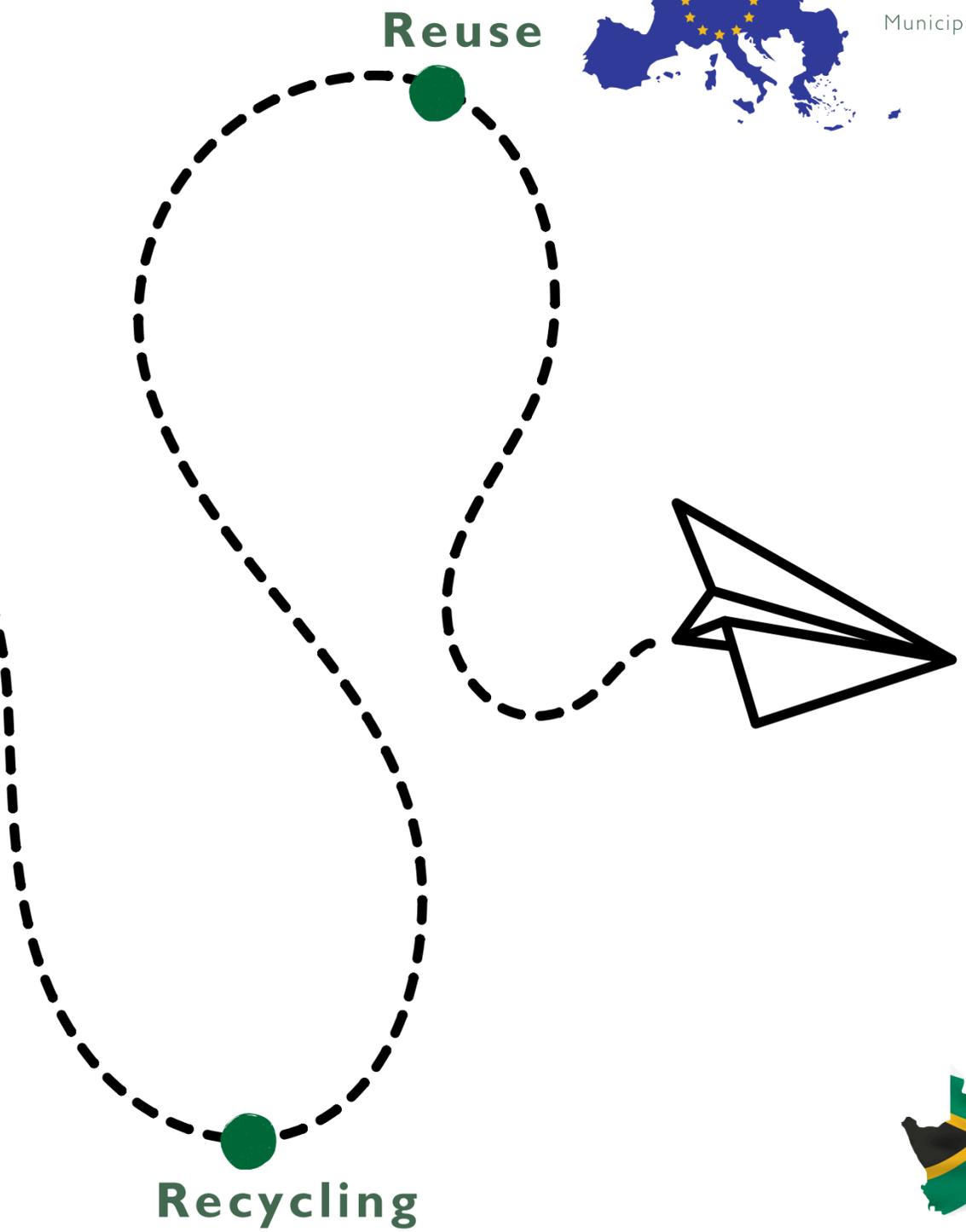


**- 48% -**  
Municipal waste recycling<sup>3</sup>

Recycling is not  
the solution



**Awareness**  
Limited action



**Recycling**



**- 10% -**  
Municipal Waste Recycling<sup>1</sup>



**- 32% -**  
Municipal Waste Recycling<sup>2</sup>

**References:**  
 1. ICLEI Africa- [Circular Economy in South Africa Report](#)  
 2. US EPA- [National Overview: Facts and Figures on Materials, Wastes and Recycling](#)  
 3. Eurostat- [Municipal Waste Statistics \(EU Official Website\)](#).

