

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



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.



Reference: Barnes, K. and Gihring, K. (2025). Scaling reuse-refill in South Africa: Learnings from local experience. African Circular Economy Network (ACEN) for Circular City Labs South Africa, GIZ, and Plastics SA.

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

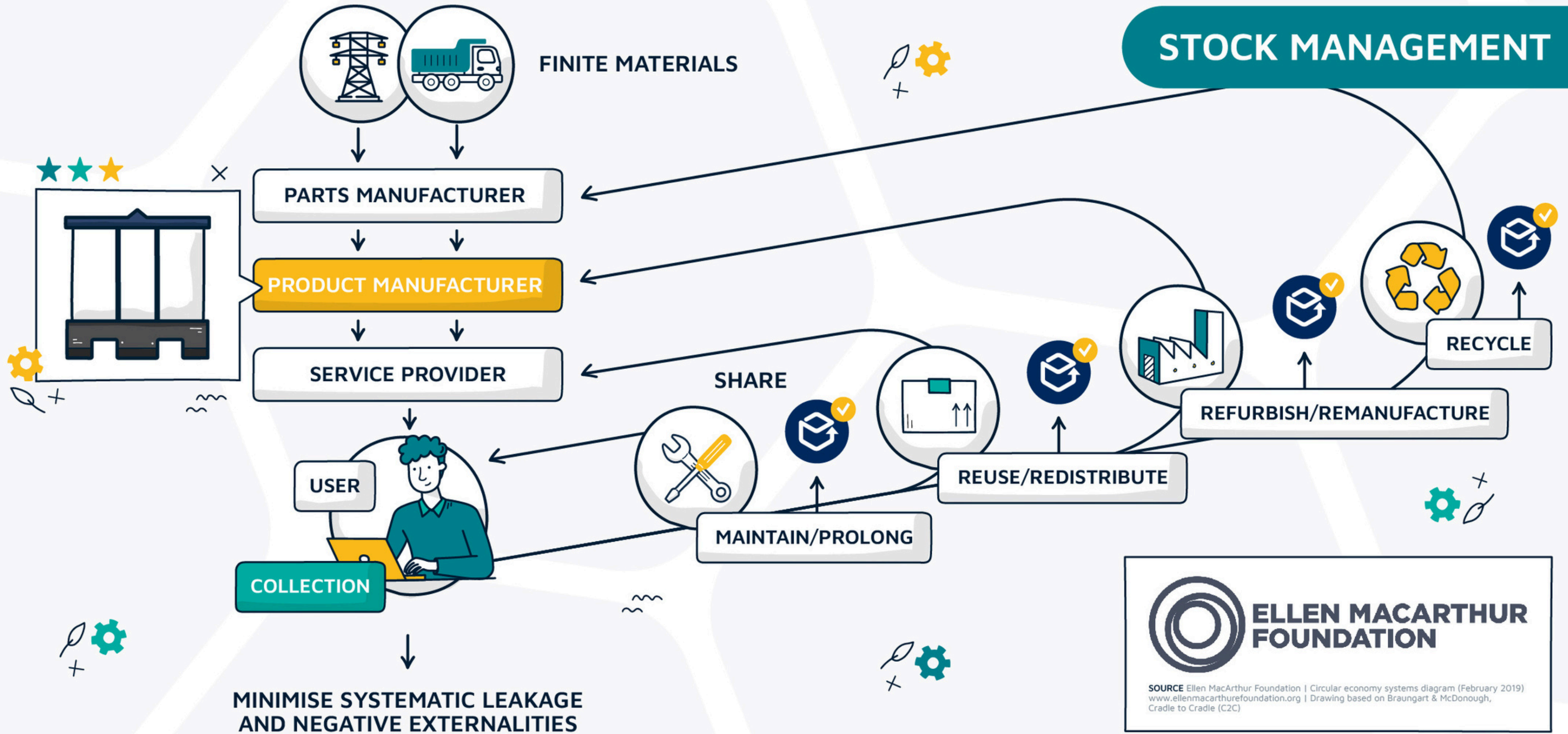


WHAT IS ALPAL?



