



Solidarity

Equality

Sustainability

A Global Bioeconomy

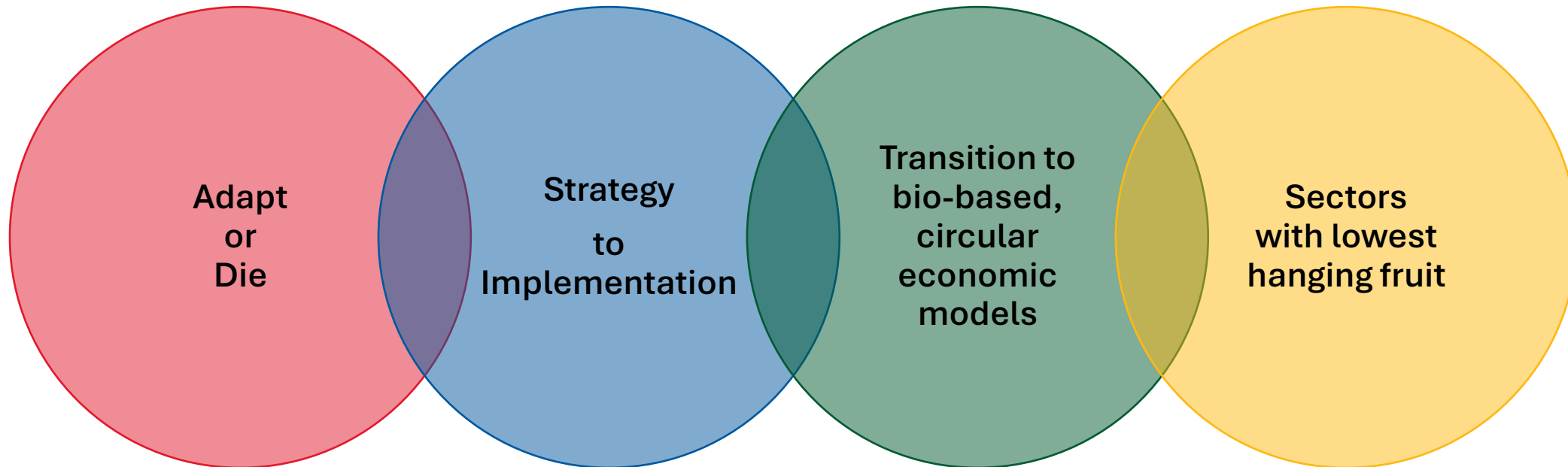
What needs to be done to develop the global sustainable bioeconomy?

A Private Sector Perspective

Jane Molony | Paper Manufacturers Association of South Africa

19 September 2025

PRIVATE SECTOR VIEW | **The market imperative**



THE BIOECONOMY IMPERATIVE | What are the drivers?