**"What's driving  
the  
sustainability  
status?"**

# URGENT- IMPORTANT

	URGENT	NOT URGENT
IMPORTANT	 <b>Do it</b> Things with clear deadlines and consequences for not taking immediate action.	 <b>Schedule it</b> Activities that bring you closer to a set deadline that bring you closer to your goals. Easy to procrastinate on.
NOT IMPORTANT	 <b>Delegate it</b> Things that need to be done but don't require your specific skills. Busy work.	 <b>Delete it</b> Tasks that distract you from your goals.

# WHAT'S DRIVING THE URGENCY?

01

Regulation

02

Reporting

03

Stakeholders

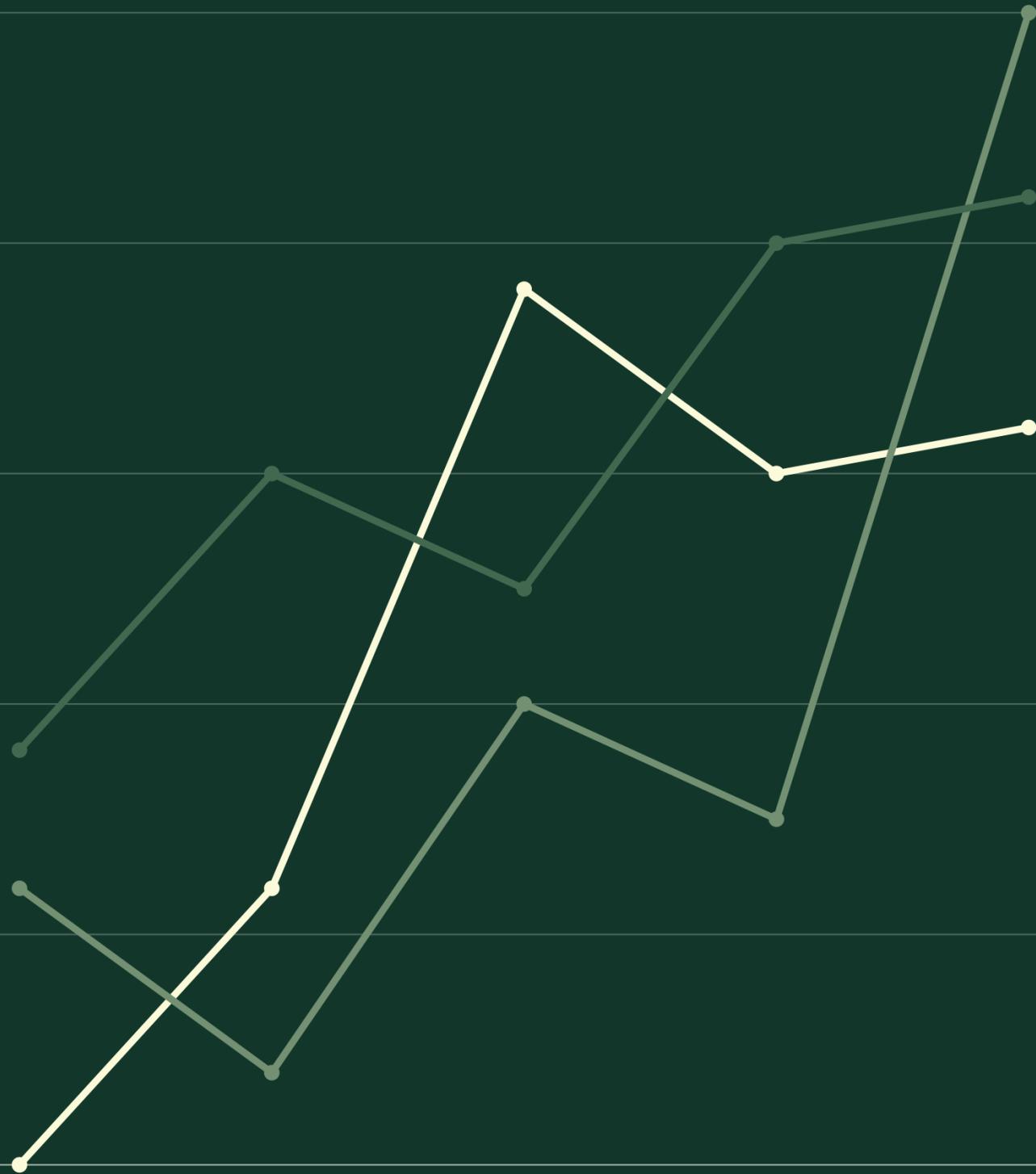
04

Financial performance

05

Brand

Dynamic interplay of  
elements



# EVER-EVOLVING MARKET





# SUSTAINABLE TRANSFORMATION

A global imperative

# WHAT'S DRIVING THE TRANSFORMATION?

01

Regulation

02

Reporting

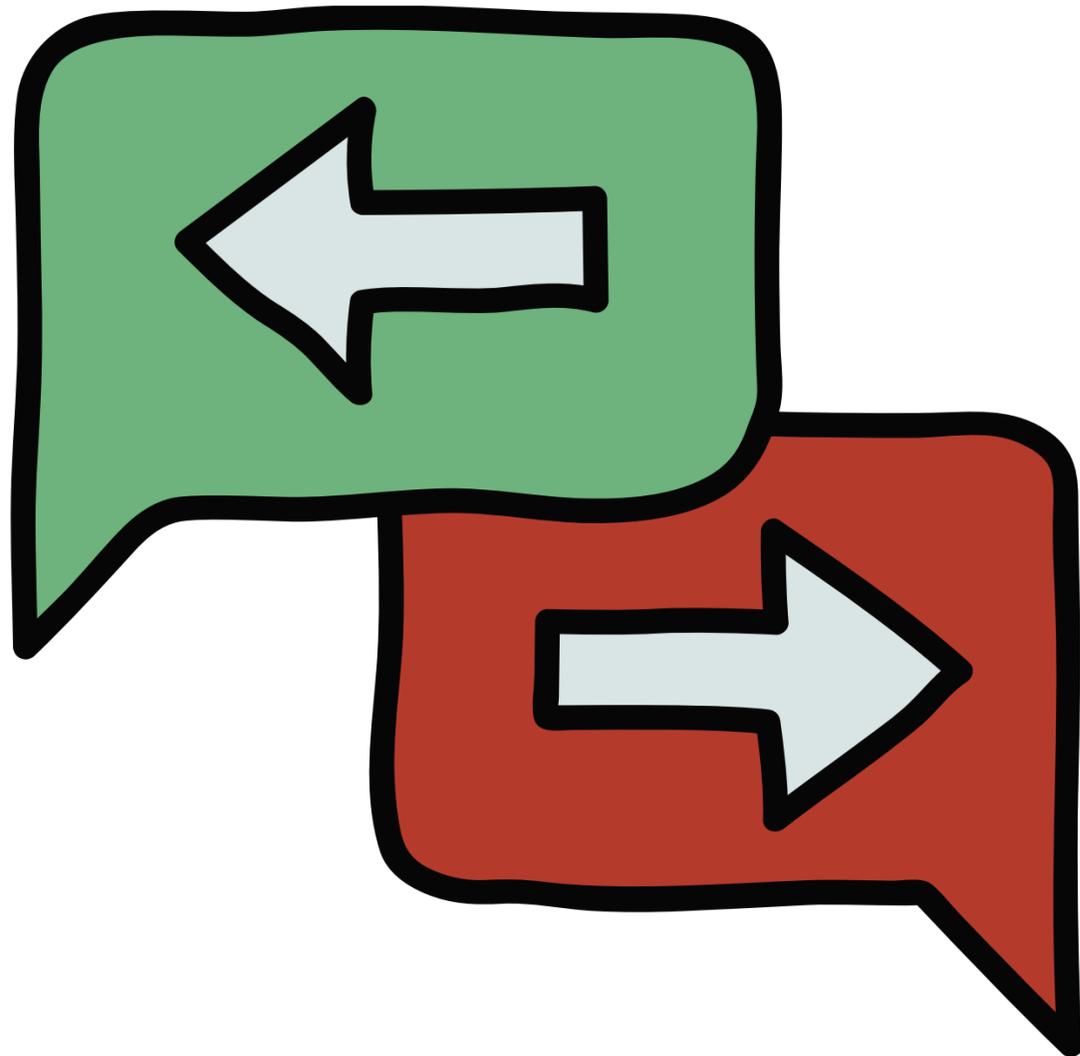
03

Stakeholders

Financial



# SA CONSUMER HAS A FUNDAMENTALLY DIFFERENT CONTEXT

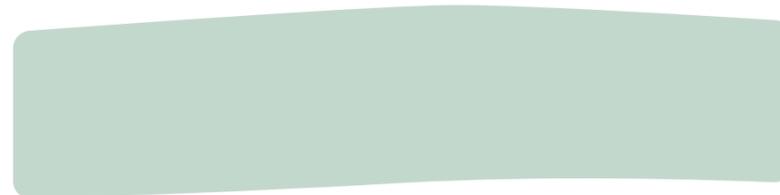


# HIERARCHY OF NEEDS

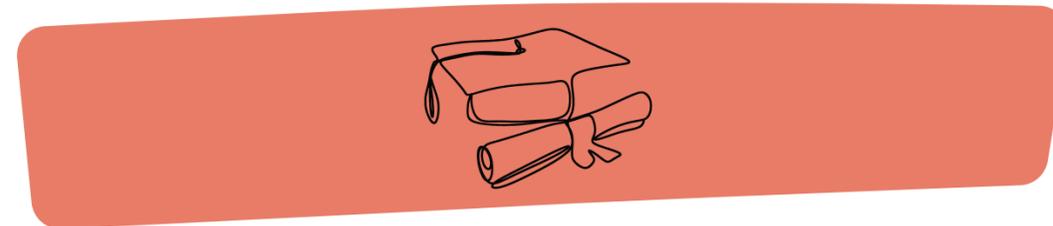
Sustainability



Other



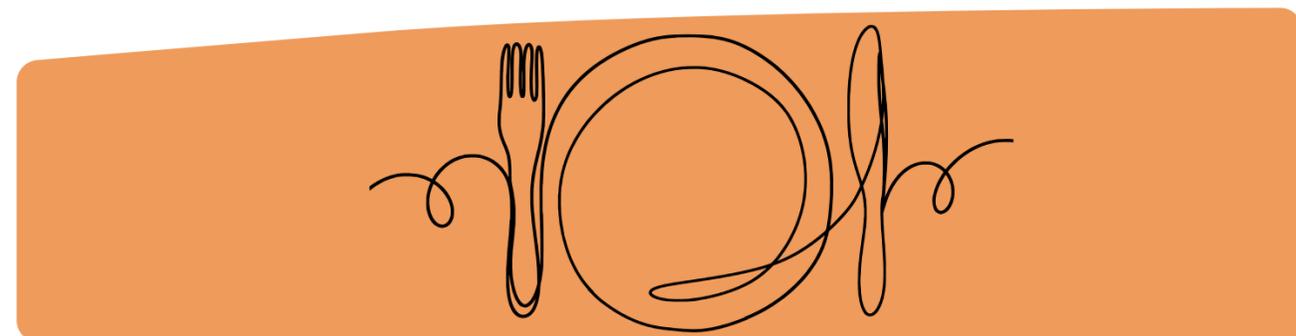
Education



Healthcare



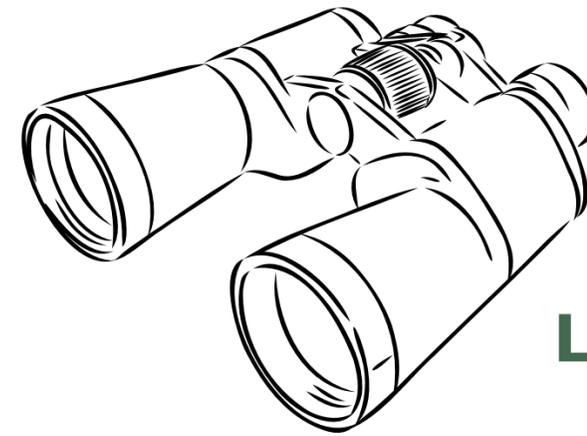
Food



MATTER  
OF  
PRIORITIES



# GENERALLY IN DEVELOPED CONTEXTS...



Last mile of supply chain

Consumer facing sustainability transformation



# GENERALLY IN DEVELOPED CONTEXTS...

Little focus on the primary end of the supply chain





# IN SOUTH AFRICA

- Pressure not coming from consumer
- Difficult to drive sustainability transformation from consumer angle



Primary end of the supply chain

# SOUTH AFRICA & EPR

- **Focus on Extended Producer Responsibility (EPR) makes sense**

“An environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of the product’s life cycle.”

