



Josh Haslun, Ph.D.
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TODAY'S WEBINAR WILL BEGIN SHORTLY

2030: A Horizon of Agrifood's Future

QUESTIONS?

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2030: A HORIZON OF AGRIFOOD'S FUTURE



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Research Director



The
Deciding
Factor

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Agenda

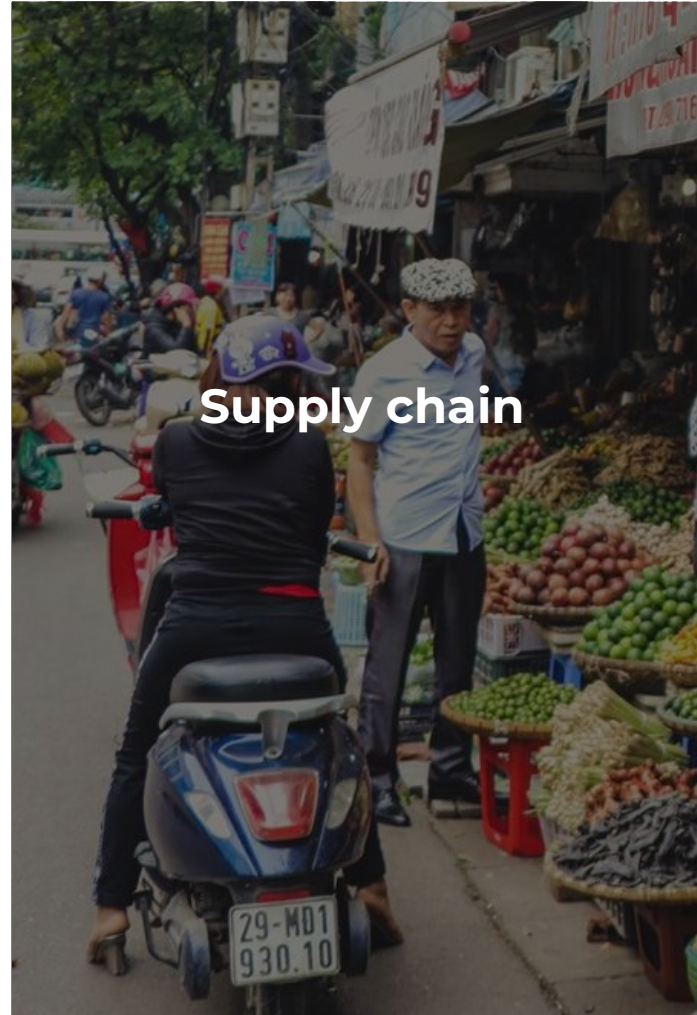
Overview of the rapidly changing agrifood ecosystem

PESTLE of change

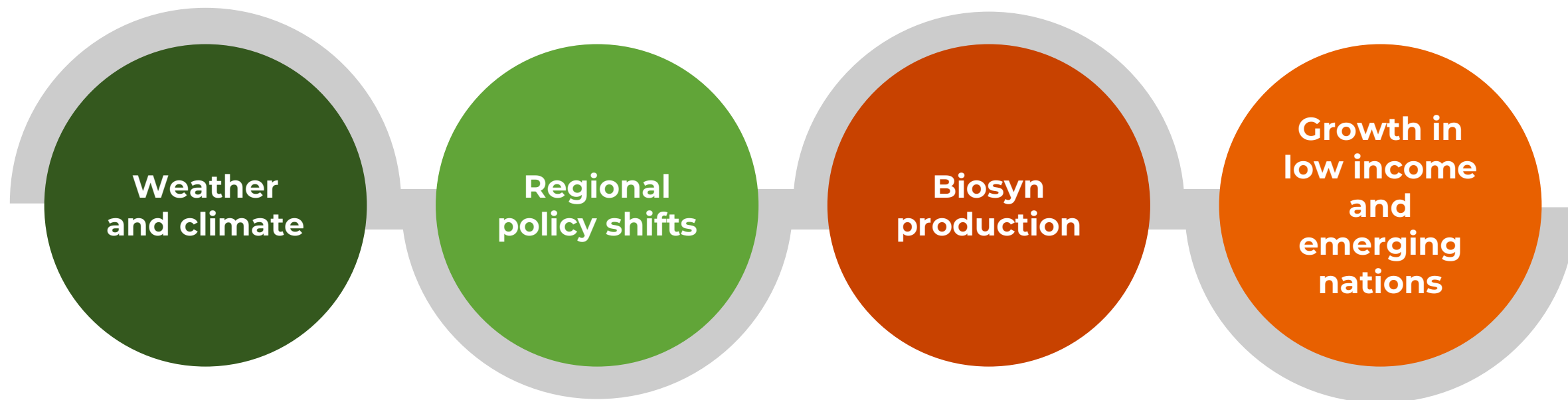
Analysis of policy and promise alignment

