

Building Regenerative Economies in Practice from CIRCULAR REPUBLIC FESTIVAL 2025

Key Learnings



Carbon Removal Required for Centuries

Reaching net zero by 2050 is insufficient; the economy must actively remove CO2 from the atmosphere until 2500 to prevent catastrophic sea level rise. This creates a centuries-long market for carbon sequestration technologies and fundamentally changes material decisions: instead of asking "should I recycle this?", companies must ask "should I bury this permanently or reuse it?" Carbon removal becomes a core business requirement, not an optional sustainability add-on.

Financial Rules Control Transition Speed

Circular companies struggle to access cheap capital because financial markets don't price the risk management benefits of circularity into lending decisions. The solution lies with central bank regulations incorporating physical resource stress tests and "transition metal requirements" into capital requirements, similar to current financial stress tests. This regulatory pathway offers faster results than traditional policy advocacy for accelerating circular economy adoption.

Technology Ambition Determines Circularity Impact

Current recycling technologies only reduce some price volatility during supply shocks but cannot solve fundamental supply security problems. Companies need breakthrough technologies like precision fermentation for proteins rather than incremental improvements in traditional recycling. The gap between circularity goals and current technical capabilities requires entirely new approaches rather than scaling existing solutions.

Bioeconomy Enables Geographic Distribution

Unlike concentrated mineral supply chains vulnerable to single points of failure, bioeconomy technologies have neutral economies of scale due to biomass transportation constraints. This creates naturally distributed production networks that are inherently more resilient to floods and natural disasters. Strategic advantage goes to companies building bioeconomy platforms rather than trying to secure concentrated supply chains through traditional circular approaches.

Listen to the full episode here:

<https://circularity.fm/building-regenerative-economies-in-practice/>