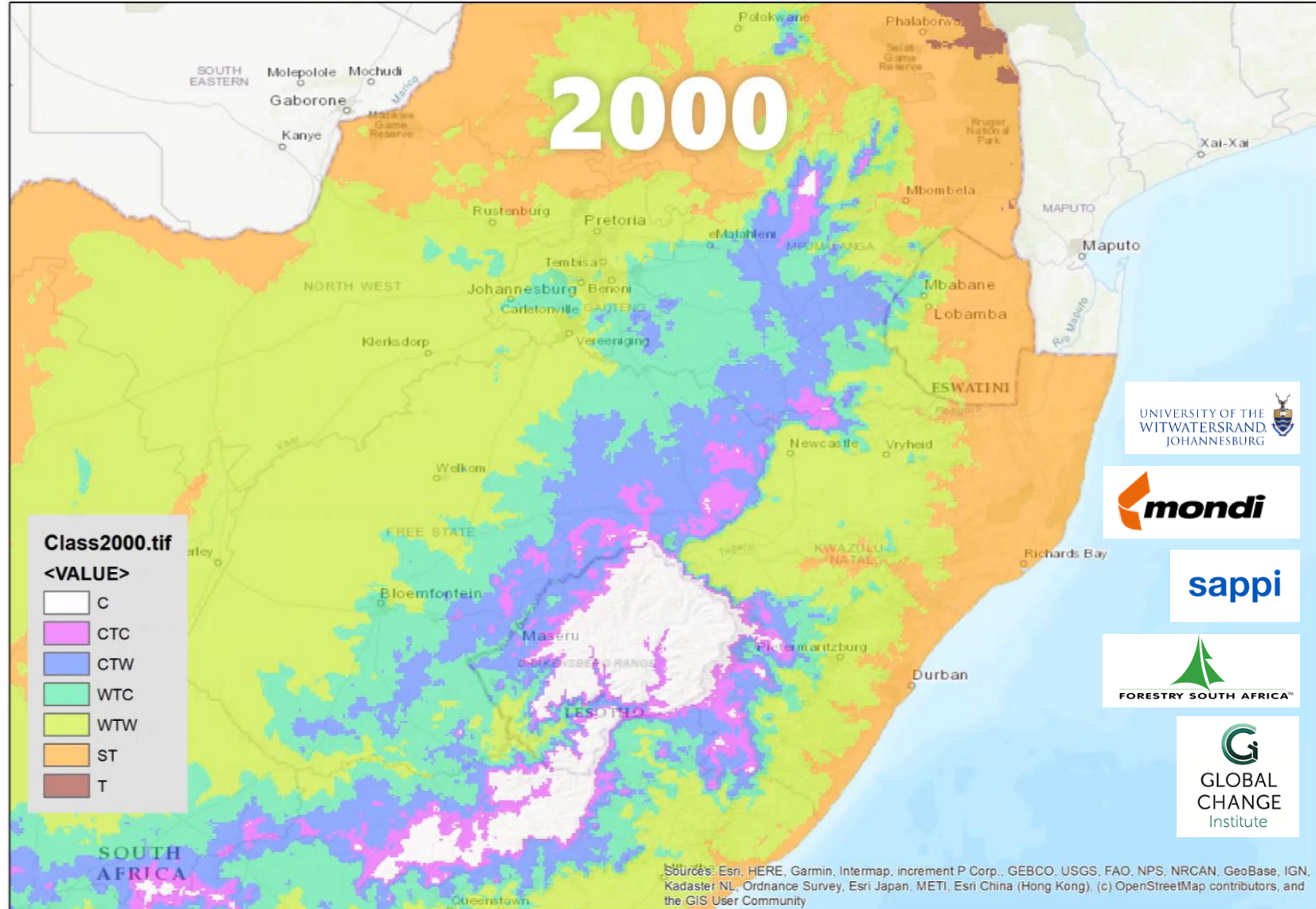
- **Climate Change**
 - Not good to focus on carbon capture & storage (CCS) and not reduce emissions
- **Biodiversity Loss**
 - Dependency on water/ pollination – quote from Agence Française de Développement (AFD) 80% SA exports reliant on ground water
- **Unsustainable Development**
 - Linear economy depleting finite resources
- **Legislation and Regulation**
 - Putting a price on carbon not enough

The Solution

Transition to bio-based, circular economic models – how?

