

One vision **Global competitiveness**

Reshaping The Canadian Forest Innovation System

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Origins of Canada's Forest Innovation Agenda

- **CFIC (2006)**
 - **White Papers on Transformative Technologies**
 - Wood Products, Bioenergy, Biochemicals, Pulp & Paper
 - Workshops gathered input from Industry, Government & Academics
 - Identified technologies and products that could transform the Canadian Forest Sector

Recommendation

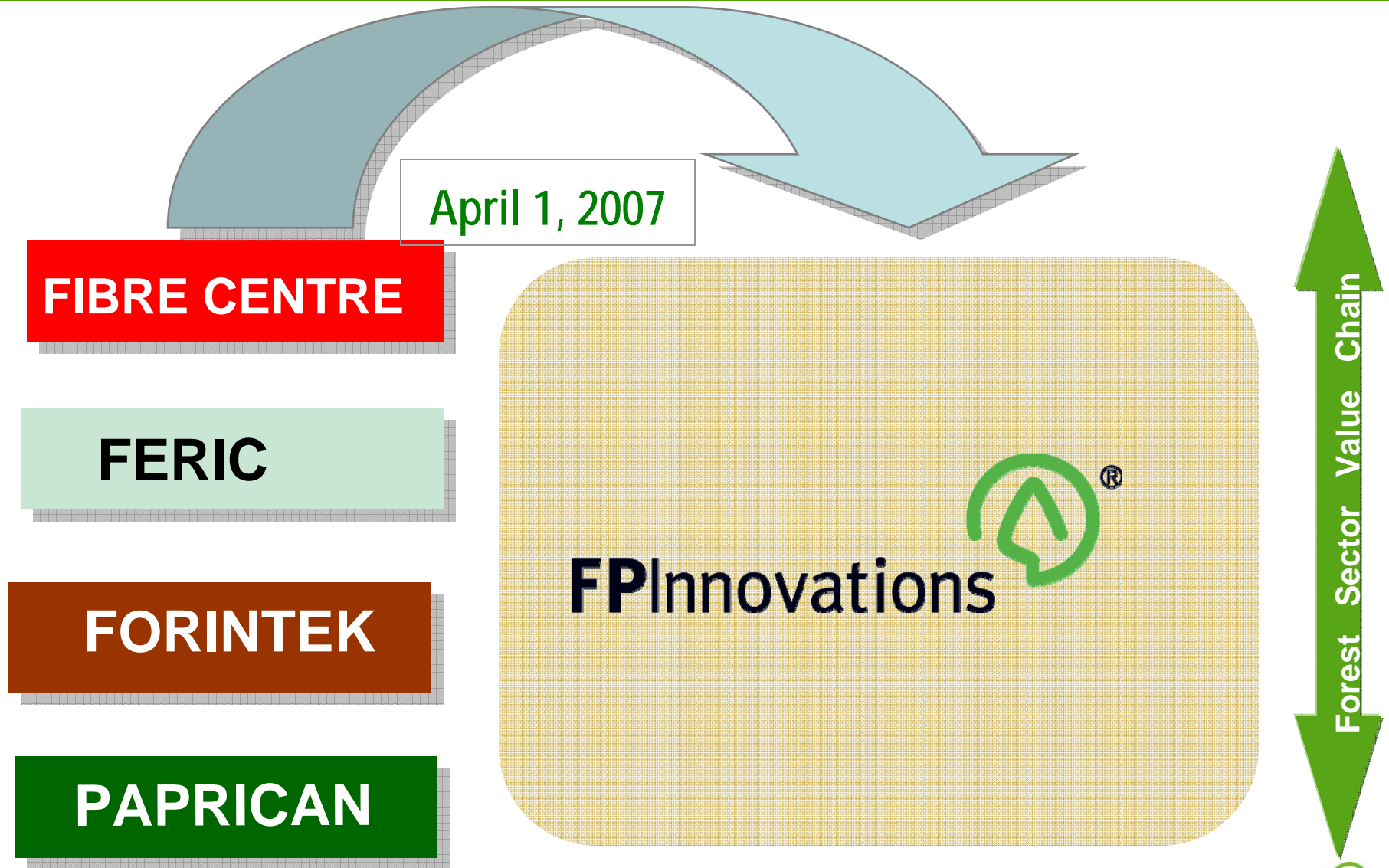
- **The Forest Sector institutes should be merged.**

- **FPInnovations (2007)**
 - **Devised the transformative technologies research program with Industry / Government partners using the white papers as the basis**
 - **Funding from NRCan for this initiative**
 - **University research was an essential component of this plan**
 - New partnerships forged
 - New University partnerships proposed

What was wrong with the Forest Sector Innovation System?

- Fragmented
- Did not examine the whole Value Chain
- There was no overall Plan or Strategy
- Not focused on commercial solutions
- Technology Receptor Capacity was weak
- Did not take advantage of the academic infrastructure

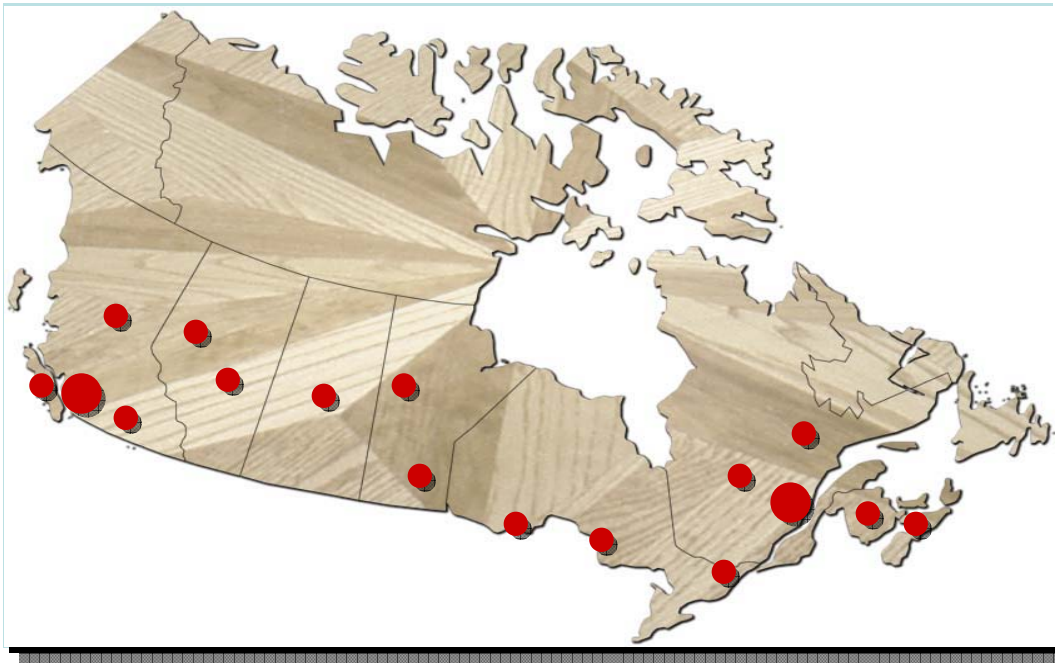
Addressing Fragmentation



The FPInnovations Partnership

Shared Priorities, Shared Risks,
Shared Benefits, and Shared Costs

- Industry – 370+ Companies
- Provincial Governments



- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Québec
- New Brunswick
- Nova Scotia
- Newfoundland & Labrador
- Yukon