Key takeaways

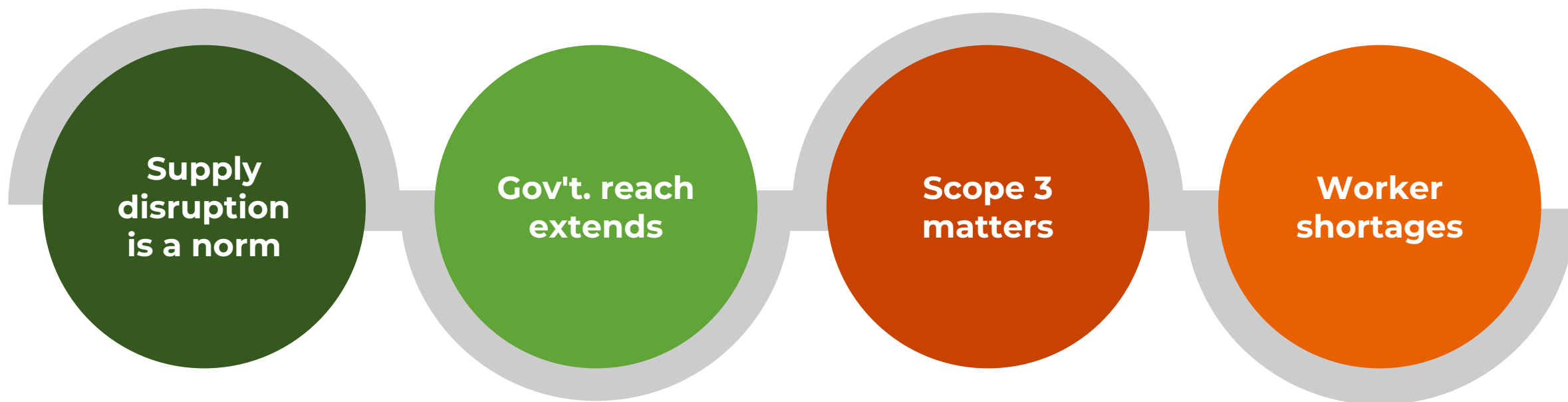
Agrifood innovation accelerates, driven by sustainability