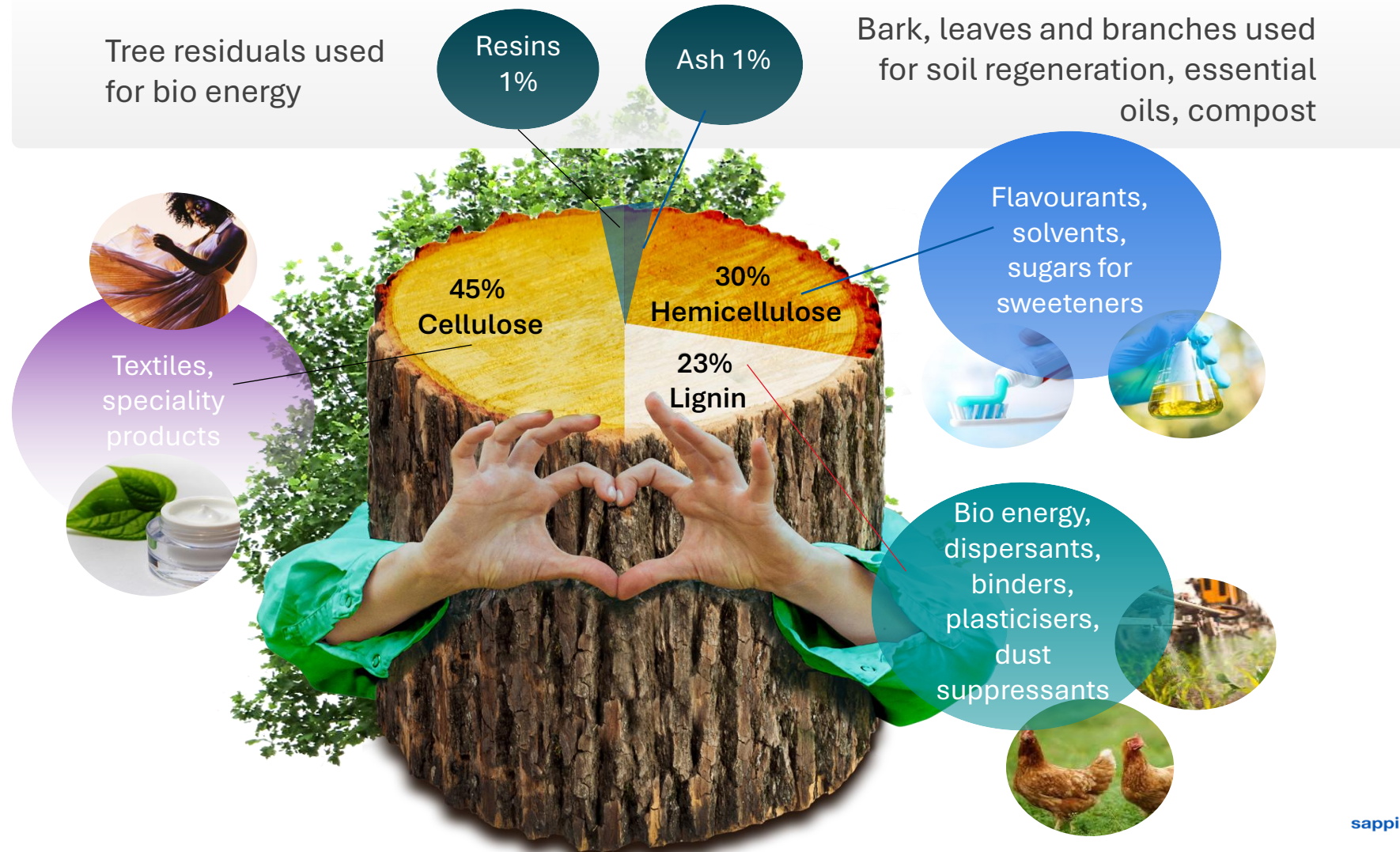
Climate change 2000 to 2100 – Silviculture Zone

Wits GCI 6 x CMIP5 models (Dovey 2022)



MAT (°C)	Silviculture Zone	
>21	Tropical	
21	Sub-tropical	
20		
19	Warm Temperate (WT)	WT Warm
18		
17		
16		WT Cool
15	Cool Temperate (CT)	CT Warm
14		CT Cool
13		

MAXIMISE YOUR RESOURCES



MAXIMISE YOUR RESOURCES | What does a thriving global bioeconomy look like?

30%

of chemicals and materials
from bio-based sources

50%

reduction in agricultural waste
through circular value chains

**Imagine
by 2030
Vision**

\$7.7 trillion

global bioeconomy (up from \$4
trillion today)