- Federal Government

Value Chain Optimization

Think *market* before *product*



Market demanded attributes



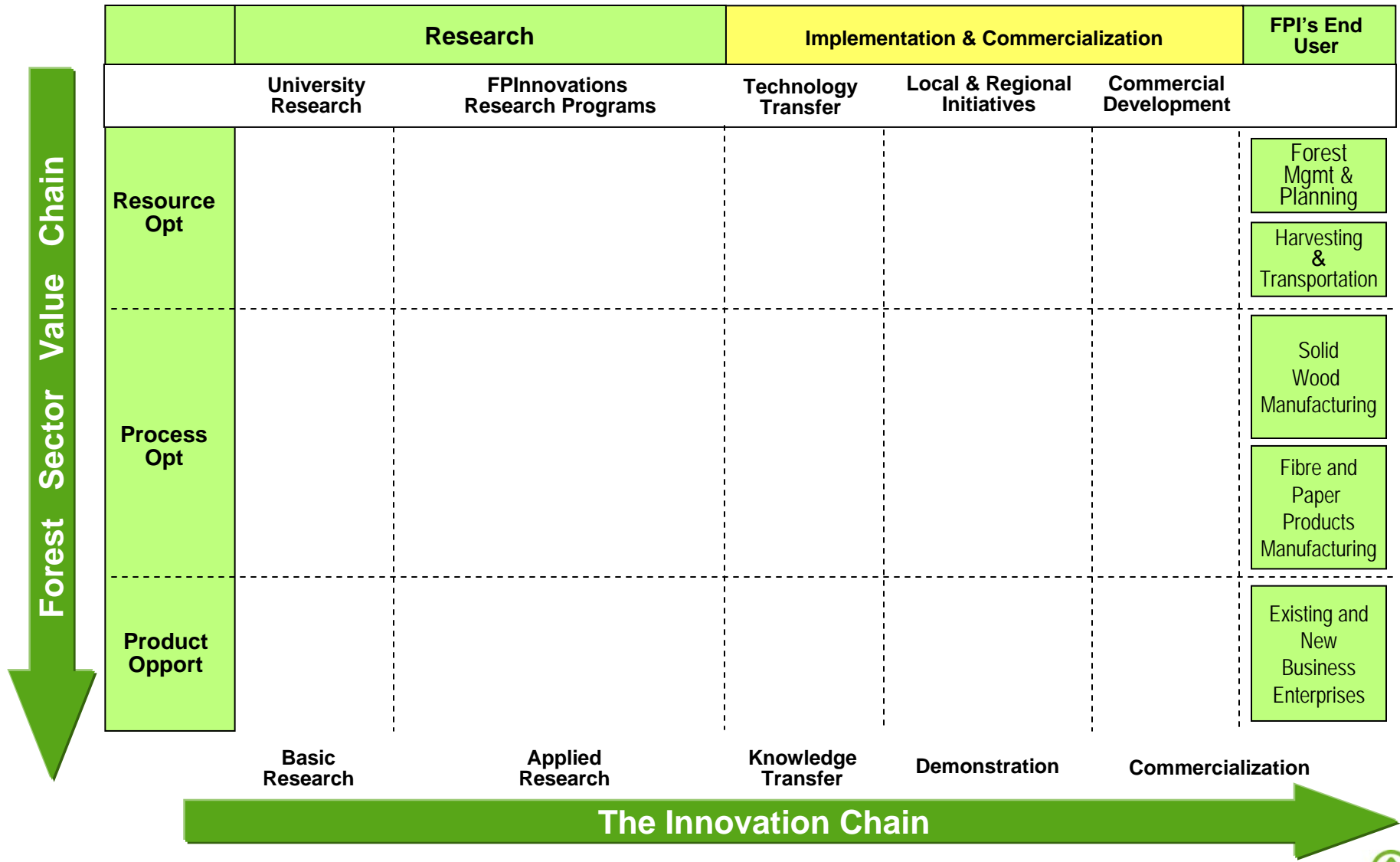
Processing



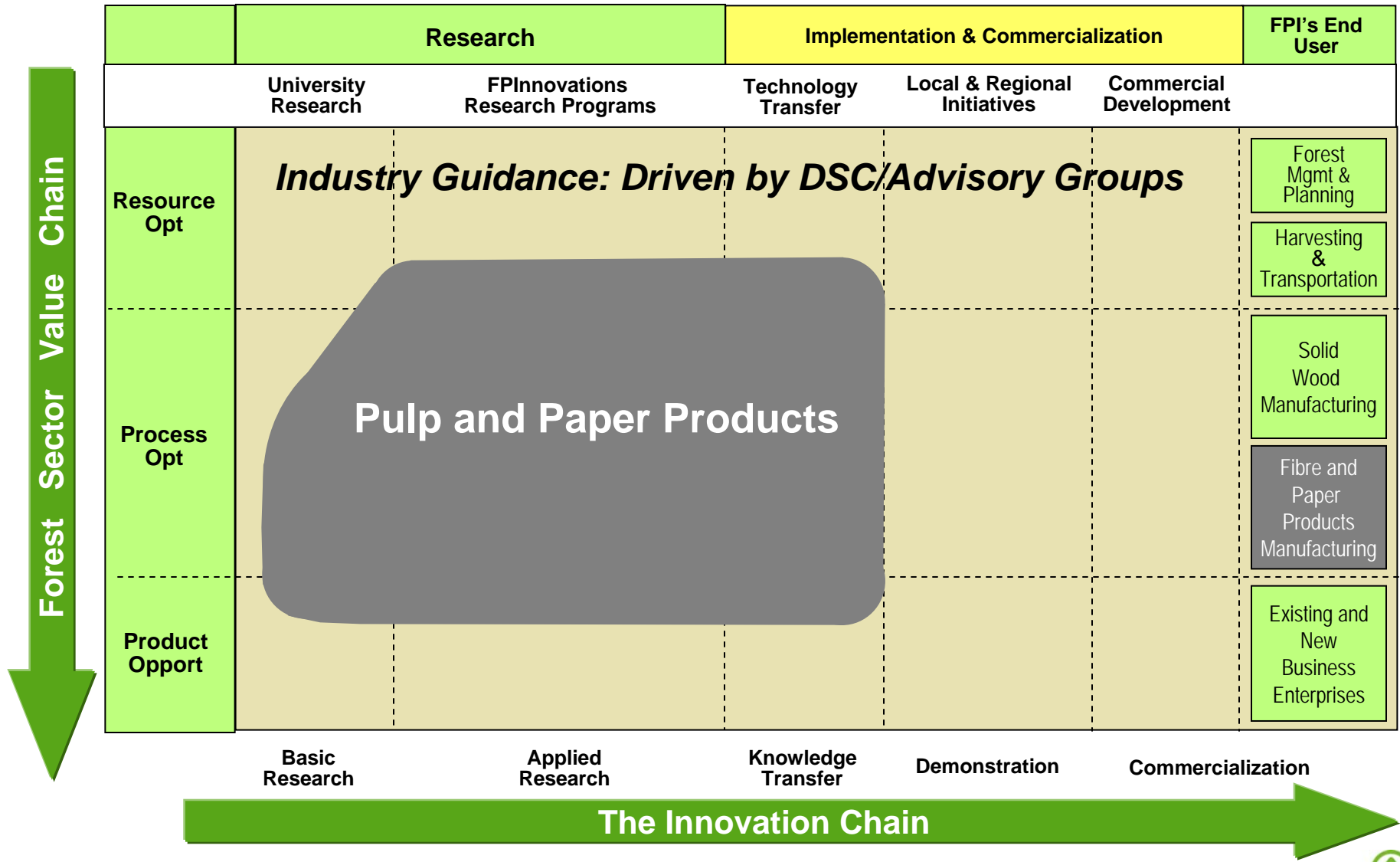
