

RETHINKING WOOD?

DEVELOPMENT STRATEGIES IN THE BIOECONOMY ERA

THE CASE OF THE WOOD-BASED SECTOR

IN POLAND

Marek Wieruszewski, Łukasz Sarniak, Leszek Wanat

Poznań University of Life Sciences, Poland

Background & The Paradigm Shift

- **New Reality:** Massive sector transformation driven by economic uncertainty & climate change.
- **The Circular Bioeconomy:** Changing how wood is managed and used.
- **The Paradigm Shift:**
 - *Old view:* Timber as a basic, linear raw material.
 - *New view:* Wood as a **strategic bio-asset** securing supply chains.

Research Focus

Three Practical Problems:

1. Circular Economy (CE) application in supply chains.
2. Barriers to optimal wood biomass use.
3. Real eco-innovation vs. corporate greenwashing.

Methodology

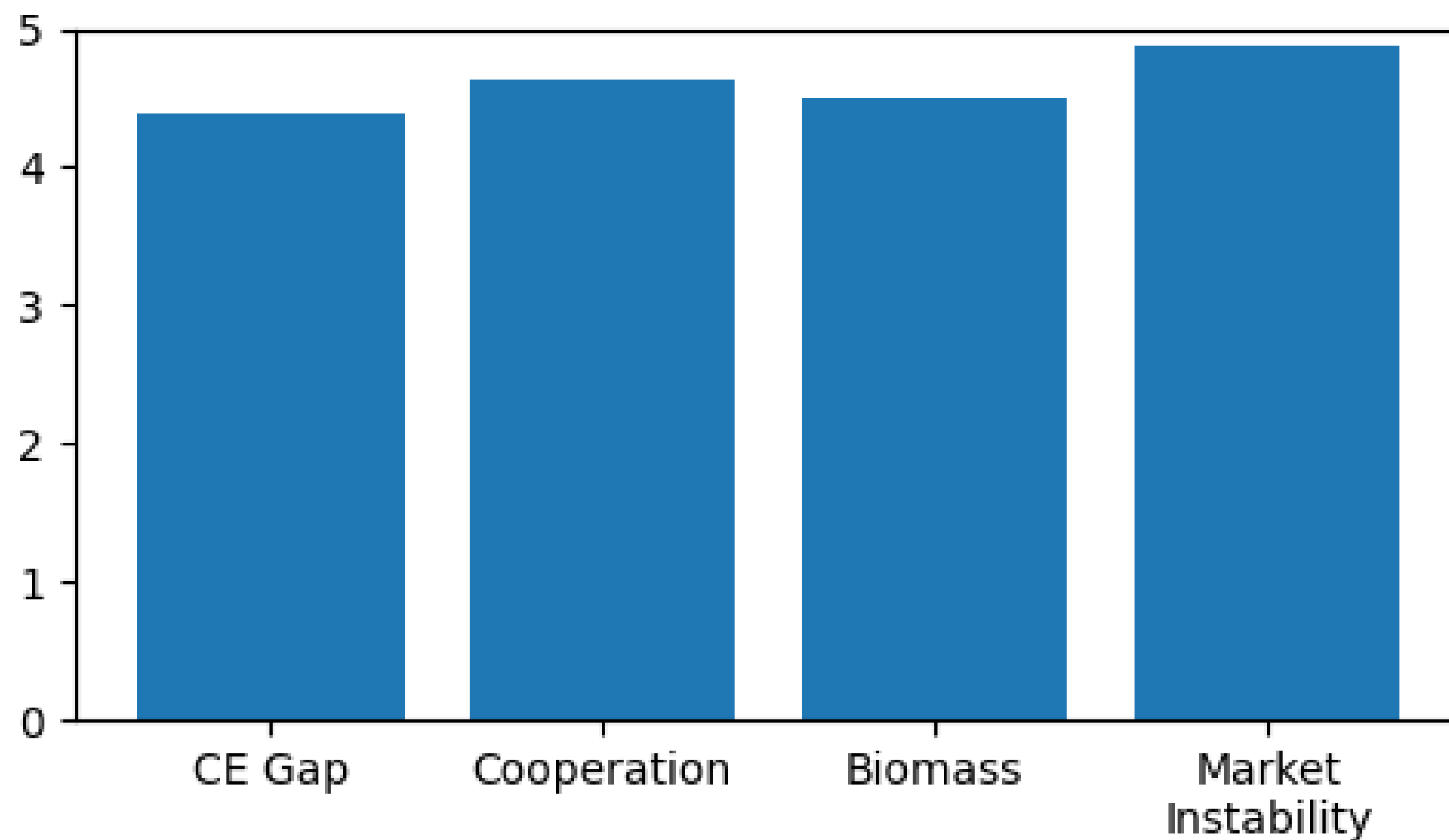
Individual In-Depth Interviews (IDI)