50 million

new green jobs, particularly in
developing economies

SO HOW DO WE GET THERE **and close the implementation gap?**

Fragmented value chains
ACfTA

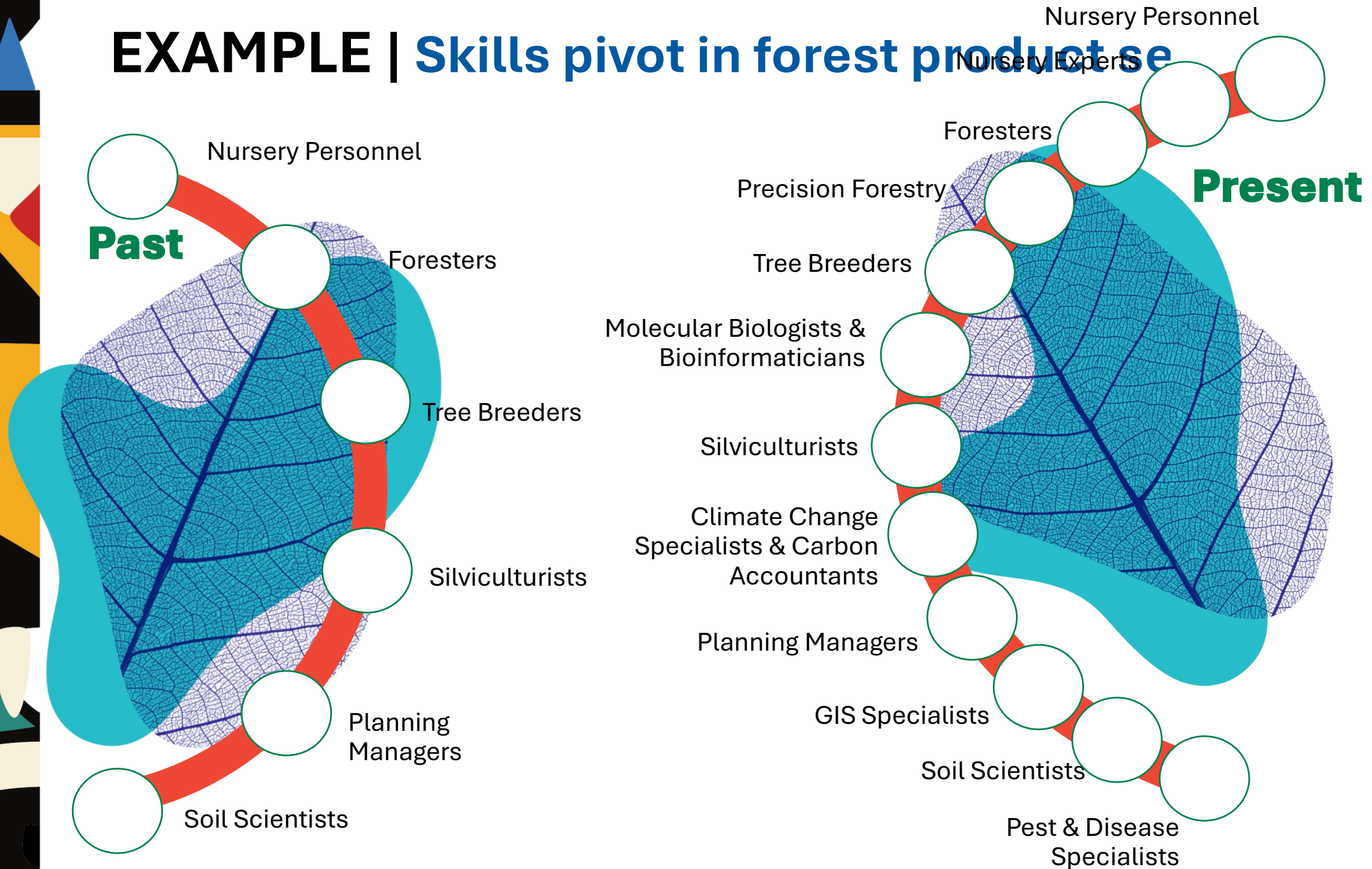
Increased nationalism and global geopolitical disconnect
Partner through other means?

Limited access to finance
(especially for SMEs and developing countries)

Regulatory barriers and inconsistent standards
Create pilot exemptions?
Reimagine regulations once replicable pilot shown to work and to avoid risks?

Skills shortage
Anticipate skills requirements
e.g. forest product sector

EXAMPLE | Skills pivot in forest products



PRIVATE SECTOR | Requirements to thrive

Policy Certainty & Long-term Commitment

- Consistent regulatory frameworks across G20 countries
- Carbon pricing mechanisms that favour bio-based alternatives but don't inhibit industrialisation and development.
- R&D tax incentives for bioeconomy innovations and biodiversity conservation

CREATE enabling policy ecosystems

Harmonise Standards

Common certification for bio-based products

Reform Subsidies

Shift \$1.8 trillion fossil fuel subsidies to bioeconomy (from total of US \$7 trillion*)

Procurement Power

G20 governments commit to x % bio-based purchasing

Trade Facilitation

Reduce tariffs on bio-based products and technologies

Avoid unsustainable subsidies

Bio-based product price premium?