Raw material attributes

Think *market solutions*

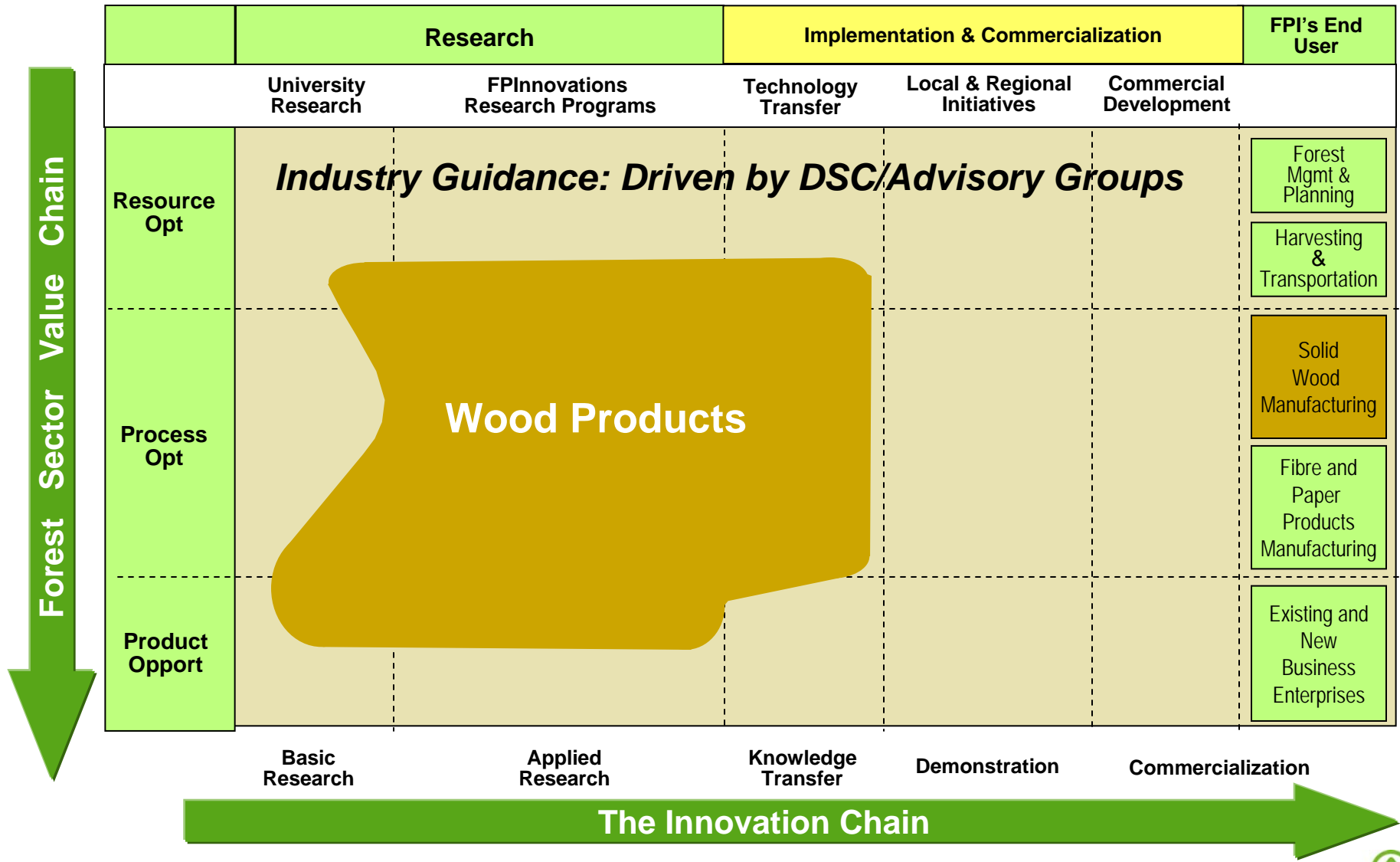
New FPInnovations Business Structure Framework



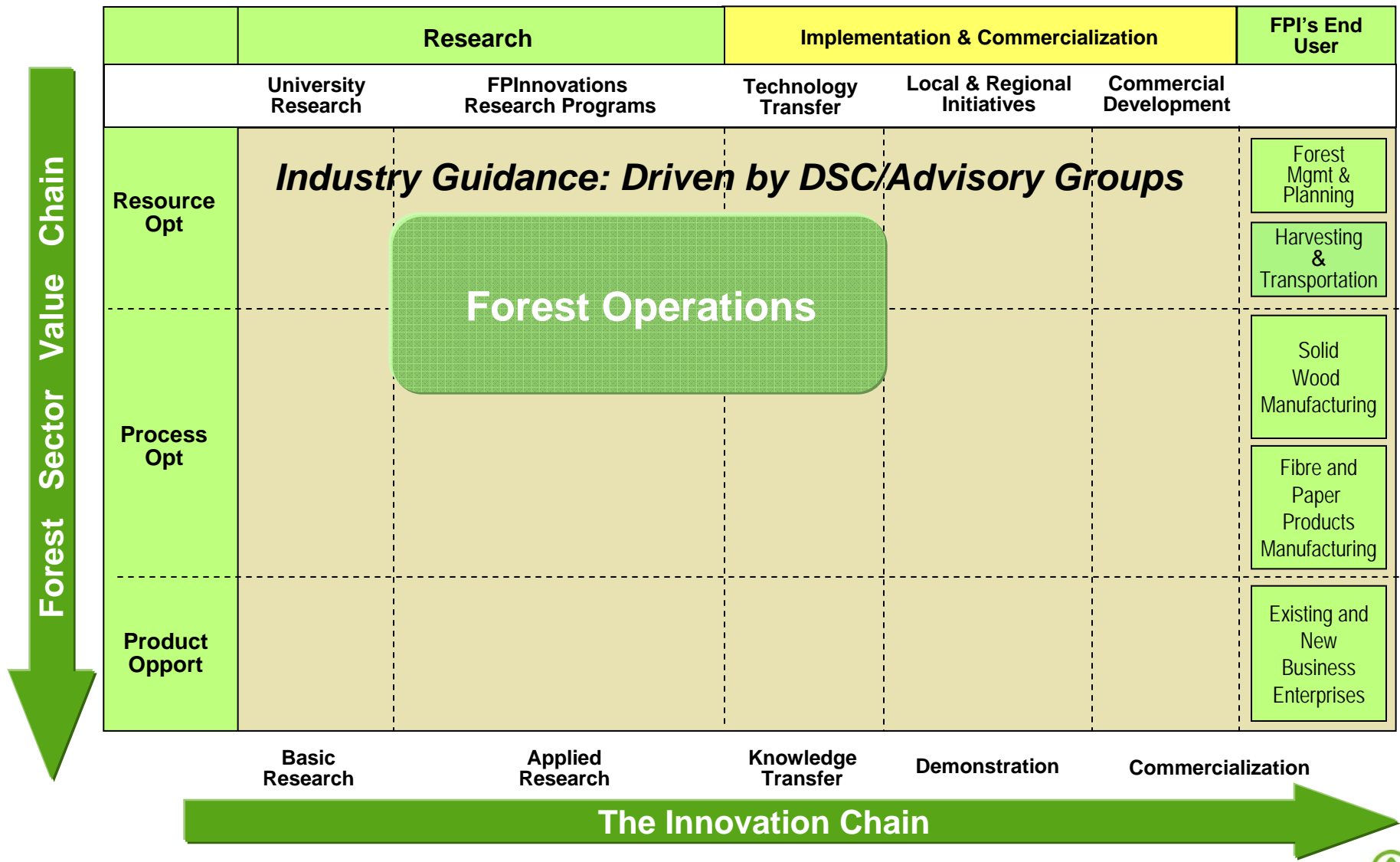
New FPInnovations Business Structure Framework