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

STOCK MANAGEMENT



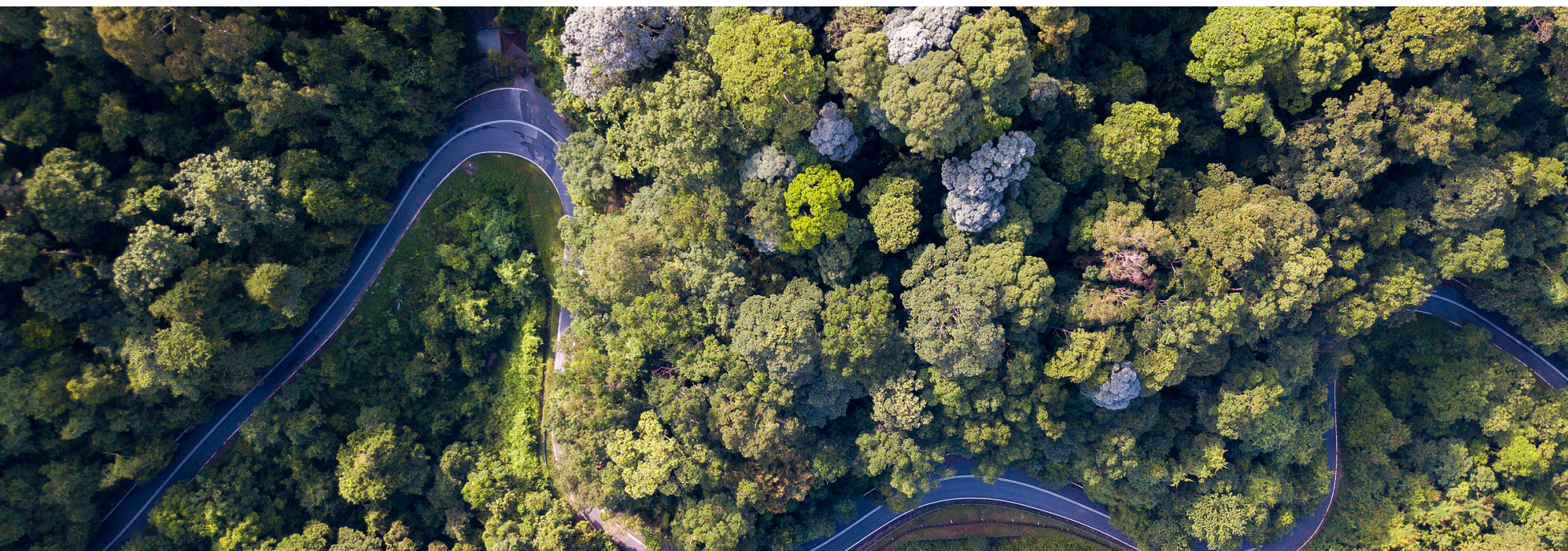
**ELLEN MACARTHUR
FOUNDATION**

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



ALPAL™

OVERVIEW



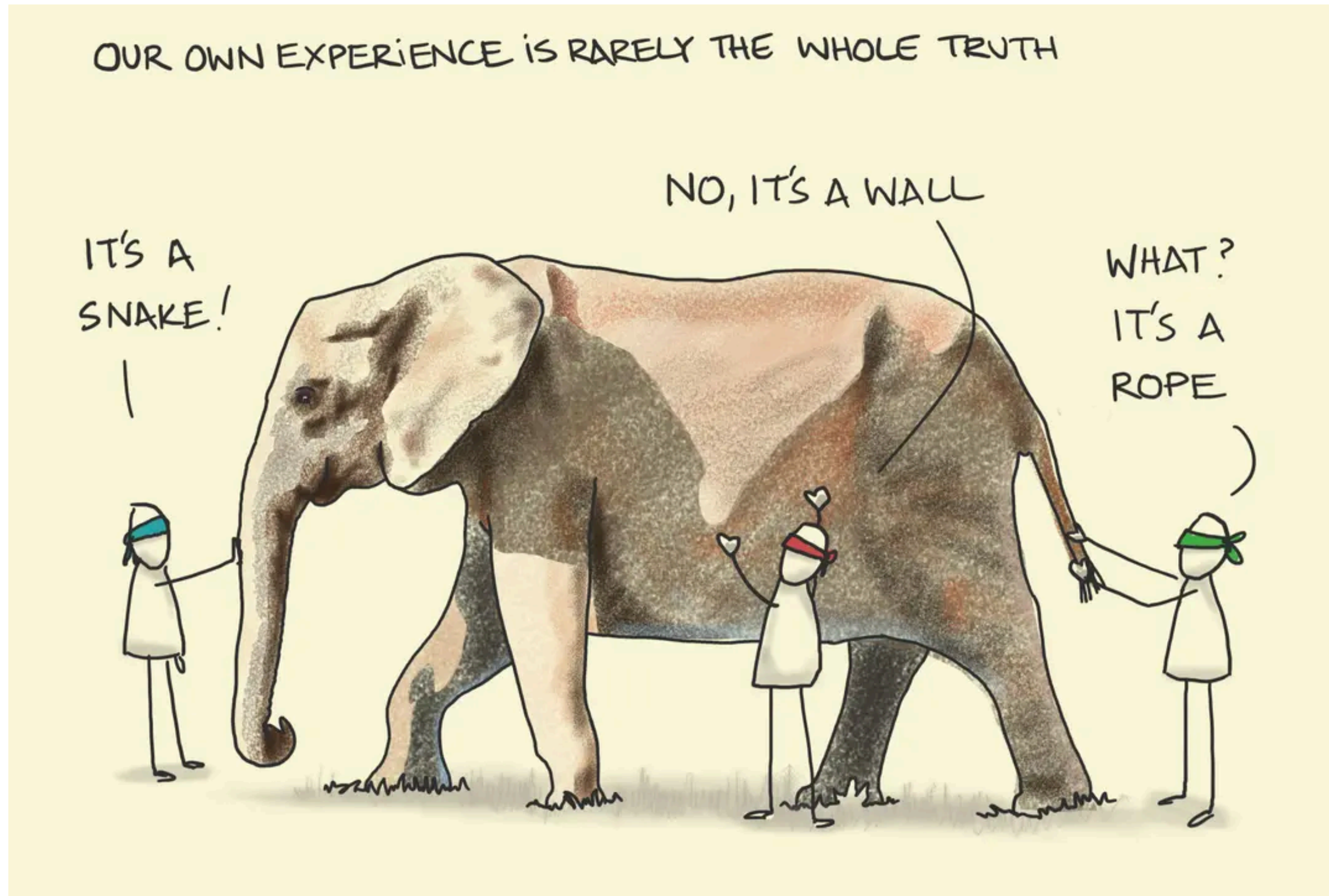
- 01** **CONTEXT IS KING**
- 02** **SUSTAINABILITY TIMELINE**
- 03** **SOUTH AFRICA CURRENT POSITION**
- 04** **WHAT ARE THE DRIVERS**
- 05** **EPR**
- 06** **SA CHALLENGE & OPPORTUNITY**
- 07** **WHAT TO EXPECT IN THE FUTURE**
- 08** **WHAT BUSINESS/SA SHOULD BE AWARE OF**



