

Fostering innovation along the wood value chain in Canada

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InnovaWood & UNECE / FAO Seminar



Location: **Geneva, Switzerland**

Date: **April 22, 2013**

Creating FPInnovations



April 1, 2007

FIBRE CENTRE

FERIC

FORINTEK

PAPRICAN

FPInnovations



FPIInnovations: Canada's Forest Innovation Hub

- Unique Industry/Government Partnership
 - 80-year history
 - >200 members
- World-scale research institute
 - 550 specialized staff
 - Annual budget: \$90M
- A track record of developing and deploying innovations needed by the industry



Québec

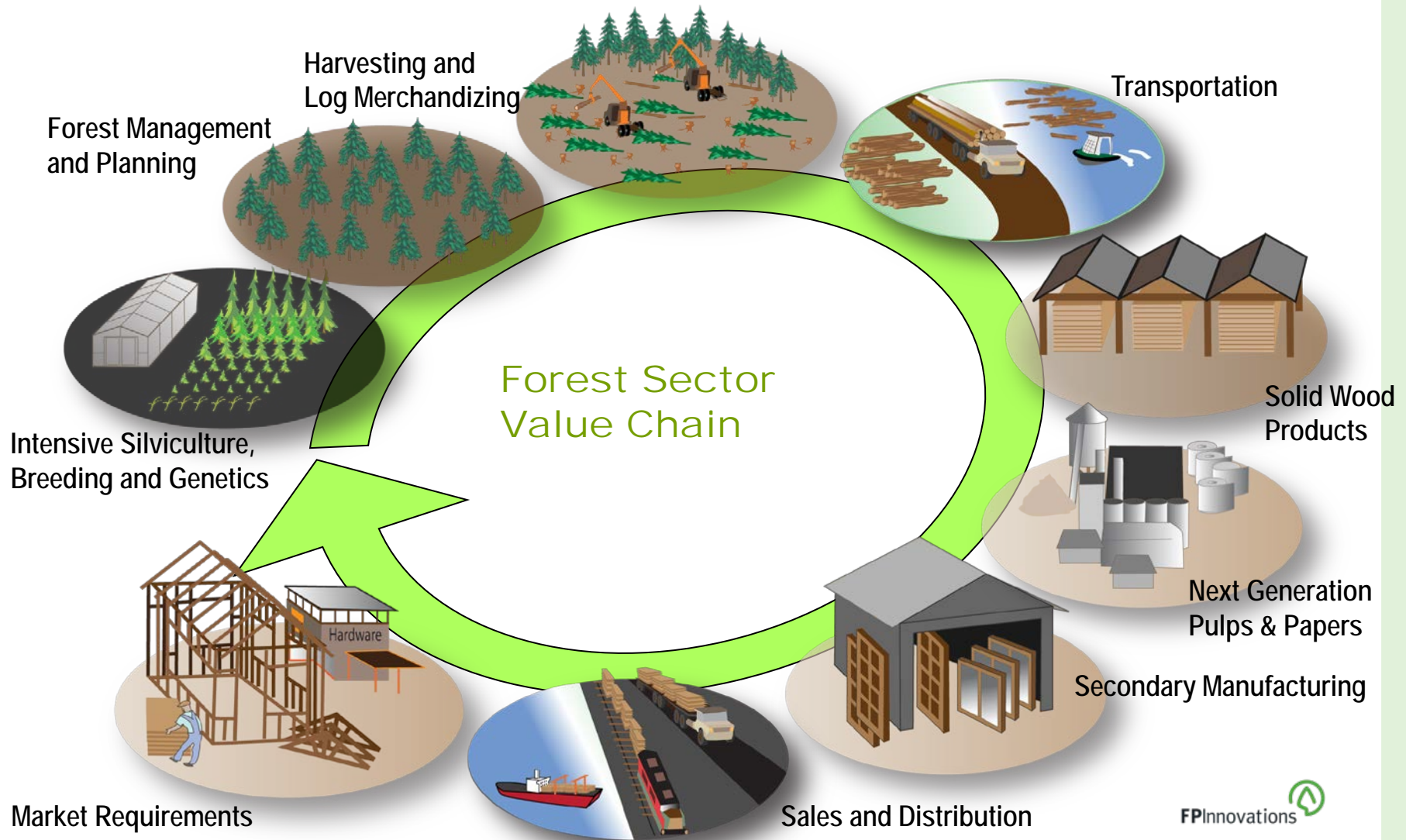


Pointe-Claire



Vancouver

Covering the Full Value Chain



A Common National Forest Sector Transformation Strategy

FPInnovations/FPAC/NRCan

Improving Productivity & Competitiveness

- More efficient and effective business processes

Diversifying Markets

- Expansion of product sales to new and emerging markets

Leveraging Environmental Performance & Attributes

- Leverage environmental stewardship and unique environmental attributes of forest products

Developing the Next Generation Products

- Developing new fibre based products

National Forest Sector Transformation Strategy

FPAC

www.fpac.ca

■ Vision 2020

Goals:

- “Generate an additional \$20 billion in economic activity from new innovations and growing markets.
- Deliver a further 35% improvement in sector’s environmental footprint.
- Renew the workforce with at least 60,000 new recruits including women, Aboriginals and immigrants.”