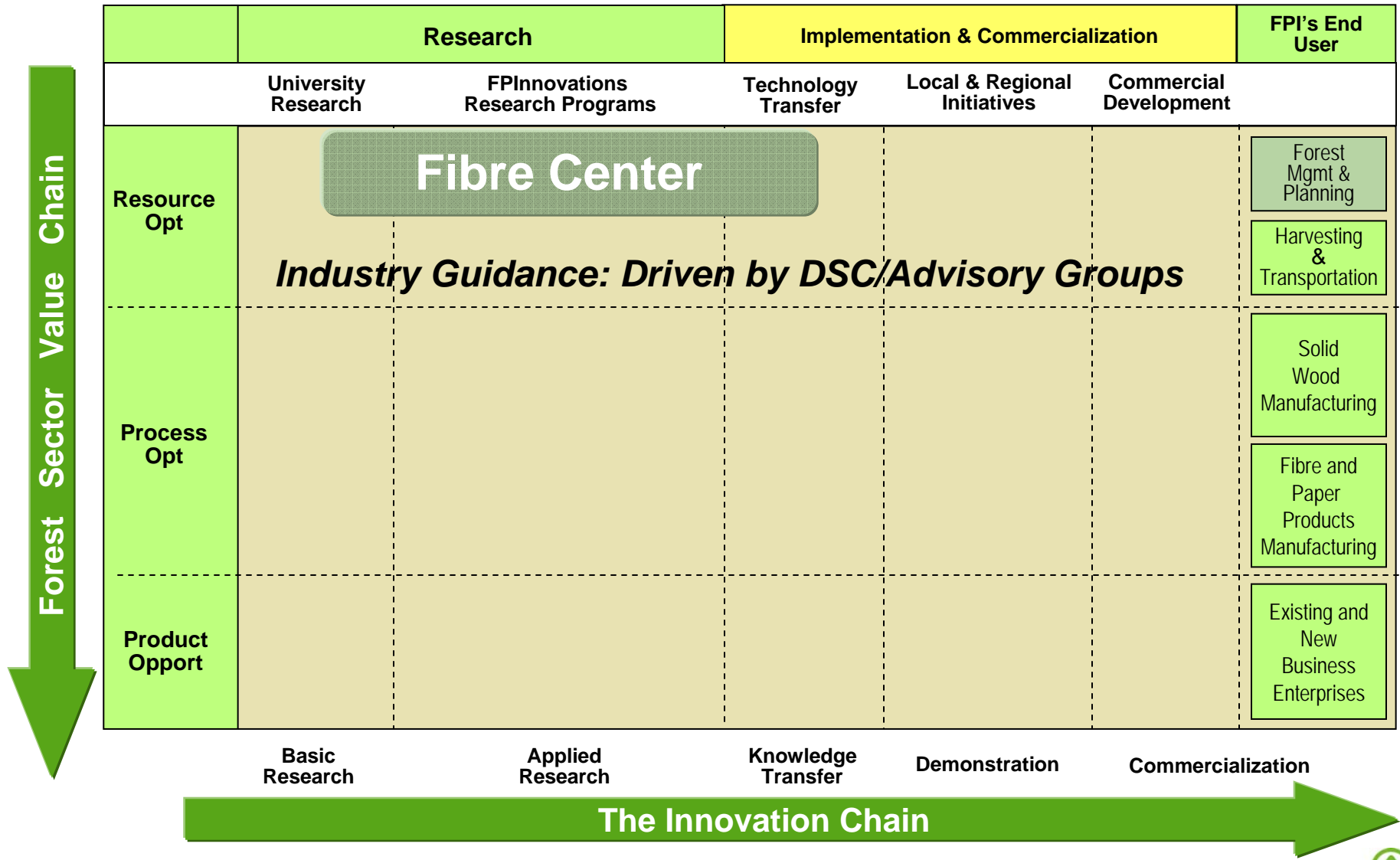
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Tomorrow's Forest Sector (2007)