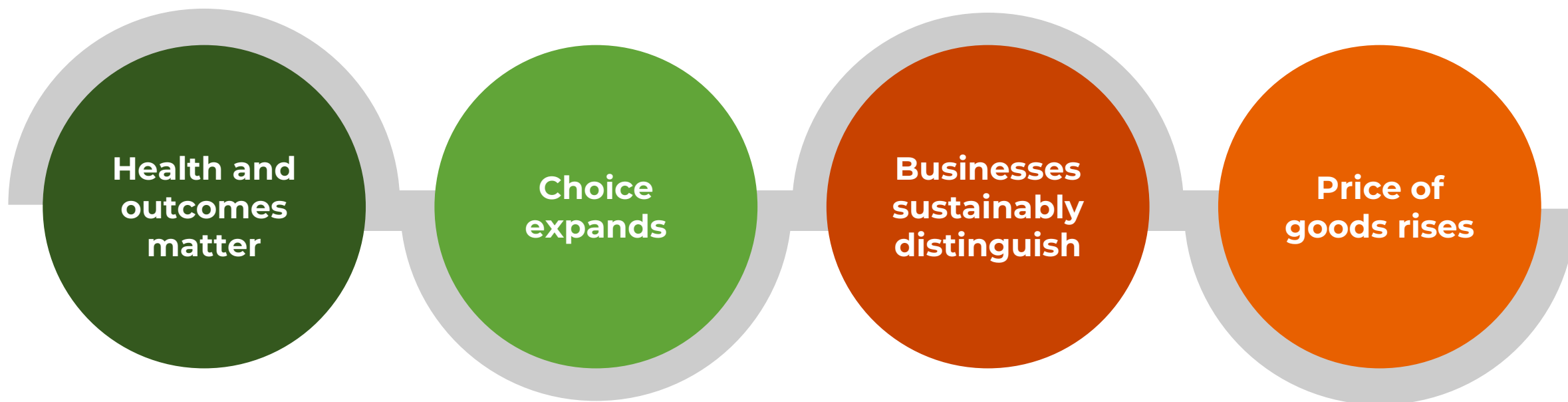
Production Sources



Supply Chain



Consumer



Agenda

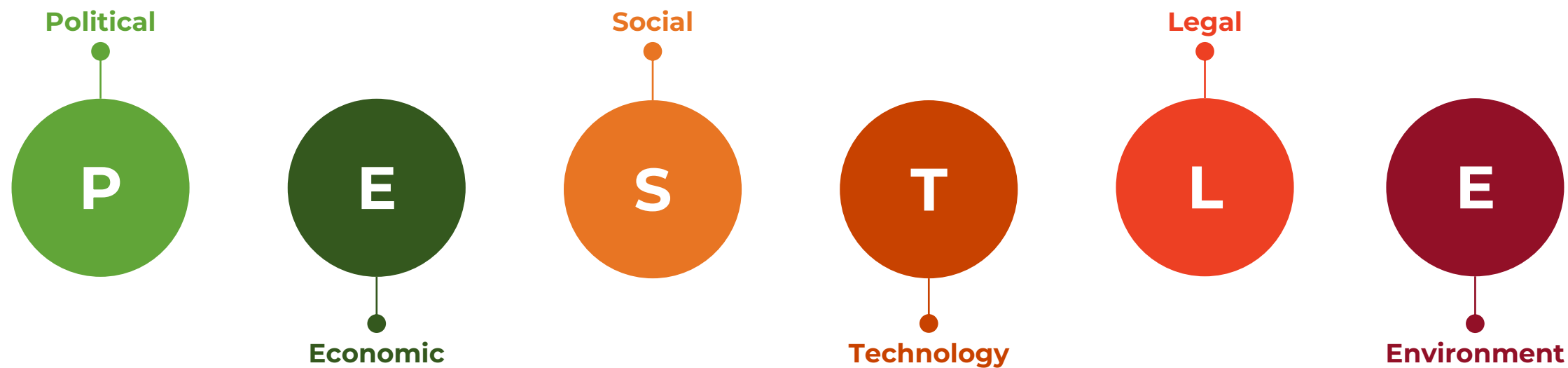
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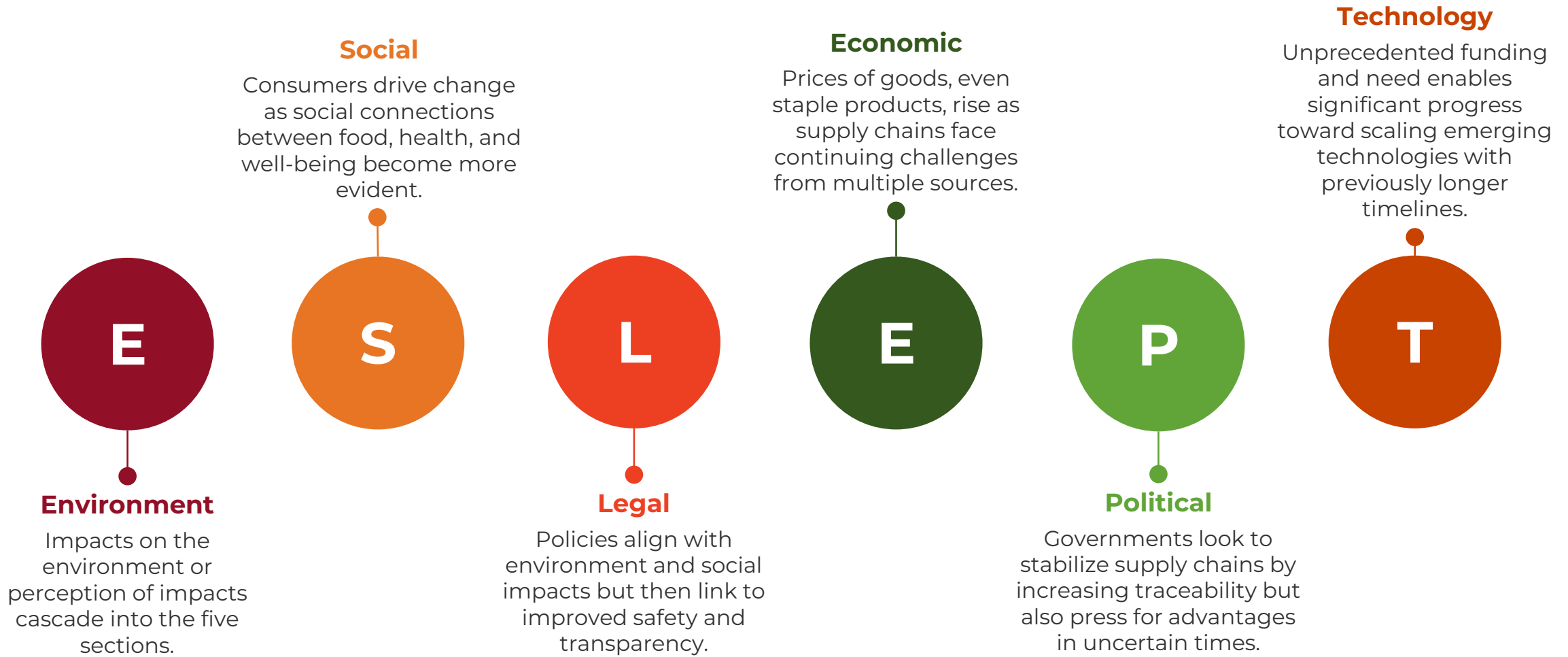
Analysis of policy and promise alignment