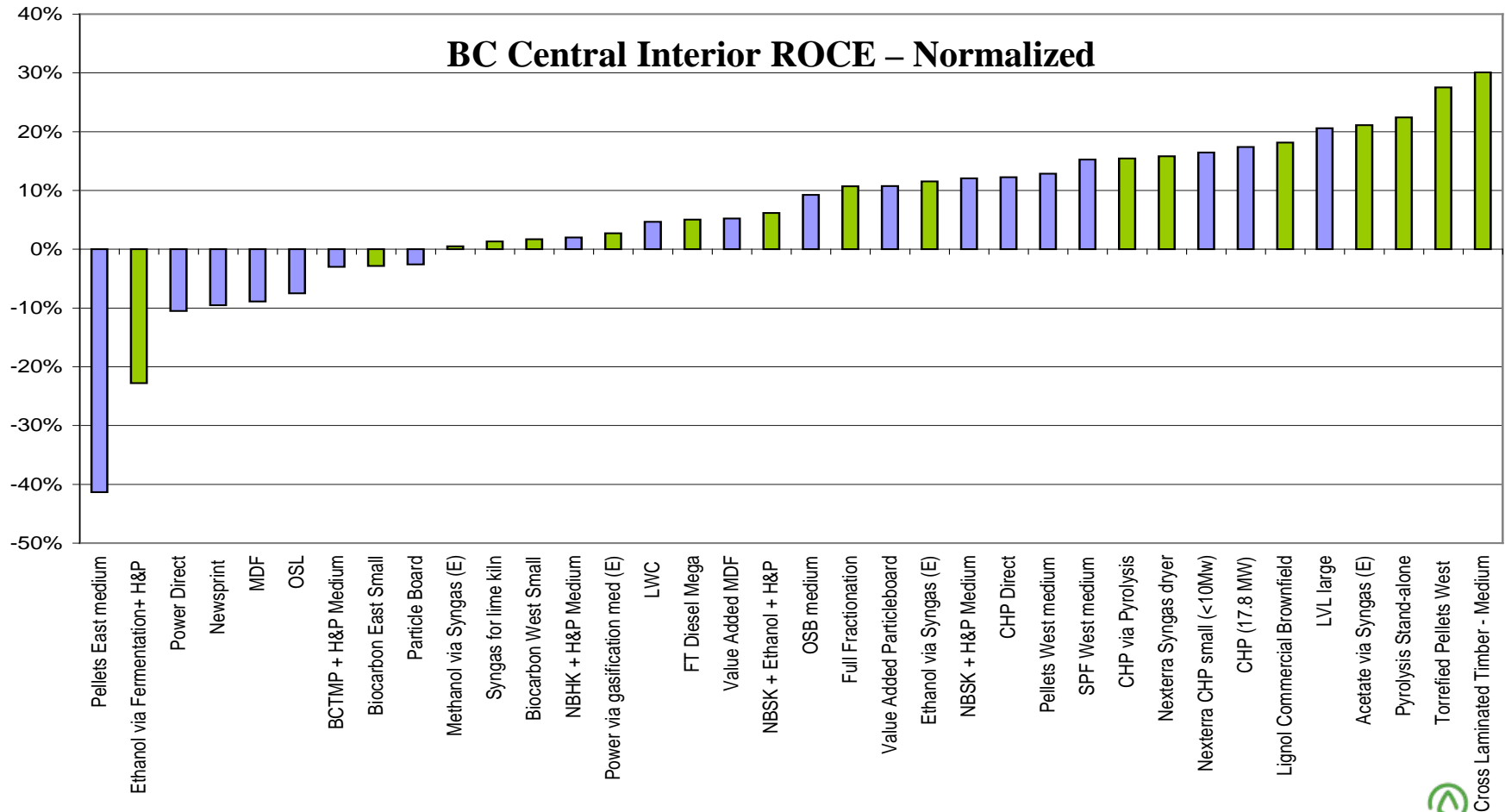
■ Bio-pathways / Value Pathways in Construction