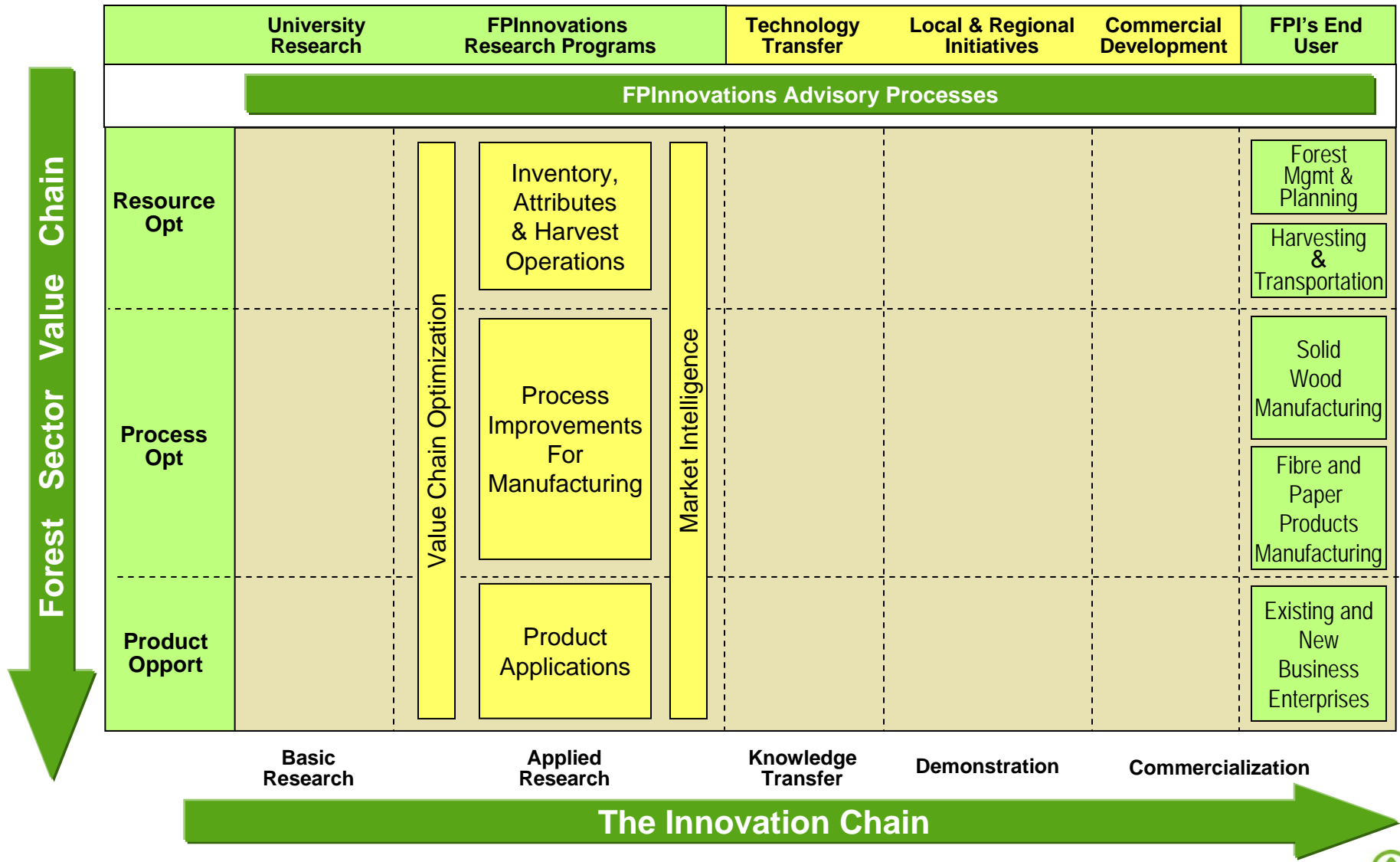
Integrated Value Chain Optimization

**Next Generation
Building and
Living Solutions**

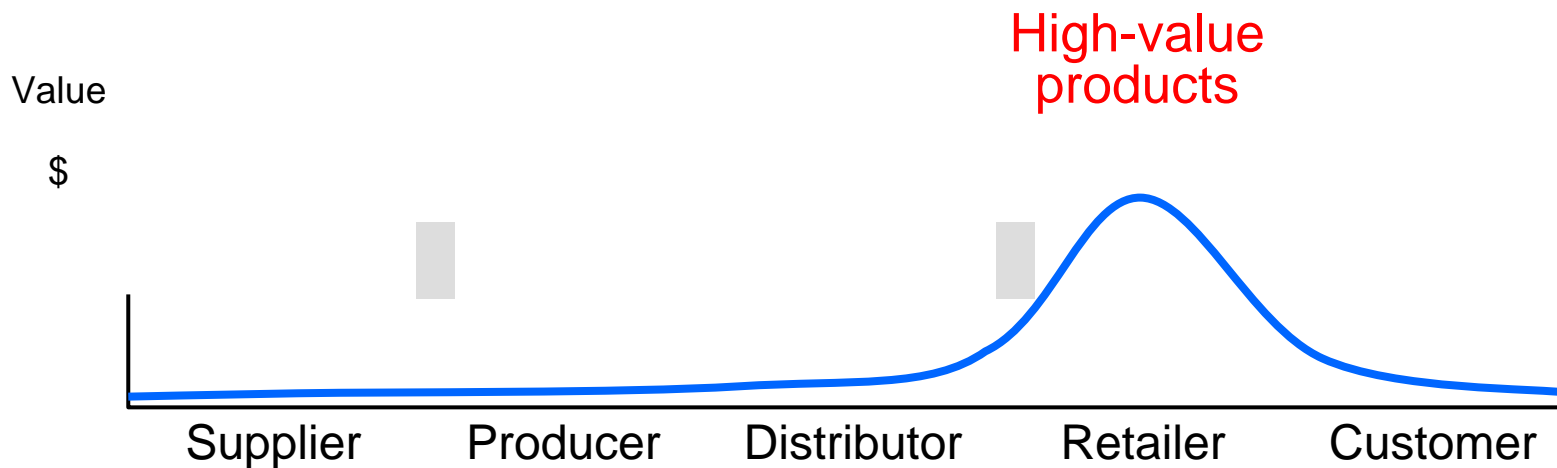
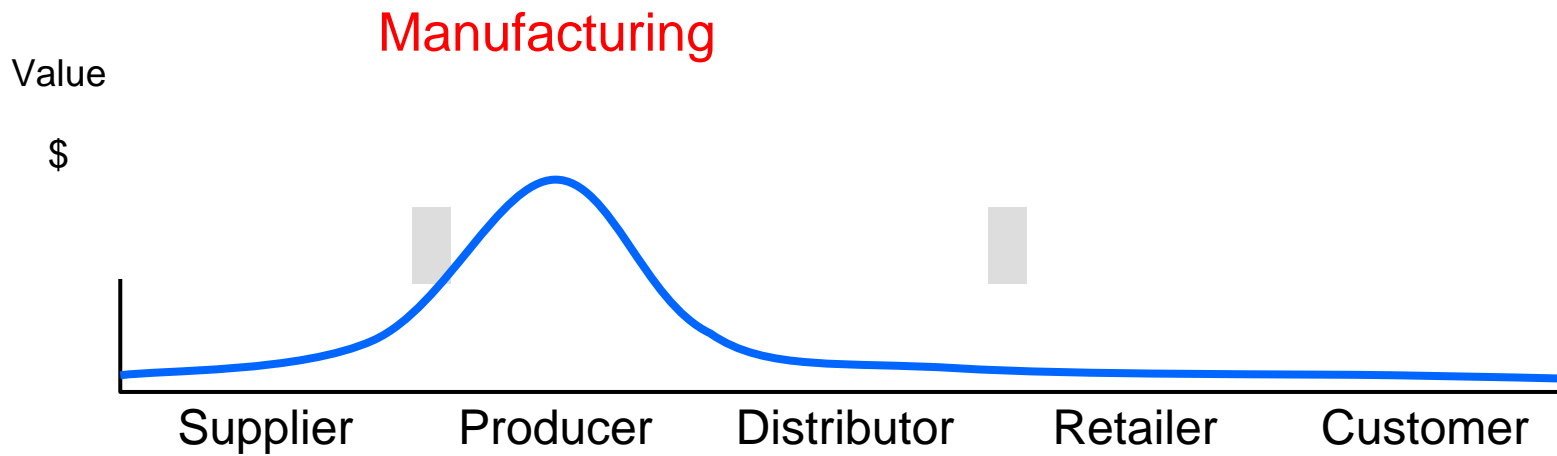
**Next Generation
Pulps & Papers**