Section 18; National Environmental Management: Waste Act

- **EPR only really formalized framework**

# SA ARE AMONGST THE LEADERS IN EPR



Graphic Reference:  
1. Graphic source: [Derek Stephenson, Strategy Matters](#)



A dramatic image showing a shark's hand reaching out from a sea of plastic waste. The waste is piled high, with various types of trash like cardboard boxes, plastic bottles, and bags. The shark's hand is a stark white against the colorful and chaotic sea of trash. The background is a cloudy sky.

**WE ARE  
DROWNING  
IN WASTE.  
ACT NOW.**

# THE CHALLENGE...

**South Africa has both a waste crisis  
and a waste focus**

“The National Waste Management Strategy (NWMS) aims to transition to a circular economy by diverting waste from landfills.

Extended Producer Responsibility (EPR) play a significant role in this transition.”

- Circular Economies in South Africa Report, ICLEI Africa

# THE OPPORTUNITY...



## TRANSFORM



Focus on  
waste issues



Focus on  
consumption issues

Reactively managing  
waste



Proactively preventing  
waste



# WHAT CAN SOUTH AFRICA EXPECT IN THE FUTURE?

Circular Economy & Reuse Systems

**WE LIVE IN A  
GLOBAL  
ECONOMY**



# NO COUNTRY IS AN ISLAND

**South Africa** is **hugely dependent** on **exports** and imports for its **economic growth** and development

**Exports** accounted for **32.75%** of SA **GDP** in 2023 (over a third)

Can't ignore what's happening globally.  
**Context is king.**

# LOOK TO THE LEADERS



We are impacted by the standards they set

Don't reinvent the wheel

Unique opportunity to leverage the learnings and wars scars of the early adopters/pioneers