Who/how can we coordinate this way forward?

*IMF

BUILD INNOVATION and skills ecosystems

Innovation Hubs

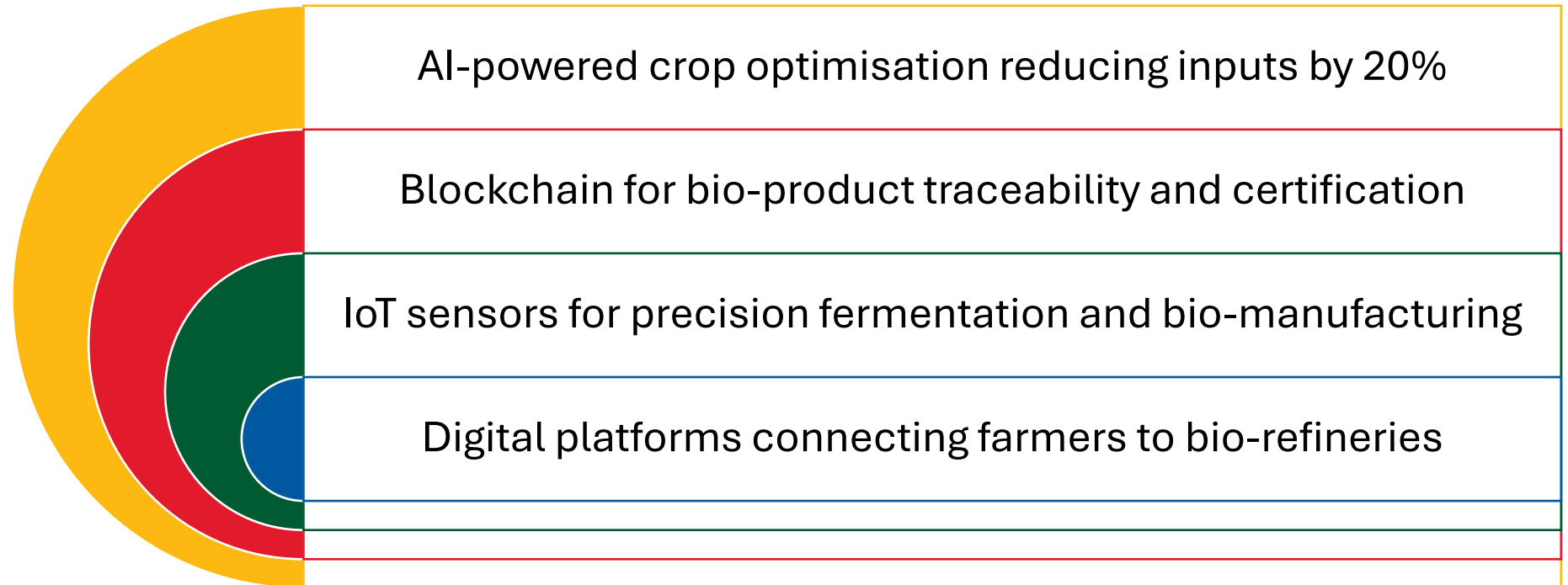
- G20 Bioeconomy Research Network
- Technology transfer mechanisms – partnerships have worked in Forest product sector. e.g. Lignin beneficiation - extensive private sector investment
- Open-source platforms for bio-innovations?
- Sand box for exemptions from inhibiting regulations

Sector and Cross-Sectoral Skills Ecosystems

- University-industry partnerships
- Focus on youth in developing countries
- Department of Science, Technology & Innovation's Sector Innovation Funding ticks both of above boxes
- Example – paper sludge to bioethanol