Key takeaways

PESTLE Summary – Six Sections



PESTLE Summary – Six Sections



Agrifood risk starts with environmental impact and change

Weather and climate

- The "emergence" of climate impacts consistently occurs earlier in the new projections.
- 44% of the EU's agricultural imports will become highly vulnerable to drought in the future because of climate change.

Businesses sustainably distinguish

- Land-use change has affected almost a third (32%) of the global land area in just six decades (1960–2019).
- Deforestation becomes a driver of change.



Consumers integrate new choices into their lives

Choice expands

- Diversity of protein sources is linked to improved health – Canada includes this in new food plate.
- Choice may not align with perception of quality.

Health and outcomes matter

- Consumers have growing interest in the connection between gut health and immunity.
- Food choices are increasingly based on environmental impact as well as inherent quality.



Policy follows shifting consumer and environmental changes

Regional policy shifts

- Food labeling.
- Gene editing.

Government reach extends

- Supply chain – U.S. Department of Agriculture announces a framework to shore up the food supply chain.
- Future influence on Scope 3 carbon/sustainability markets.



Disruption leads to rising costs, challenging consumer behavior

Supply disruption is the norm

- The cost of essential food items increased by over 10% on average.
- Fats and oils, fresh fruits, and seafood are highly impacted.

Rising costs

- Companies race to the least for the highest price.
- Cost to produce is aligning with technology implementation, establishing the next wave of mechanization.



Politics adds further uncertainty to the mix

Growth focus is low-income and emerging nations

- The world is on the brink of food crises.
- Food becomes a tool for humanitarian assistance and geopolitical stabilization.

Scope 3 matters

- California Senate passes a bill requiring large companies to report Scope 3 emissions.
- Science Based Targets initiative aligns with the emissions targets of the agrifood supply chain.



Funding leads to rapid advancement of innovations

Biosynthesis contributes

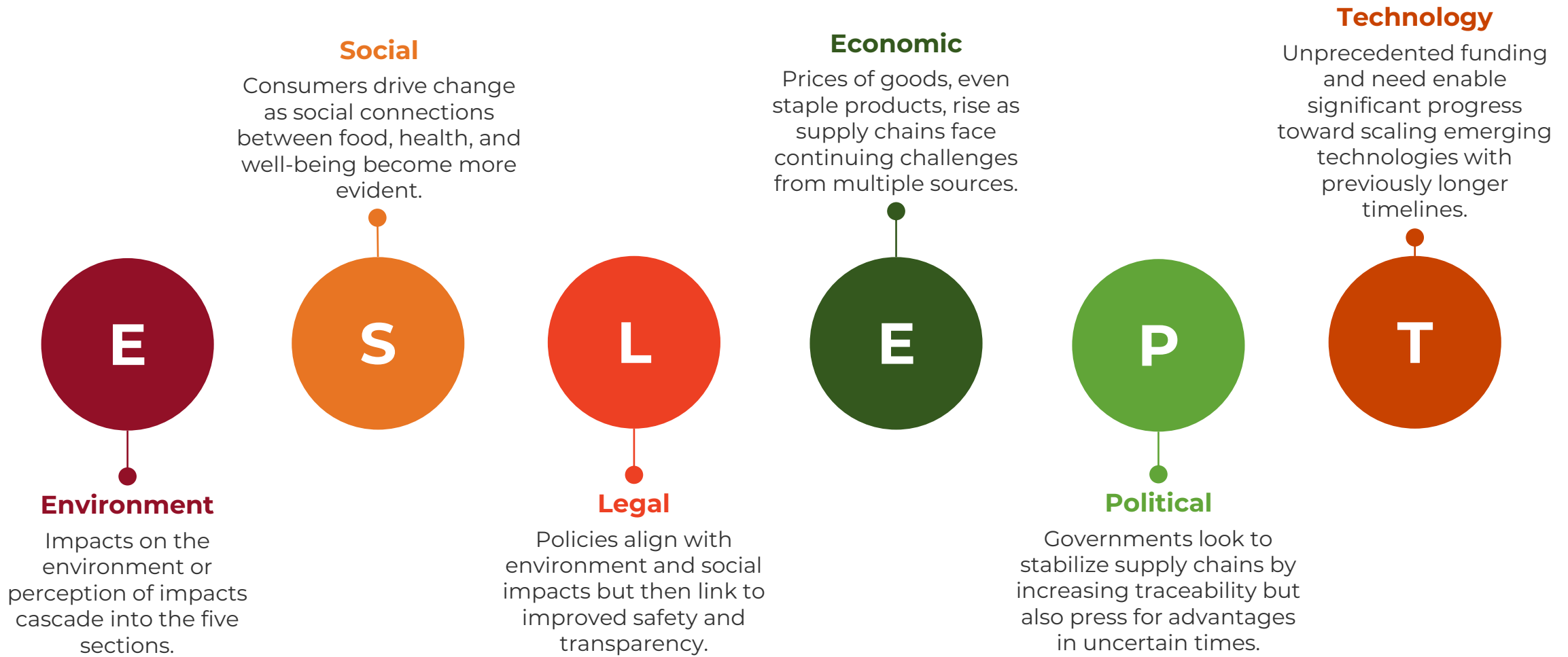
- Provided with significant funding, biosynthesis overcomes hurdles to achieve scalability.
- Growth depends on infrastructure availability, creating bottlenecks.