- Ranking of ≈40 “commodity” pathways for bio-materials (solid and engineered wood/composites), bio-energy and bio-chemicals
- Economic, social and environmental measures
- A look beyond commodities with a construction focus

National Forest Sector Transformation Strategy

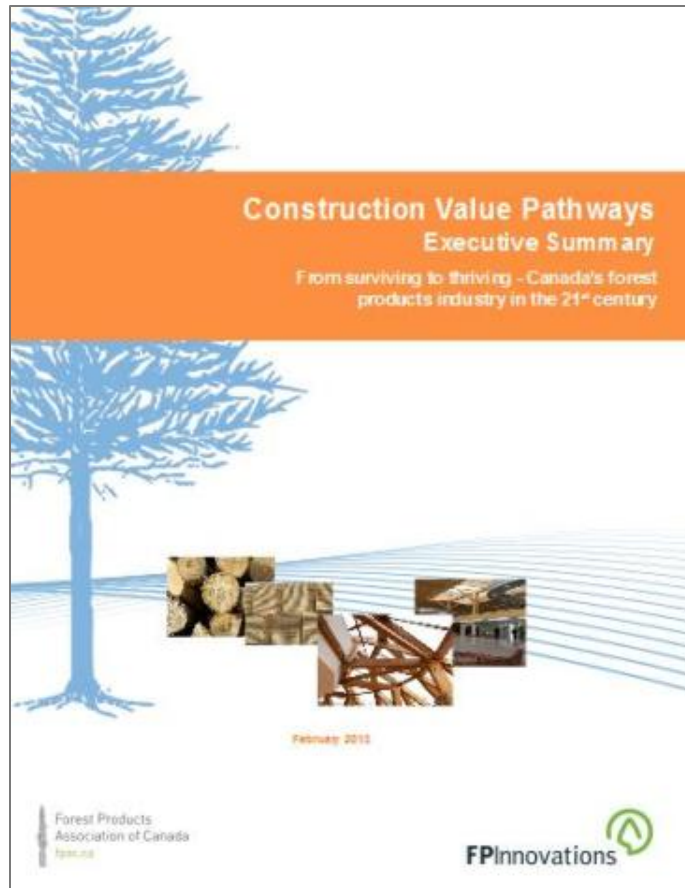
FPAC

BC Central Interior ROCE – Normalized



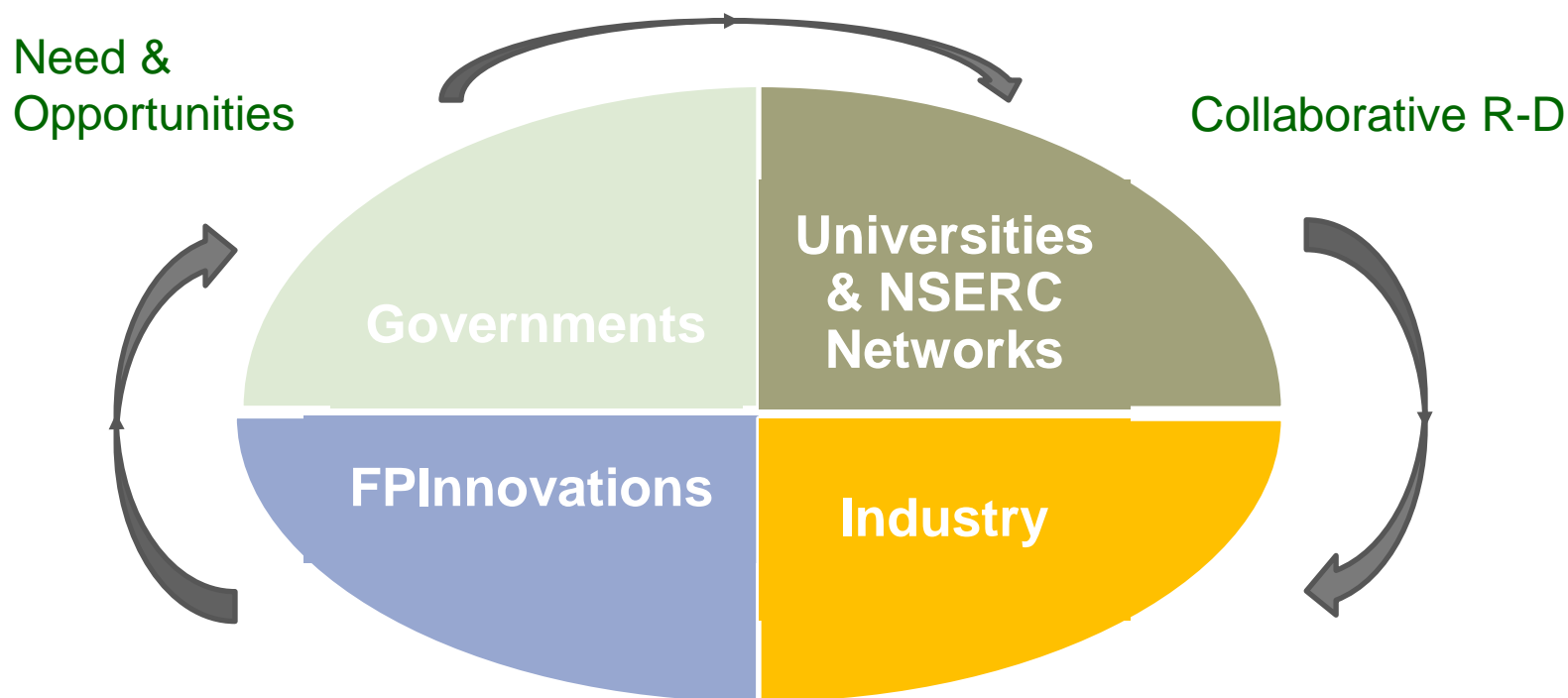
National Forest Sector Transformation Strategy