LEVERAGE digital technologies

DIGITAL BIOECONOMY INTEGRATION



ECONOMIC TRANSFORMATION | The African Opportunity

Africa's Bioeconomy Advantages

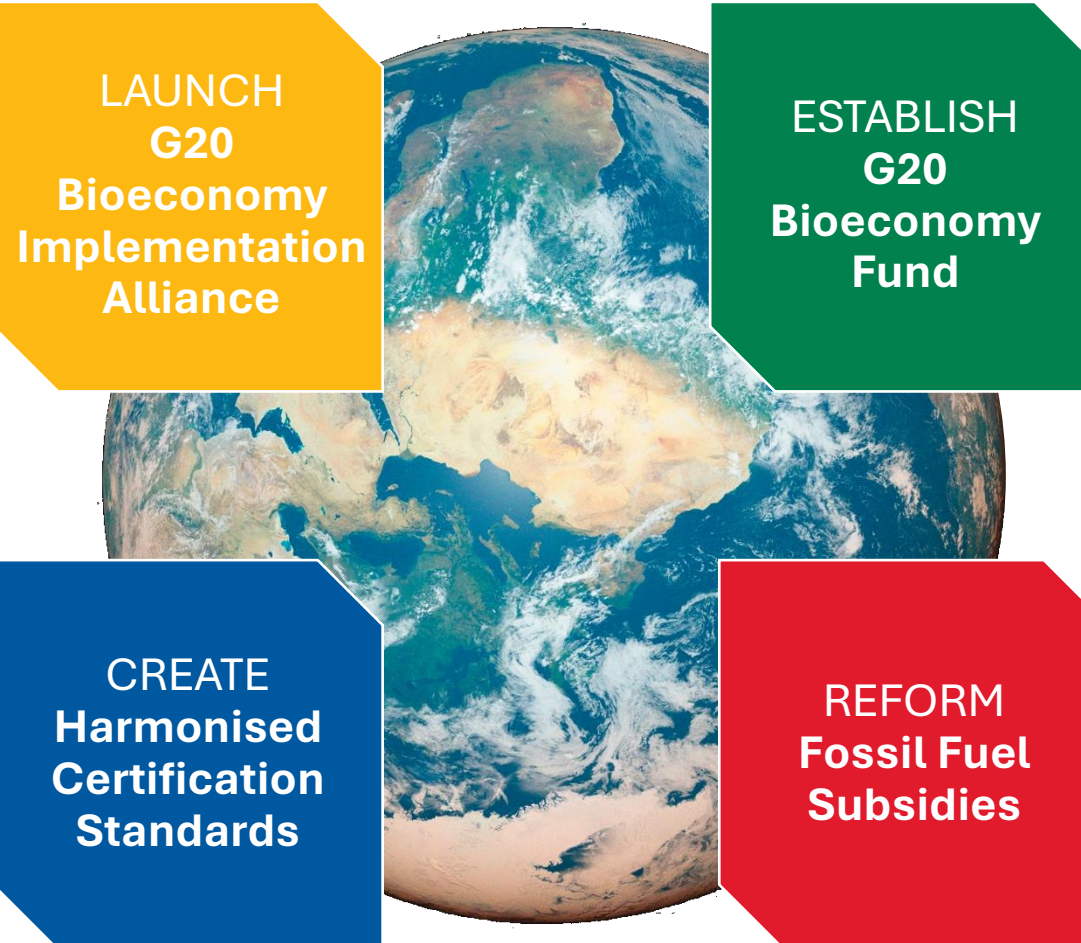
- 65% of world's remaining arable land
- Abundant biomass resources
- Young, adaptable workforce (70% under 30)
- Growing domestic markets (1.3 billion people)

Transformation Potential

- Value-added processing creating 2x economic value
- Rural development reducing urban migration
- Technology leapfrogging to sustainable solutions



CALL TO ACTION | 4 priorities



CONCLUSION | The moment for action

The Bioeconomy Advantage

- Climate solution that creates prosperity
- Nature-positive development pathway
- Inclusive growth opportunity for all countries
- Technology-enabled transformation

The Private Sector is Ready

- Capital commitment follows market need
- Technology solutions: Available and scalable
- Market demand: Growing rapidly
- Partnership approach: Collaborative implementation

The bioeconomy is not just an environmental imperative – it's the greatest economic opportunity of our time. With good leadership, a framework or structure and private sector partnership, we can build a sustainable, prosperous future for all.

THANK YOU
QUESTIONS AND DISCUSSION