Worker shortages

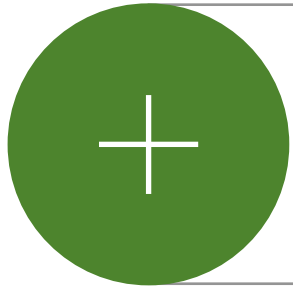
- Cost of workers and unpredictability of availability drive investment in automation.
- Innovation funding is at an all-time high despite disruptions.



Do NOT fall asleep at this juncture

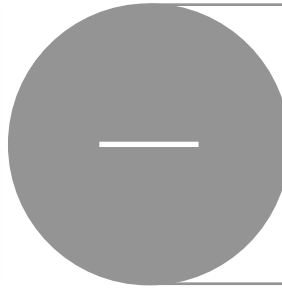


Complexity breeds paradoxes that challenge decision making



Demand for outcomes

Consumer interest in reliable preventive wellness products offers significant opportunity.



Rising product costs

Consumers struggle to make decisions under tightening budgets.



You need a litmus test to identify changing states, directional shifts, and industry gaps to better position your innovation across your immediate and adjacent value chains.

Agenda

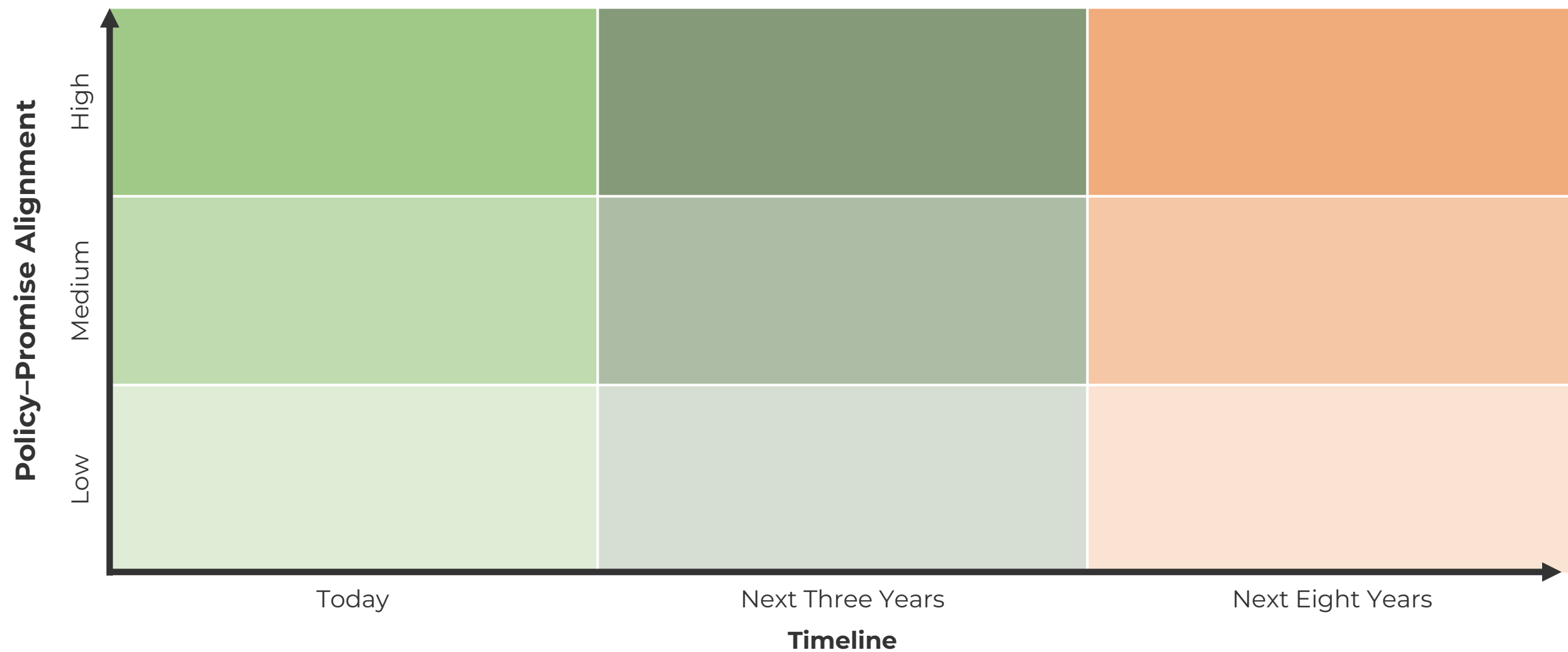
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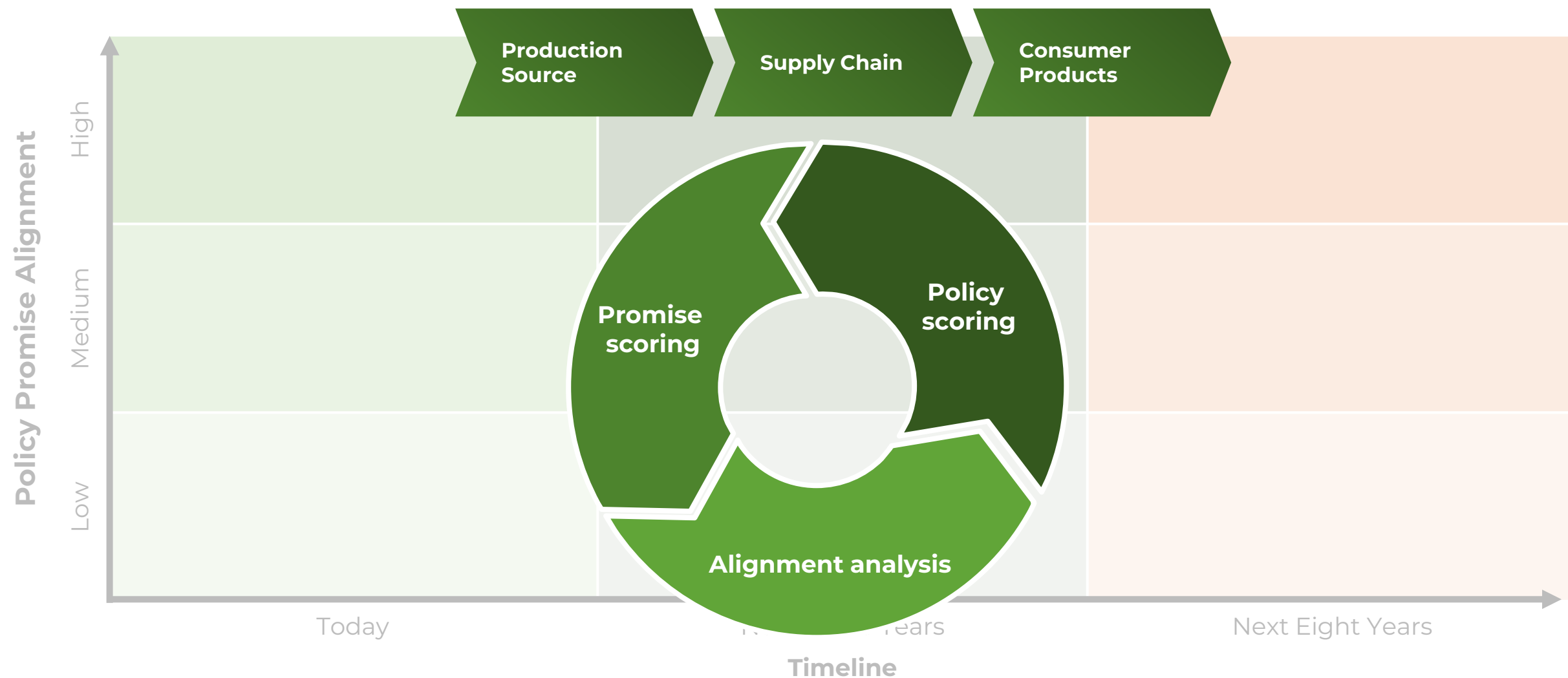
Analysis of policy and promise alignment

Key takeaways

Recommended overall strategic path



Recommended overall strategic path



12 archetypal sustainability goals identified

Average scores based on

- Promises have 10 leading companies in each area.
- Policies focus on change in the last year looking forward in the Americas, EU, and Asia.