FPAC



- Review of existing innovative construction products
- Survey of specifiers on construction trends
- Developed list of 'best bets' for further development
- A look at best practices for implementation

National Forest Sector Transformation Strategy



INNOVATION = Implementation
Deployment Commercialization + Knowledge & Technologies

Natural Sciences & Engineering Research Council (NSERC) Forest Sector R&D Initiative



Laval

UBC
UNB
UQAT
UNBC
UQAM
Alberta
Toronto
Queen's
Lakehead



Laval

UBC
UQAM
Montreal
Toronto
Queen's
Dalhousie
Lakehead
McMaster
Polytechnique
UNB
Alberta



Innovative Green Wood
Fibre Products Network

McGill

UBC
UNB
UQTR
Alberta
Toronto



Guelph

Concordia
Queen's
Toronto
UBC
Alberta
Waterloo



FPInnovations

Sherbrooke
Alberta

McGill

UQTR
UQAT

Laval

Alberta

Queens

UBC

Waterloo

INRS



UNB

UBC
UQAT
Toronto
Carleton
Laval
McGill
Ottawa
Ryerson
Waterloo
W. Ontario



McMaster

Polytechnique
Dalhousie
Toronto
Guelph
Alberta
McGill
UQAM
UQTR
UNB
UBC



UBC

McGill
Ottawa
Guelph
Toronto
Queen's
Saint Mary's
W. Ontario
Polytechnique

27 Universities

120 Professors

300 Graduate students



SRI—the Five Disciplines of Innovation

“Innovation is the creation and delivery of new customer value in the marketplace that also provides a sustainable return to the enterprise”



SRI—the Five Disciplines of Innovation

Disciplines of Innovation

Five Key Elements to Improve New Product Development

Work on what's important, not just what's interesting



SRI—the Five Disciplines of Innovation

Disciplines of Innovation

Five Key Elements to Improve New Product Development

You don't define value—your customers do!