- **Sample (N=50 Experts):**
 - 25 Wood Industry Managers (sawmill & furniture).
 - 25 Forestry Professionals (timber trade).
- *Data coded into a quantitative matrix (1-5 scale).*

Initial Results – The Implementation Gap

- **Theory vs. Practice:** Massive gap in Circular Economy implementation.
 - *Implementation Gap Score: 4.38 / 5*
- **The Solution:** Strong consensus on the need for closer domestic industrial cooperation.
 - *Cooperation Priority Score: 4.64 / 5*

Let's Discuss the Results



- Implementation gap: 4.38
- Industrial cooperation: 4.64
- Biomass classification concern: 4.50
- Forestry subgroup: 4.72
- Market instability (industry): 4.88

Source: Own elaboration.

‘Rethinking Wood: Stakeholder Adaptive Constraints and Perception Gaps in the Bioeconomy Era’

Illustrating Findings for Primary Wood-Based Market (N=50) in Poland

■ (A) Forestry Professionals
■ (B) Wood Industry Managers

Low CE Implementation Effectiveness
PB1: Poor Execution of Circular Bioeconomy

High Domestic Cooperation Priority
PB1: Favour Industry > Profit

High Resource Degradation Risk
PB2: Unclear Classification & Wasting Quality Wood

Low Market Mechanism Transparency
PB2: Frustration with Rules & Instability

Unstable Pricing Environment
PB2: Extreme Price Volatility

High Greenwashing Perception
PB3: Image-Driven & Tokenistic Eco-Innovation

High Informal Networking Dependence
PB3: Personal Relations > Tenders & Public Data

PROBLEM & QUESTIONS OVERVIEW

Main problem:
DIVERGENCE IN ADAPTIVE STRATEGIES
Research variables for the simulated questions:

- PB1 (CE Integration):**
- Gap between theory and execution
 - Priority shift to domestic industry
- PB2 (Biomass Barriers):**
- Confusion over rules wasting quality wood
 - Purchasing rules & prices create chaos
- PB3 (Greenwashing Risk):**
- Environment policies are fluid and image-focused
 - Personal connections are crucial

LEGEND

- N=50 Total
Group 1:
■ Forestry Professionals (Foresters, n=25)
■ Group 2: Wood Industry Managers (Sawmill & Furniture, n=25)
⚖ Level of perceived constraint

The „Spider Web” Model (Stakeholder Perceptions)

Main Finding: A highly fragmented value chain with structural conflicts.

- **Common Ground:** Both groups rely on informal networking and see poor CE execution.
- **Diverging Constraints:**
 - **Forestry (Green Area):** Major fear of resource degradation (unclear rules wasting quality timber) → *Score: 4.72*
 - **Industry (Blue Area):** Paralysed by lack of market transparency & extreme price volatility → *Score: 4.88*

Market Navigation & Greenwashing

- **The Greenwashing Reality:**
 - 80% of respondents view current environmental strategies as PR and image-building.
- **The Survival Tactic (Informal Networking):**
 - 94% of experts rely on personal relationships over official tenders/public data.
 - *(Agreed by 92% of foresters and 96% of industry managers).*
- **Conclusion:** In times of crisis, market players rely on who they know.

Conclusions – Rethinking Wood

- **Systemic Challenge:** The transition is about organisation, institutions, and markets – not just technology.
- **Urgent Needs to Break the Monopoly:**
 - Transparent, data-driven resource classification.
 - Genuine inter-sectoral cooperation.
 - Robust, trustworthy chain-of-custody systems.
- **Core Message:** Rethink Wood. Treat timber as a multifaceted bio-asset to build authentic industrial symbiosis.

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Thank you for your attention! 😊

Ďakujem za pozornosť! 😊

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Poznań University of Life Sciences, Poland