**Energy,
Chemicals
and Novel
Bioproducts
from Forest
Biomass**

New FPInnovations Business Structure Framework

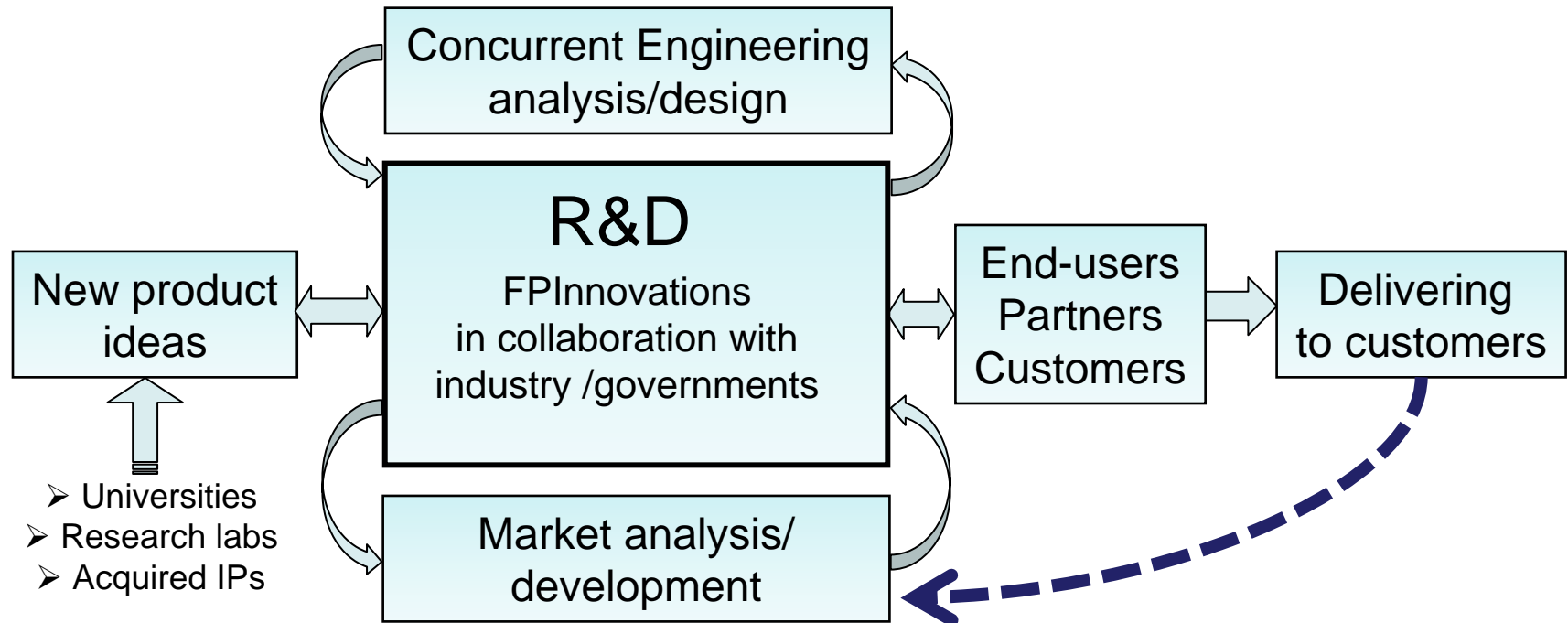


The Changing Value Proposition



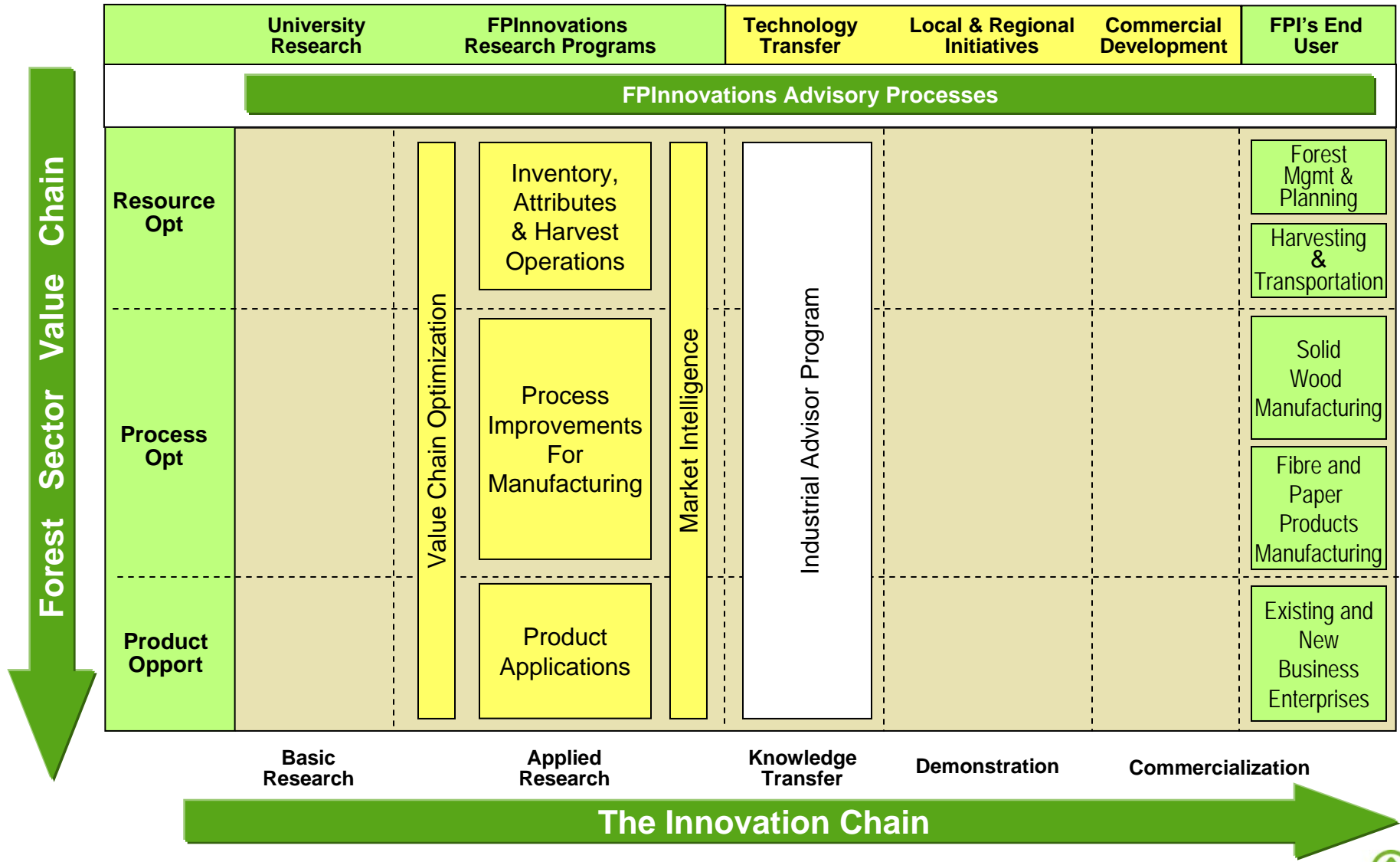
Source: RUBICON INTELLIGENCE UNIT

FPInnovations application of SRI Approach



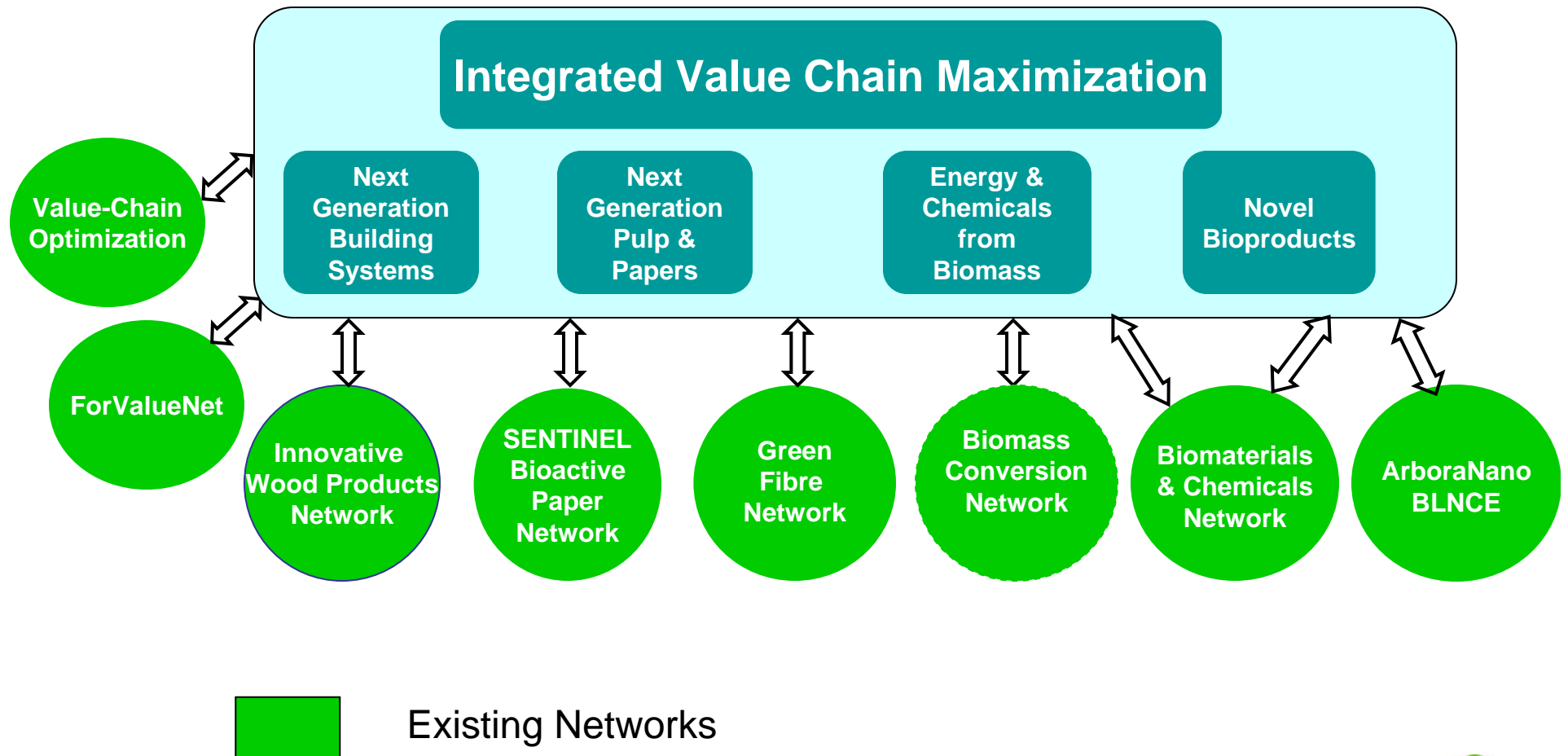
- Market input early in process
- Understand customer needs to develop the right new products
- Build partnerships to accelerate the delivery of new products
- Capital and production cost known and optimized earlier
- Alignment of key players