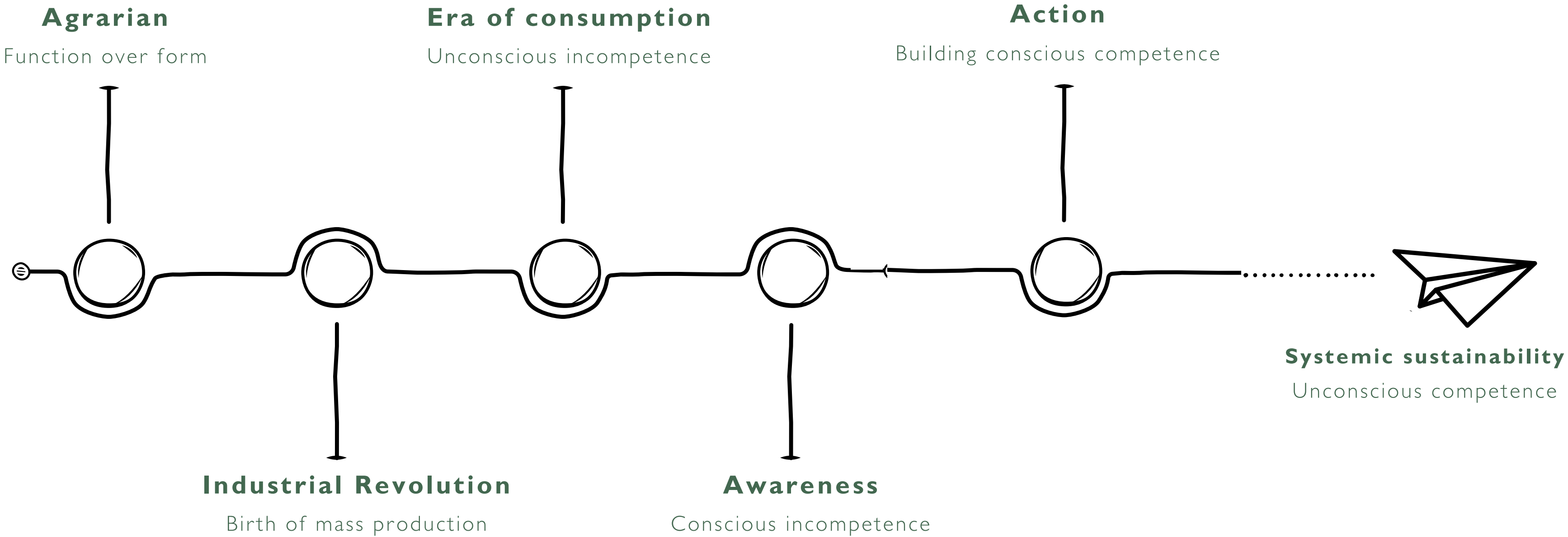
CONTENT



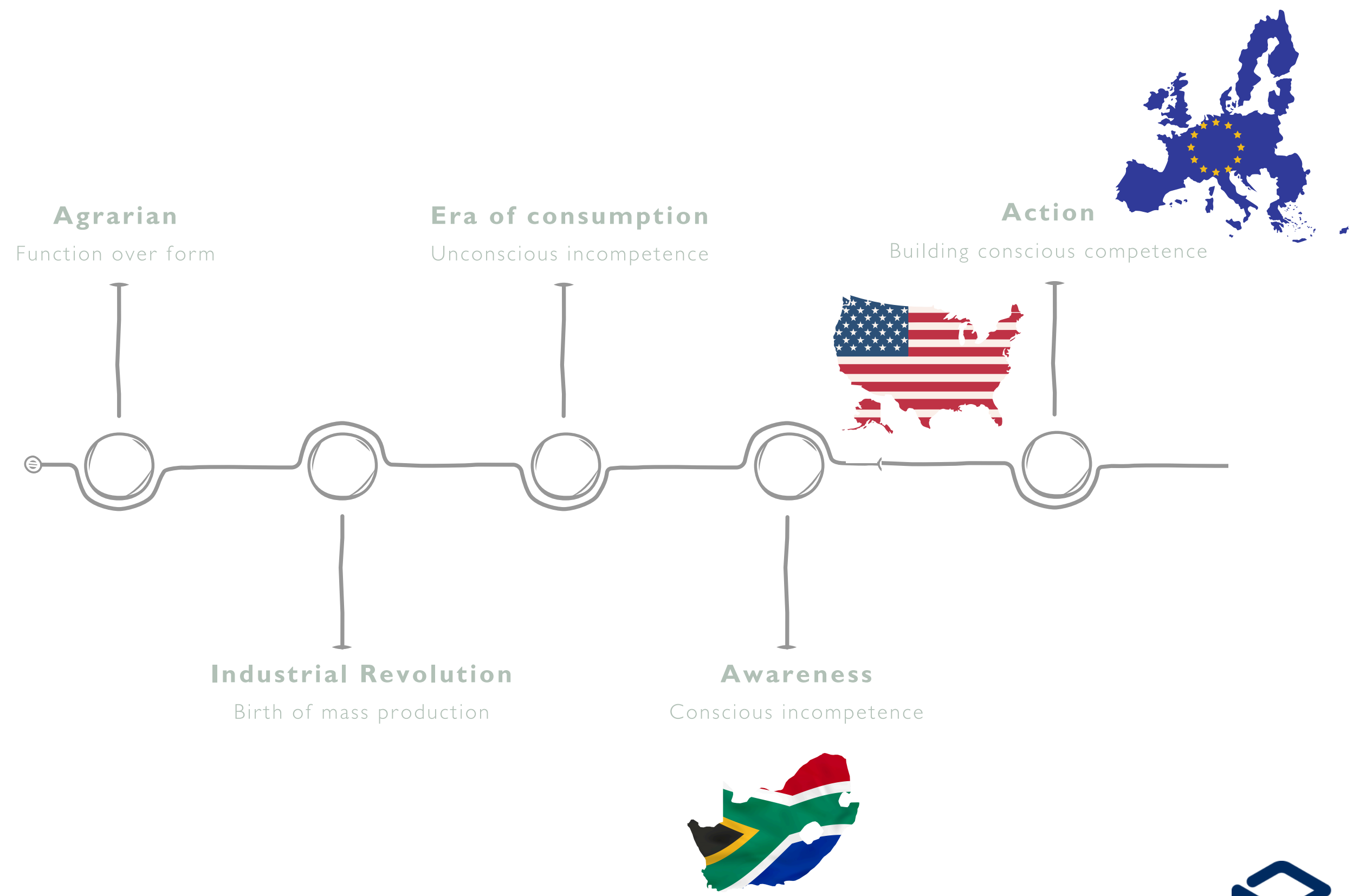
CONTEXT PROVIDES THE WHOLE PICTURE



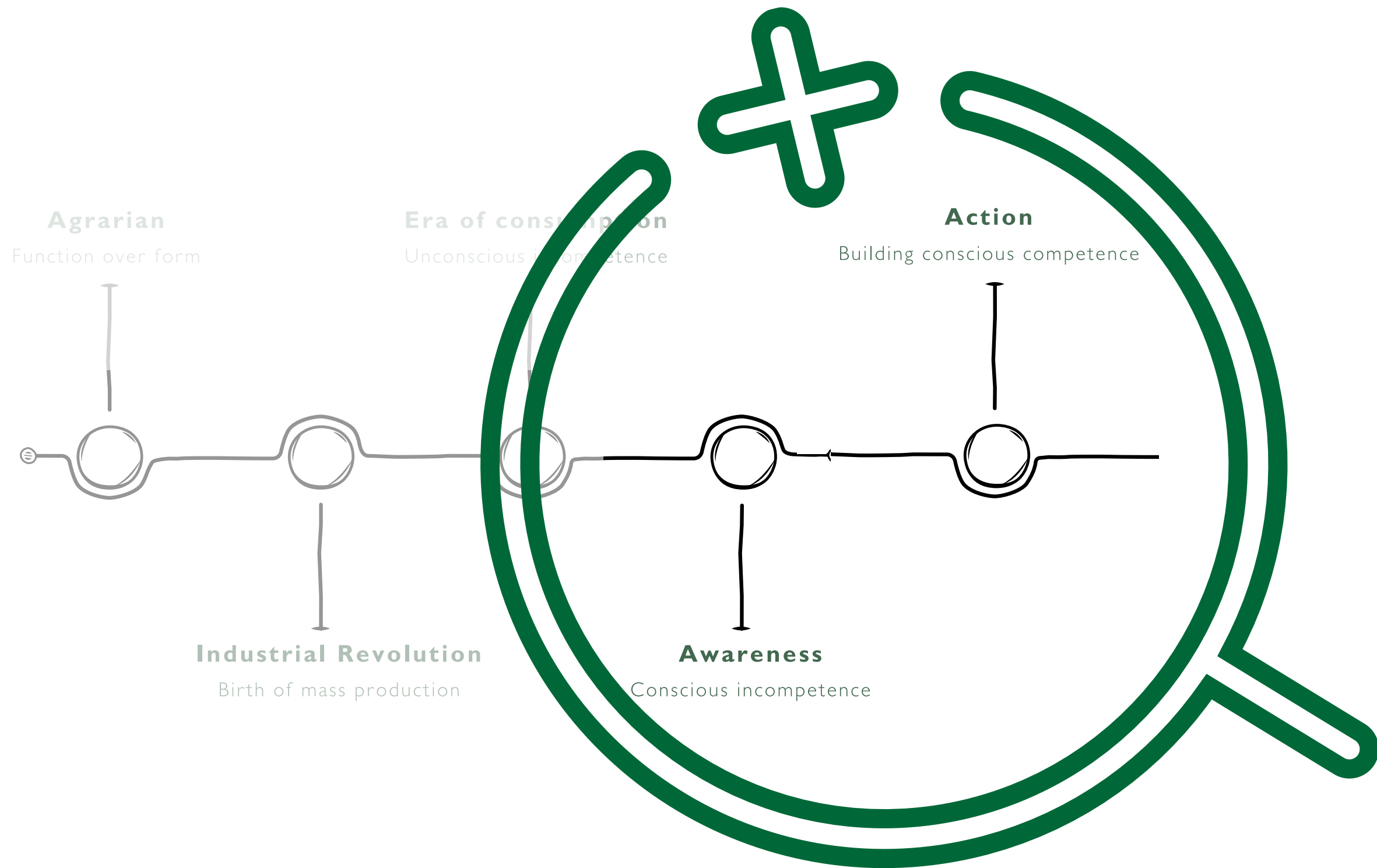
SUSTAINABILITY TIMELINE



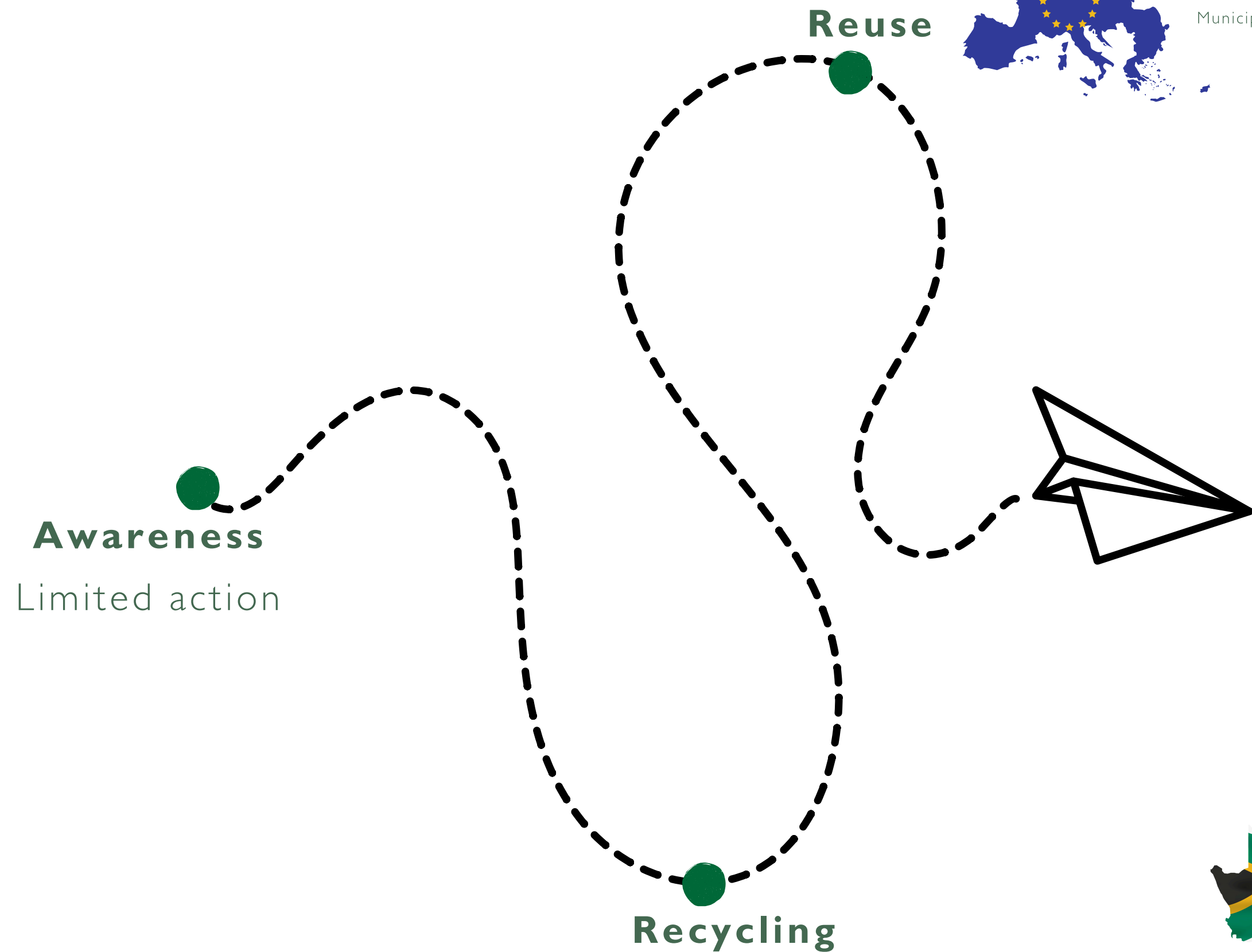
SUSTAINABILITY TIMELINE



SUSTAINABILITY TIMELINE



ALPAL™



- 48% -
Municipal waste recycling³

Recycling is not
the solution



- 10% -
Municipal Waste Recycling¹



- 32% -
Municipal Waste Recycling²