# US GRANT FUNDING FOR A RESEARCH PROJECT



## Meeting EU Packaging Requirements for a Circular Economy for U.S. Food Exports





# WHERE ARE THE LEADERS AT?

# PACKAGING LEGISLATION

**Packaging &  
Packaging  
Waste  
Regulation**

**EU  
Green  
Deal**

**Plastic  
Packaging  
Tax**

**Waste  
Framework  
Directive**

**Green  
Claims  
Directive**

**Global  
Plastics  
Treaty**

**Extended  
Producer  
Responsibility**

**Waste  
Shipment  
Regulation**

**The Paris  
Agreement**

**REUSE  
Act**

**Sustainable  
Finance  
Disclosure  
Regulation**

**EU Taxonomy**

**Corporate  
Sustainability  
Reporting  
Directive**

**Carbon  
Border  
Adjustment  
Mechanism**

**OTHER**



# PPWR



## Reuse targets

As high as 100% in certain applications



## Recyclable packaging

Banned from EU market is <70% recyclable by Jan 2030



## Min recycled content in plastic packaging

Non CSP- 35% 2030; 65% 2040



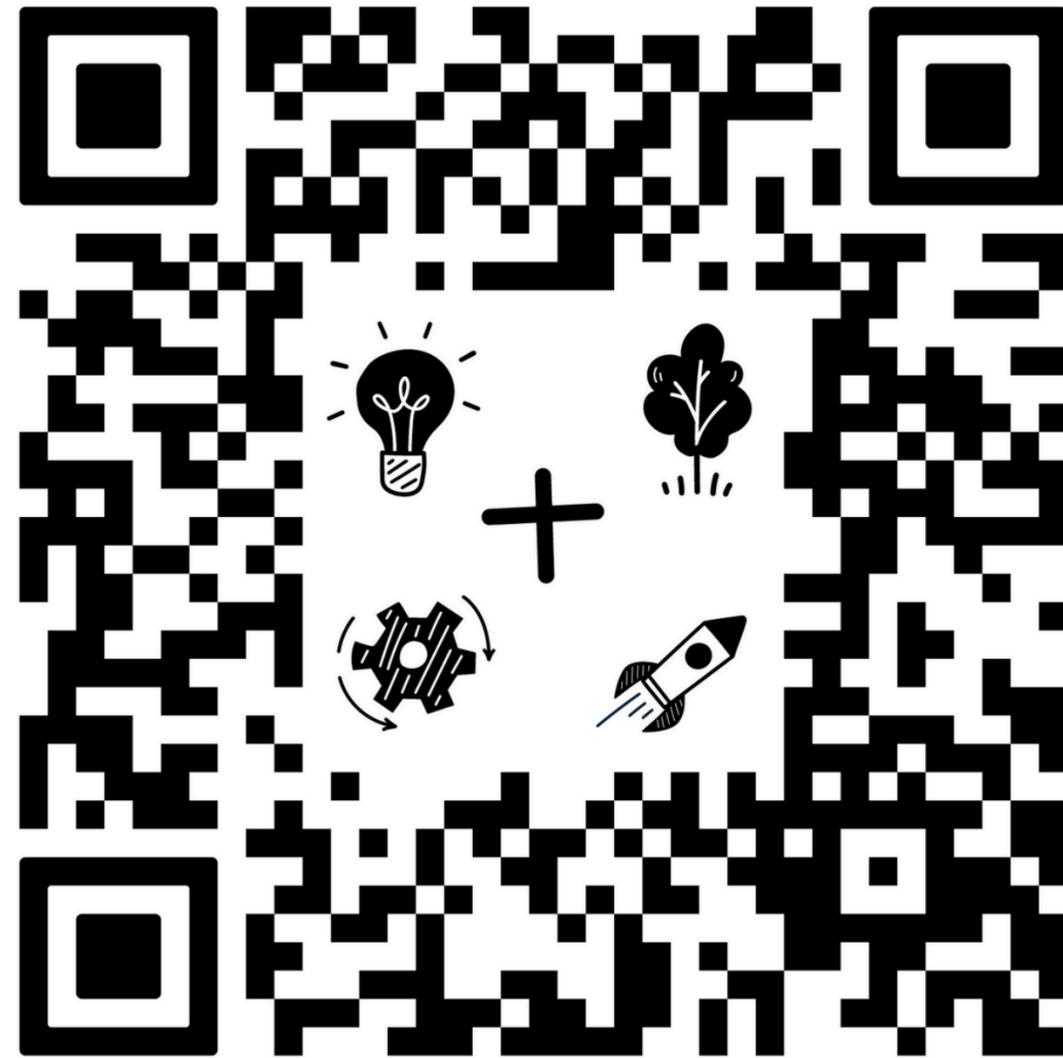
## Amazon to Require Key Suppliers to Provide Decarbonization Plans

Amazon announced that it has set climate-related expectations for key suppliers, including providing decarbonization plans, and that it will prioritize working with suppliers committed to reaching net zero, as par...

# SUSTAINABILITY CREDENTIALS ARE HERE

**"Sustainability for the sake of  
sustainability is not  
sustainable"**

# ALPAL OVERVIEW



[OR CLICK HERE FOR VIDEO](#)



ALPAL™

# WHAT SHOULD BUSINESS & SOUTH AFRICA BE AWARE OF?

- **No country, no business, no man is an island**

Consider the trends that might impact/ benefit us

- **Solve for a problem and create value using reuse/ circularity as an enabler**

“Transforming supply chains for circular efficiencies”

- **Context is king**

# URGENT- IMPORTANT

	URGENT	NOT URGENT
IMPORTANT	 <b>Do it</b> Things with clear deadlines and consequences for not taking immediate action.	 <b>Schedule it</b> Activities that bring you closer to a set deadline that bring you closer to your goals. Easy to procrastinate on.
NOT IMPORTANT	 <b>Delegate it</b> Things that need to be done but don't require your specific skills. Busy work.	 <b>Delete it</b> Tasks that distract you from your goals.



# SOUTH AFRICA

**HAS THE OPPORTUNITY TO  
PRIORITISE**

**THE *IMPORTANT*  
BUT *NOT URGENT***

**NOW**



**Be progressive**



**Avoid the “urgency trap”**



**Build conscious competence**



**ALPAL™**



**ALPAL**<sup>TM</sup>  
we box smart.

[www.alpalbulkpackaging.com](http://www.alpalbulkpackaging.com)

Plastics | SA

[www.plasticsinfo.co.za](http://www.plasticsinfo.co.za)