	Source Production	Supply Chain	Consumer Products
Animal welfare			
Human welfare			
Water use/stewardship			
Regenerative			
Sust. sourcing			
R, R, or C packaging			
Virgin plastic use			
Product stewardship			
Deforestation			
CO ₂ reduction			
Renewable energy			
Waste management			

Supply chain drives broad activity in sustainability

Supply chain creates momentum behind scalable initiatives

Carbon neutrality leads the way among promises

Promises near production and consumers take a specific focus

	Source Production	Supply Chain	Consumer Products
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Policies remain focused on energy and welfare

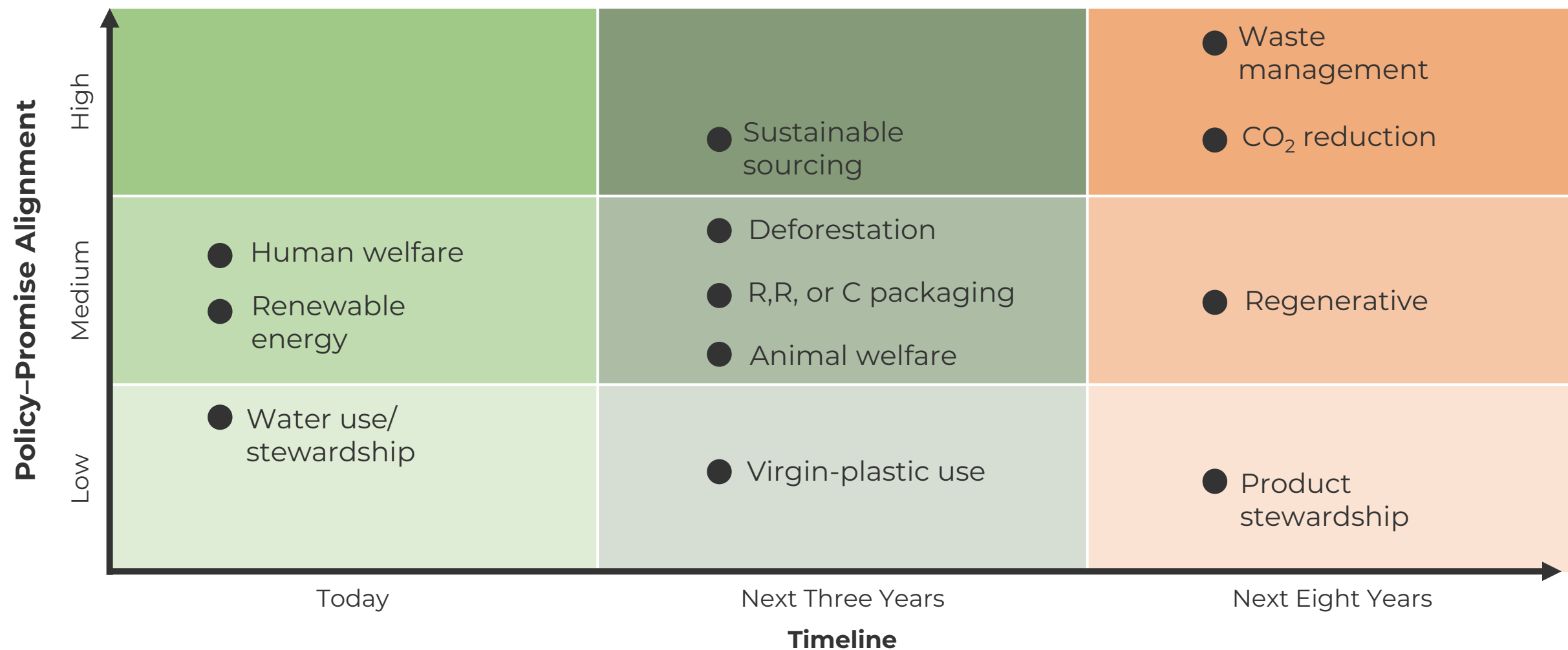
Nations and states link policy to carbon neutrality goals