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 | <div> Do it</div> <div>Things with clear deadlines and consequences for not taking immediate action.</div> | <div> Schedule it</div> <div>Activities that bring you closer to a set deadline that bring you closer to your goals. Easy to procrastinate on.</div> |
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WHAT'S DRIVING THE URGENCY?

01

Regulation

02

Reporting

03

Stakeholders

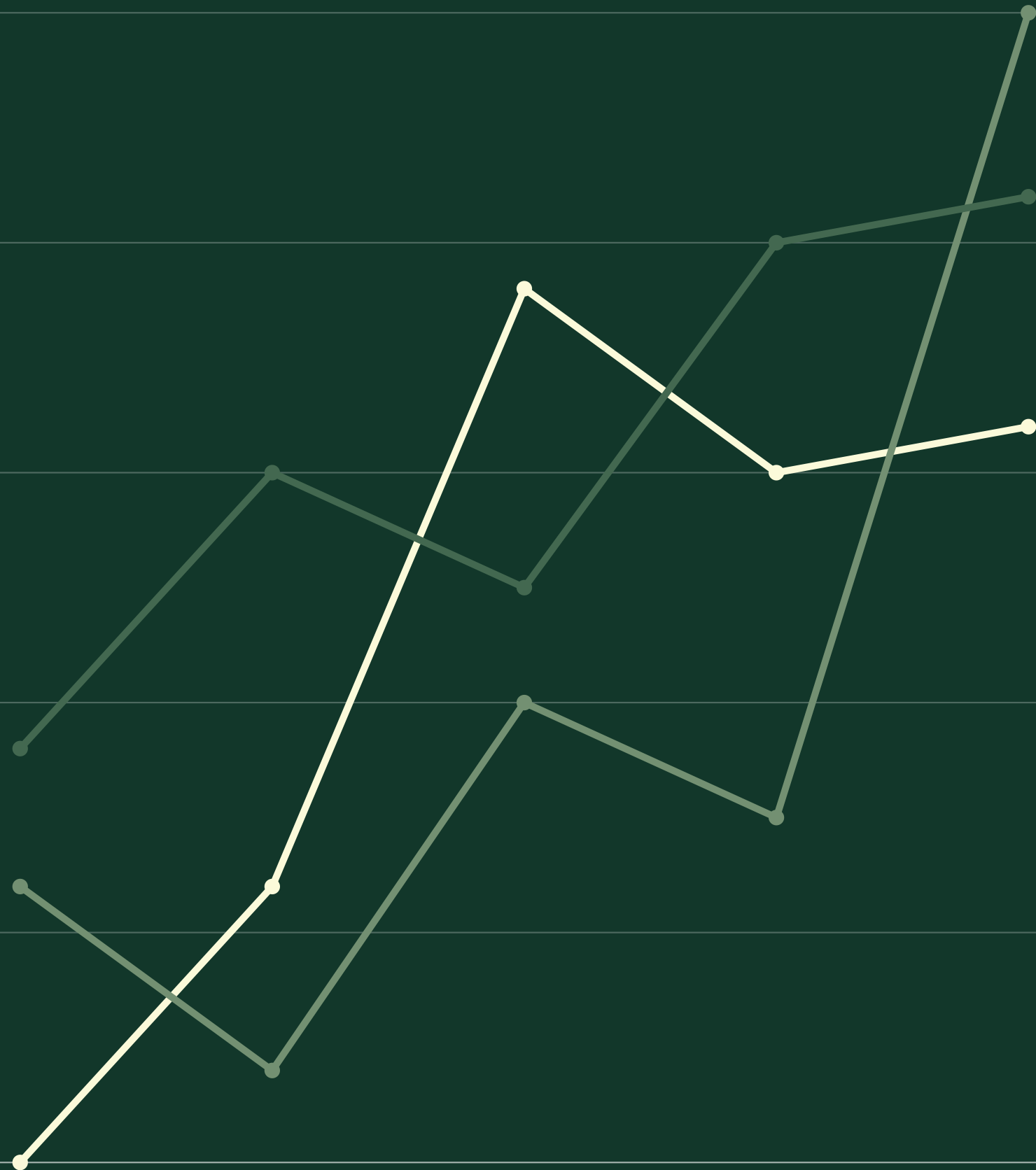
04

Financial performance

05

Brand

Dynamic interplay of
elements



EVER-EVOLVING MARKET



A hand holding a small tree with a globe-shaped canopy. The tree's canopy is shaped like a globe, with green leaves filling the continents and brown branches forming the oceans. The hand is holding the base of the tree, which is a mound of dark soil. The background is a soft-focus green field.