New FPInnovations Business Structure Framework

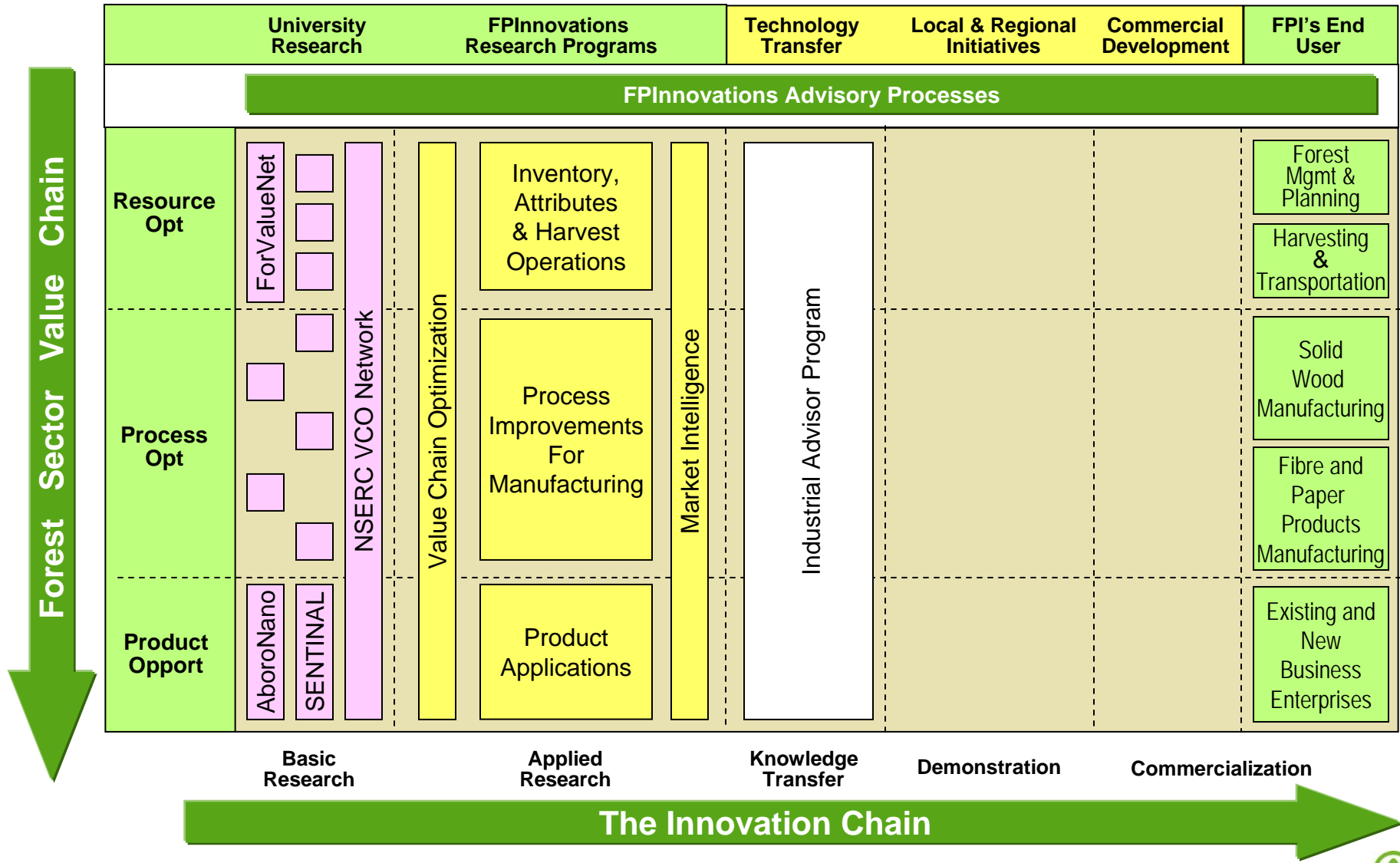


New Networks under the Initiative

FPInnovations' Flagship Innovation Program



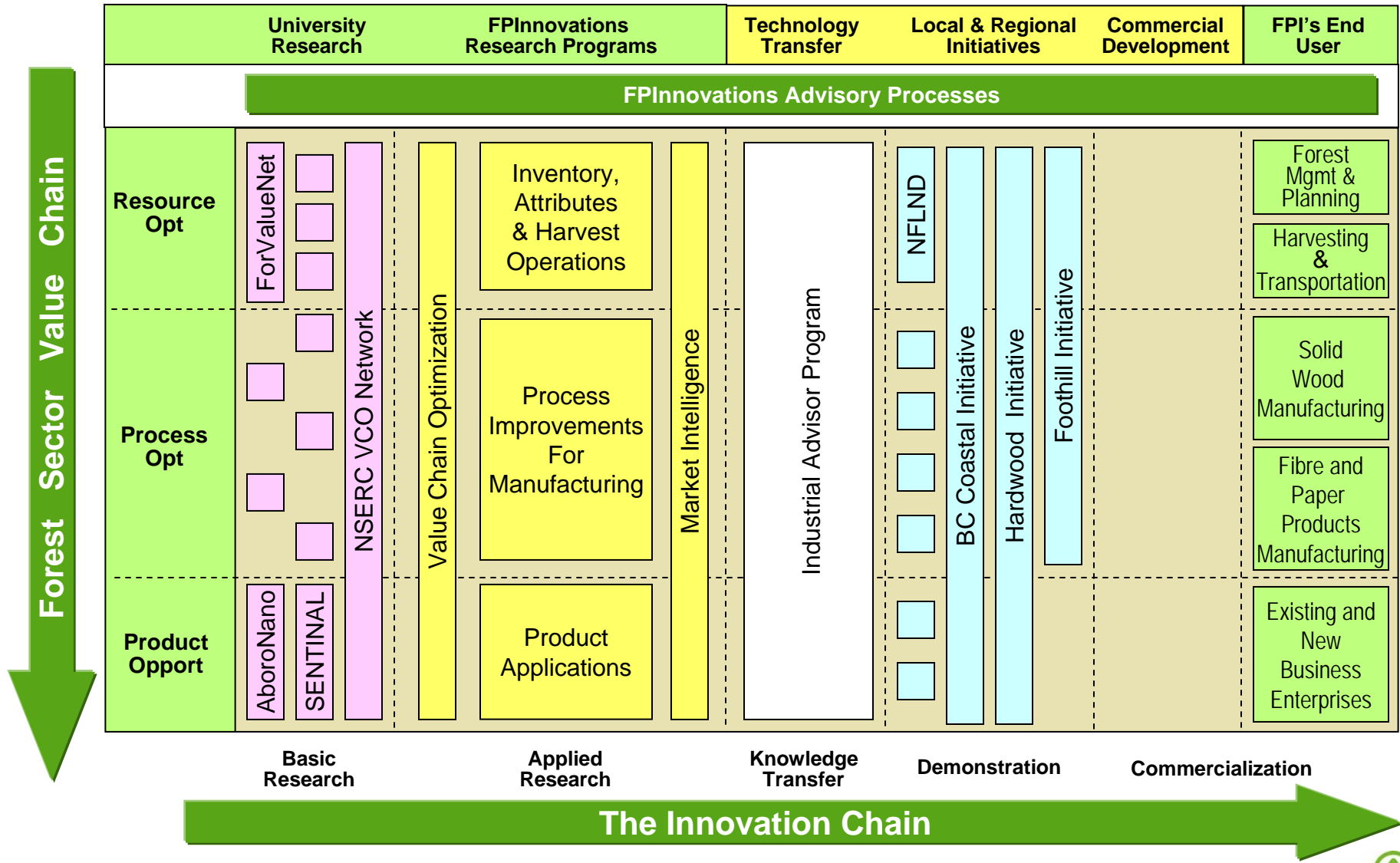
New FPInnovations Business Structure Framework



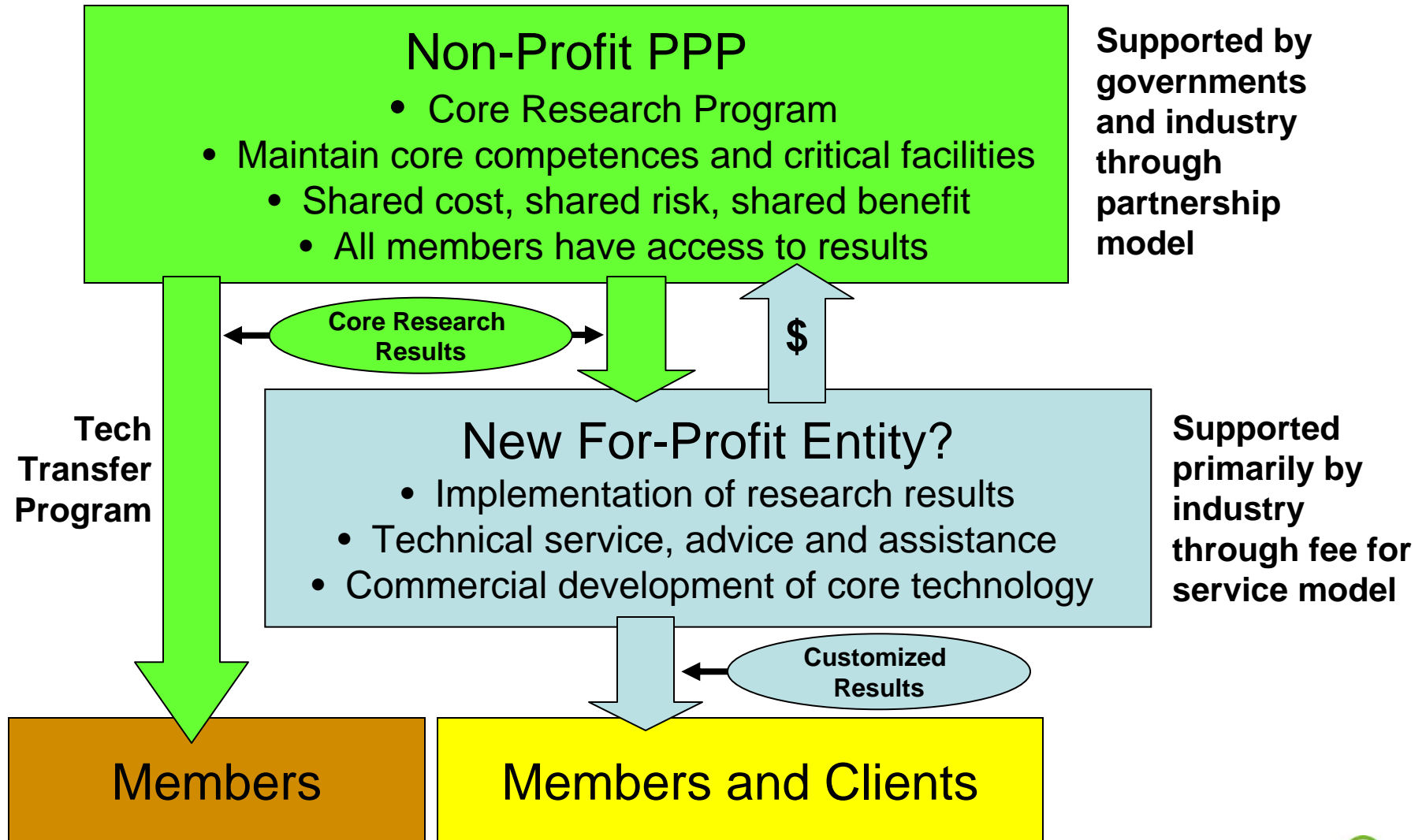
Provincial Government Investment

FPIinnovations has received strong Research Program support from the Provincial governments. Much of this support has been directed to efforts that address regional forest type issues

New FPInnovations Business Structure Framework



Speeding Commercialization: Basic Organization



Are The Changes Working?

Results from an Independent Evaluation of Program

Performance Objective	5-year Target	4-year Actual
Reduce Manufacturing Costs	Industry implements 8 technologies	Industry uptake of 15 major technologies
	\$300 Million in cost reductions realized	\$520 Million realized ⁽¹⁾

(1) Value realized in the first full year of industry operation after technology uptake



www.fpinnovations.ca