Human welfare ties multiple labeling strategies together

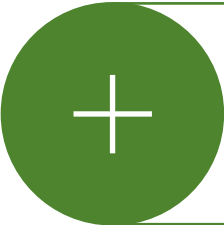

Landuse policy centers on deforestation and sustainable practices

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Supply chain strategic path



Alignment – sure bets for technology adoption

	Renewable Energy	Renewables are available and governments are likely to drive continued adoption especially as the cost of oil remains high
	Residual opportunities expand	Managing waste is creating significant long-term opportunities as infrastructure and government programs establish improved incentivization

Residuals align with multiple indicators of change



Packaging solutions from seaweed

Weaker short-term contributor

Strong mid-term contributor

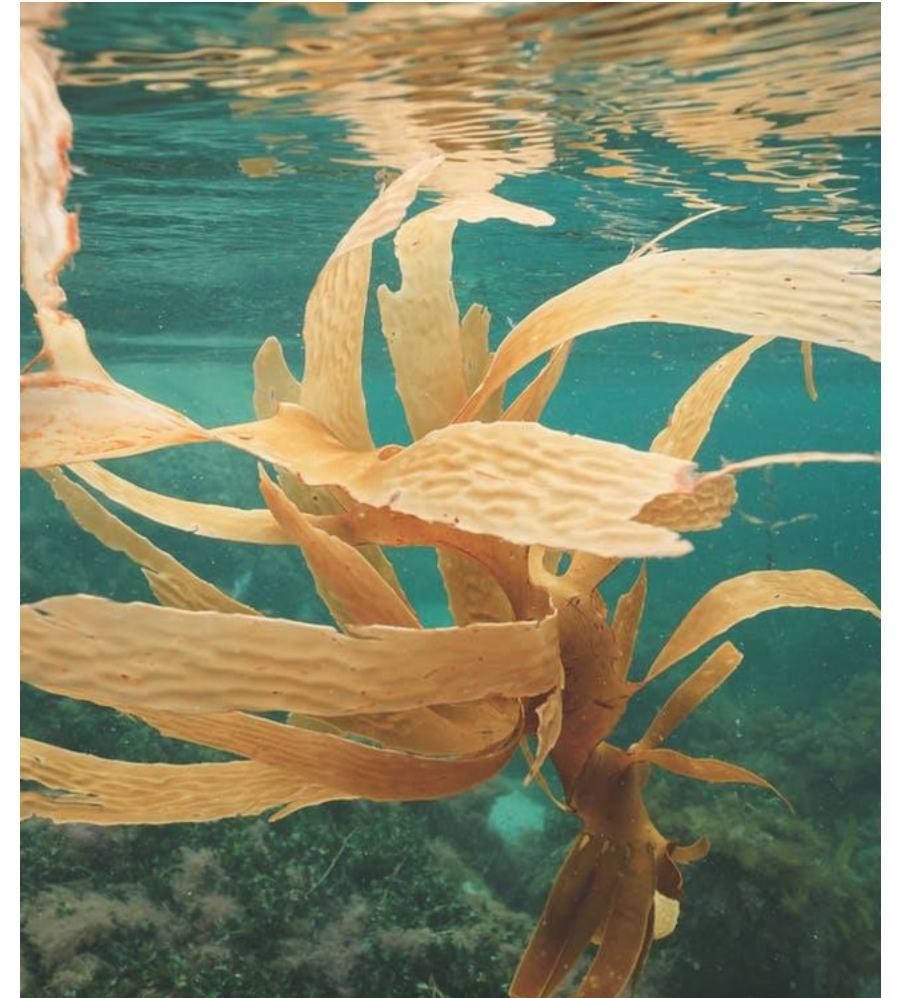
- R,R,C packaging
- Sustainable sourcing
- Virgin plastic use

Growth long-term opportunity

- Waste management
- CO2 reduction



Notpla recently raised USD 11 million and is likely to reach market in the next few years providing companies with a compostable alternative plastic container and coating.



Agenda

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PESTLE of change

Analysis of policy and promise alignment

Key takeaways

Key Takeaways

1

Interacting drivers create paradoxes that challenge decision making

2

Supply chain players and end position players must align on promises to accelerate with shifting policy

3

Where policy and promises align there are focal points of change to center your sustainability strategy

Thank You

A link to the webinar recording will be emailed within 24–48 hours.

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[Unmet Material Needs for Critical Technologies](#)

August 23rd

[Oil and Gas Scenarios: Surviving the Energy Transition](#)

September 20th

[Systematizing Sustainability in Innovation Planning](#)