SUSTAINABLE TRANSFORMATION

A global imperative

WHAT'S DRIVING THE TRANSFORMATION?

01

Regulation

02

Reporting

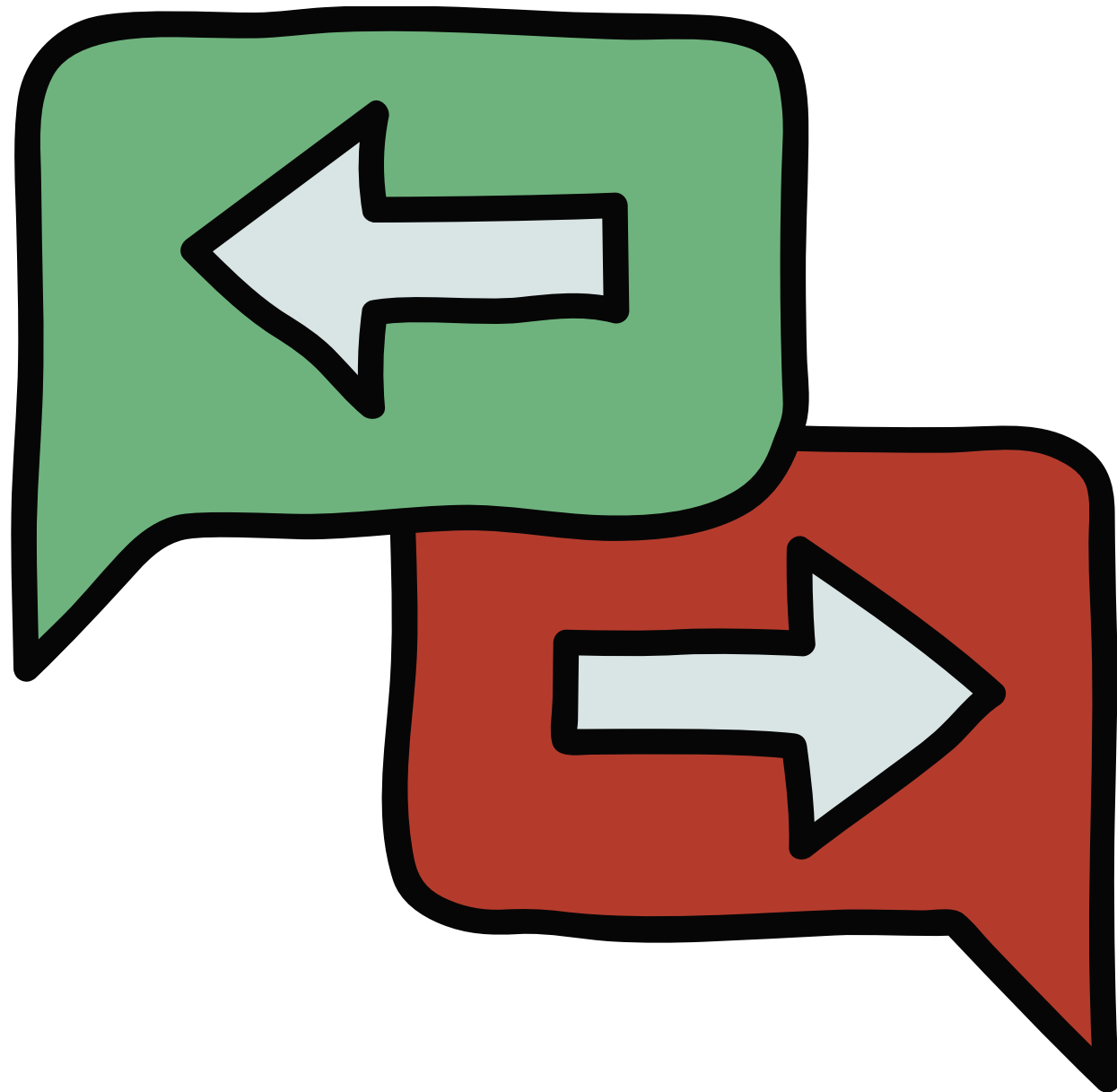
03

Stakeholders

Financial



SA CONSUMER HAS A FUNDAMENTALLY DIFFERENT CONTEXT



HIERARCHY OF NEEDS

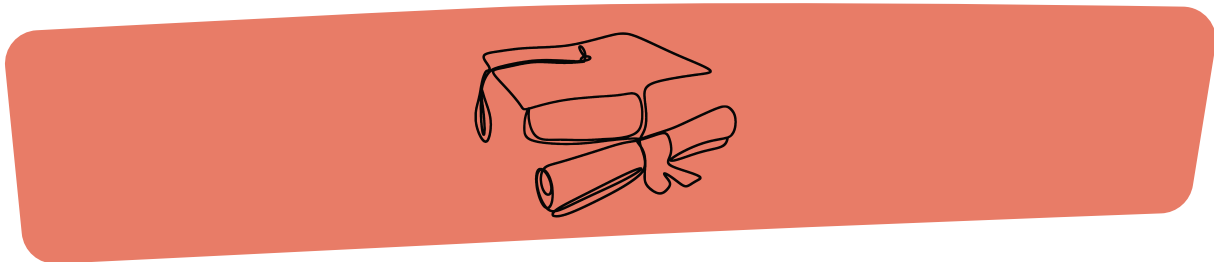
Sustainability



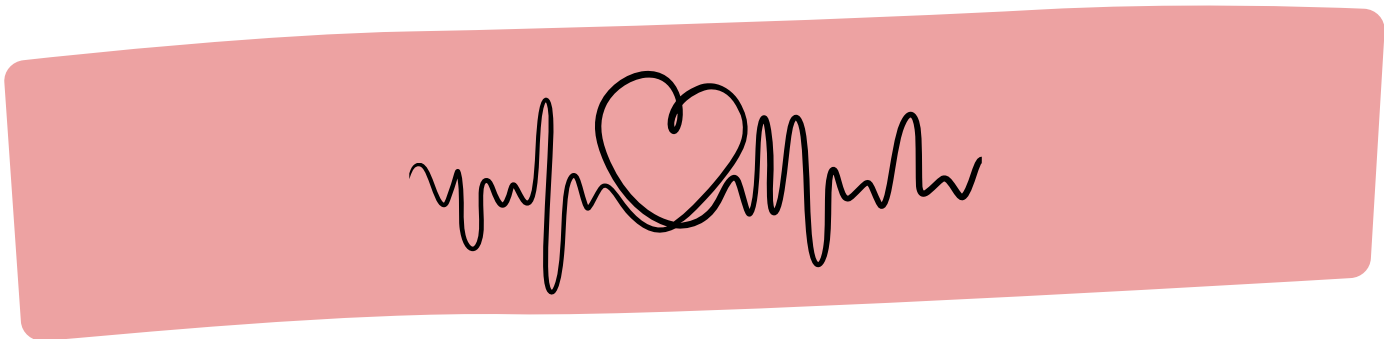
Other



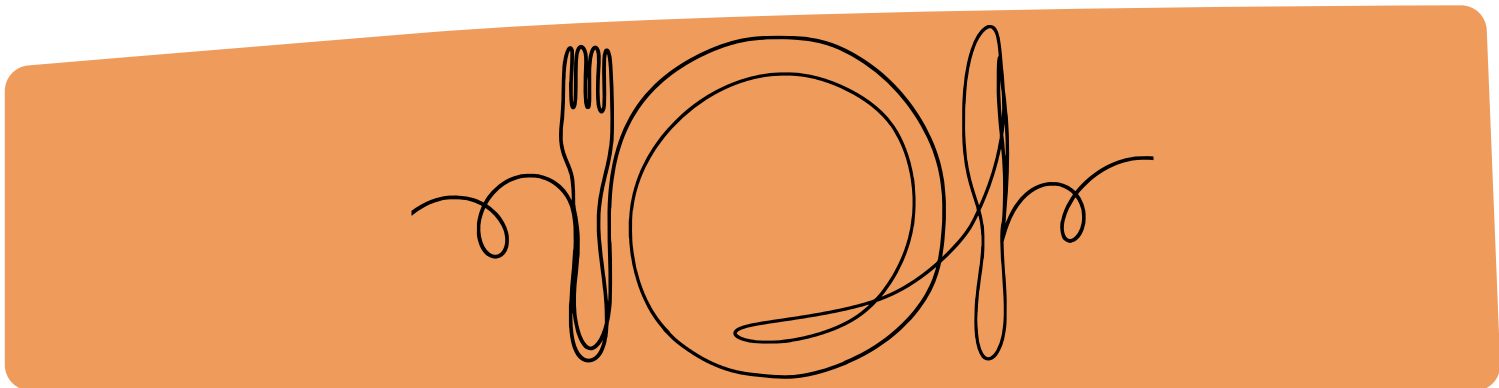
Education



Healthcare



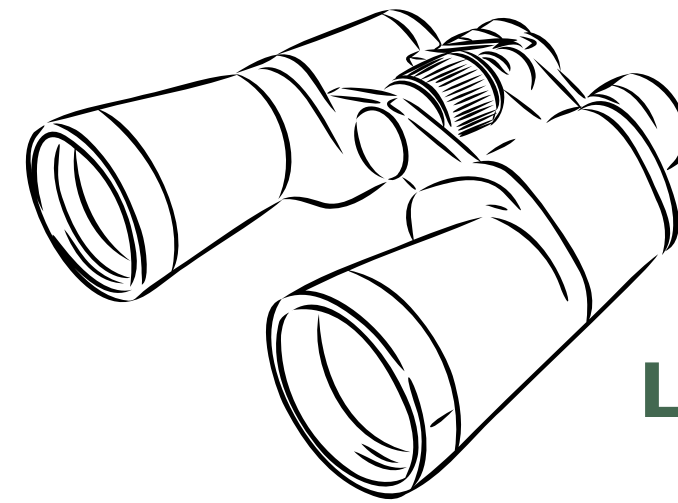
Food



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



Not transformed from the
inside out



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**

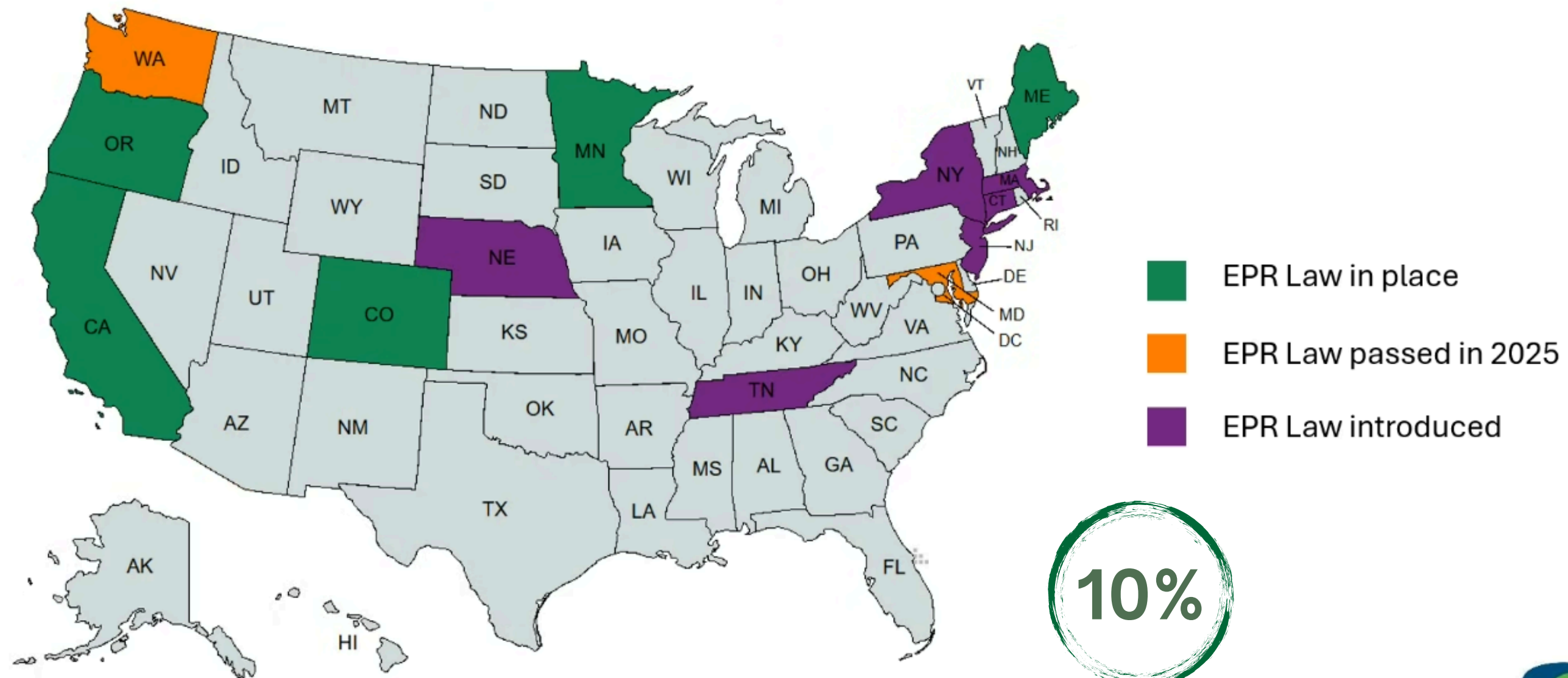
SA ARE AMONGST THE LEADERS IN EPR



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

SOUTH AFRICA ARE AMONGST THE LEADERS IN EPR

US State EPR Policies





**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**

**Green
Claims
Directive**

**Waste
Framework
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...

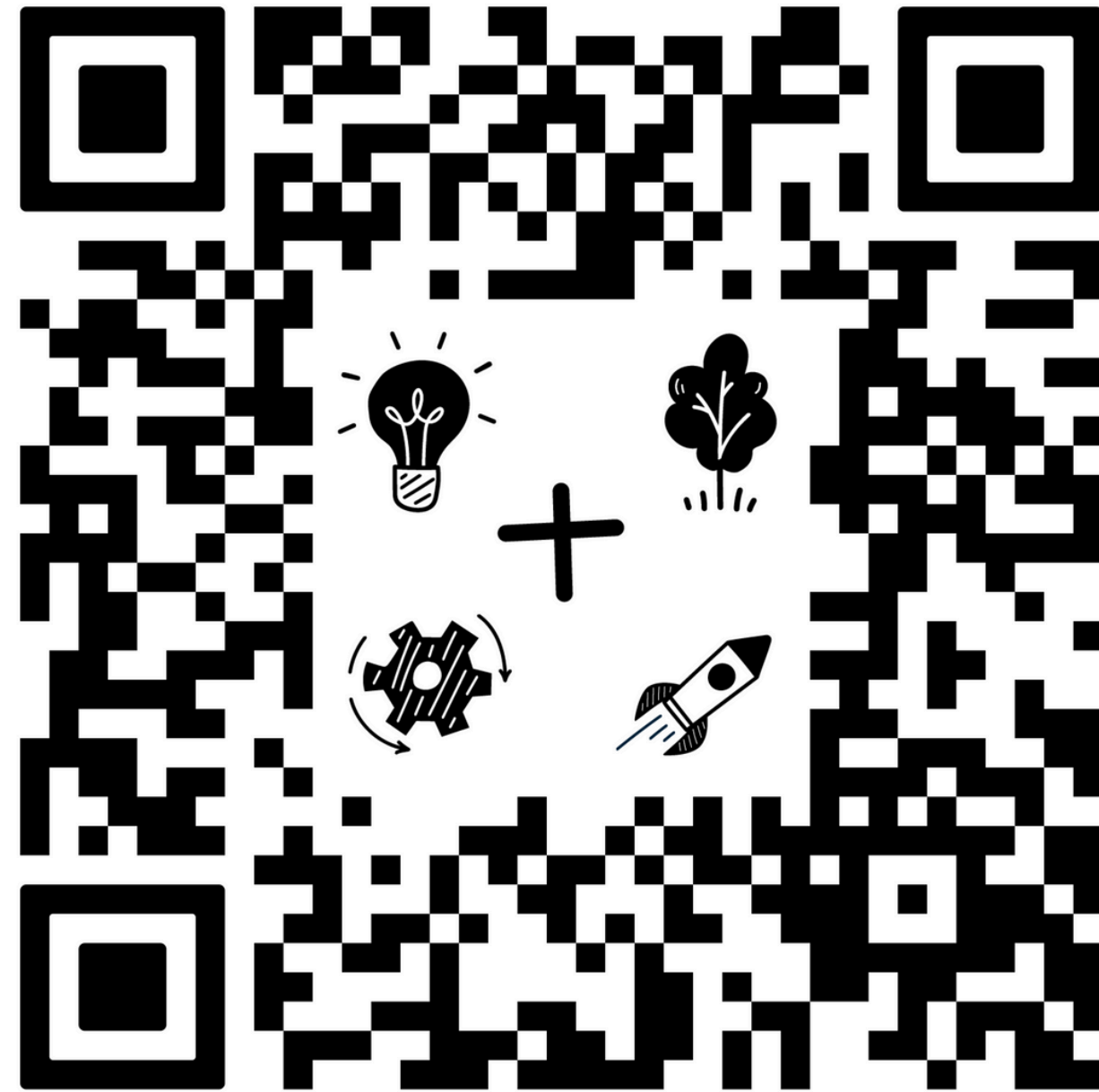
ESG Today / Jul 12, 2024

SUSTAINABILITY CREDENTIALS ARE HERE



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

ALPAL OVERVIEW



[OR CLICK HERE FOR VIDEO](#)



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**

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SOUTH AFRICA

HAS THE OPPORTUNITY TO
PRIORITISE

THE *IMPORTANT*
BUT *NOT URGENT*

NOW



Be progressive



Avoid the “urgency trap”



Build conscious competence



ALPAL™



ALPALTM
we box smart.

www.alpalbulkpackaging.com

Plastics | SA

www.plasticsinfo.co.za