**-customer value, then
-company, shareholder, employee,
and public values**

**Value Factor = Benefits / Costs
Value Propositions**



SRI—the Five Disciplines of Innovation

Value Propositions Provide Common Language

A common language and tools to quickly develop new customer/ product value

Important
Customer

NEEDS

APPROACH

BENEFITS per cost

COMPETITION

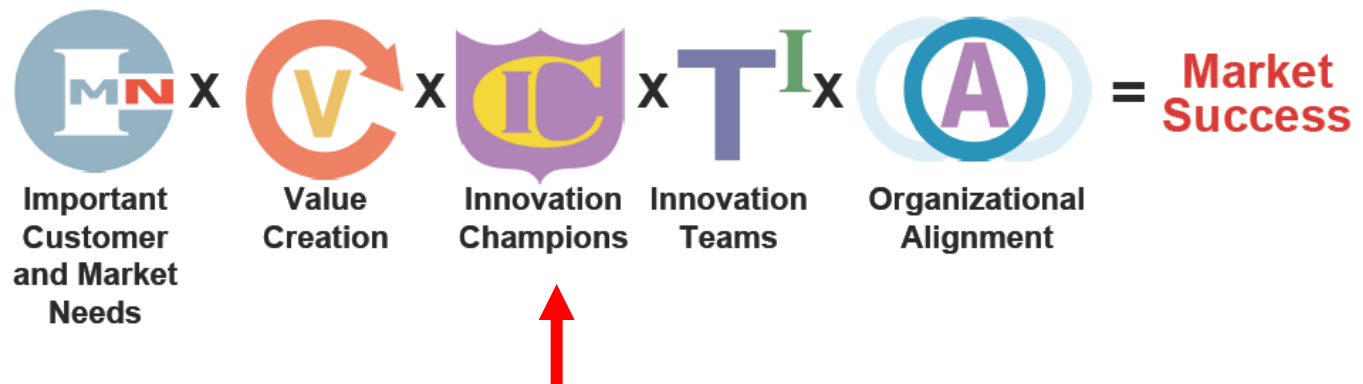


SRI—the Five Disciplines of Innovation

Disciplines of Innovation

Five Key Elements to Improve New Product Development

No Champion, no project, no exception!



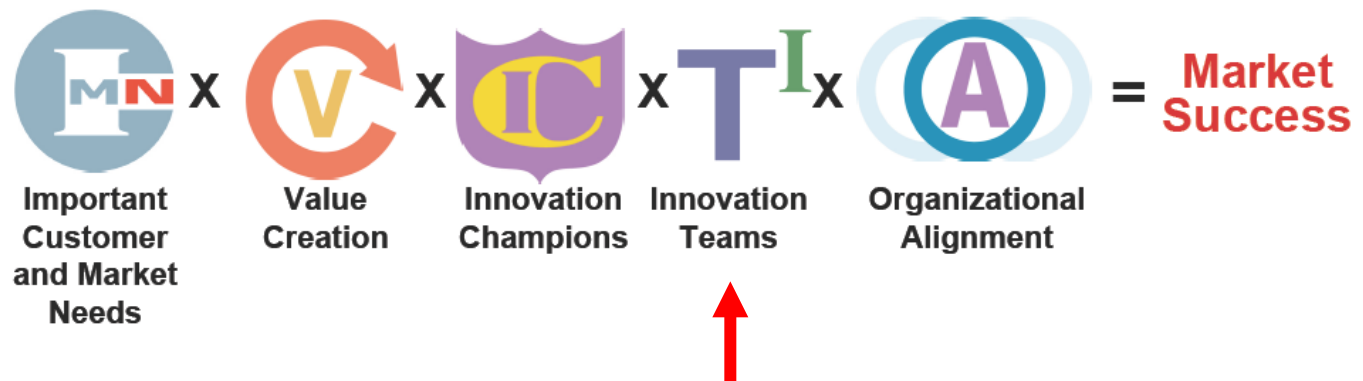
- Market or technical champions

SRI—the Five Disciplines of Innovation

Disciplines of Innovation

Five Key Elements to Improve New Product Development

No Champion, no project, no exception!



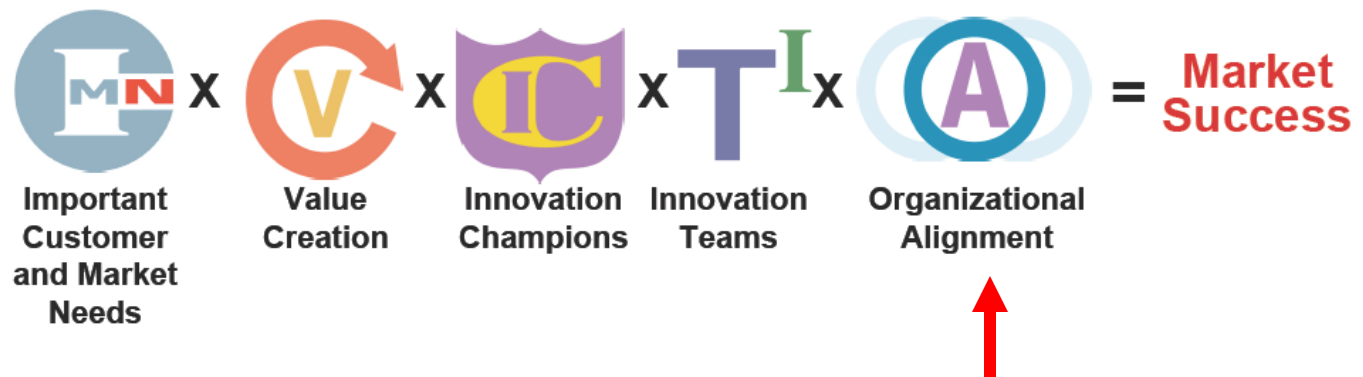
-Market and technical champions
-Importance of “watering holes”

SRI—the Five Disciplines of Innovation

Disciplines of Innovation

Five Key Elements to Improve New Product Development

Launching these disciplines of innovation throughout the organization

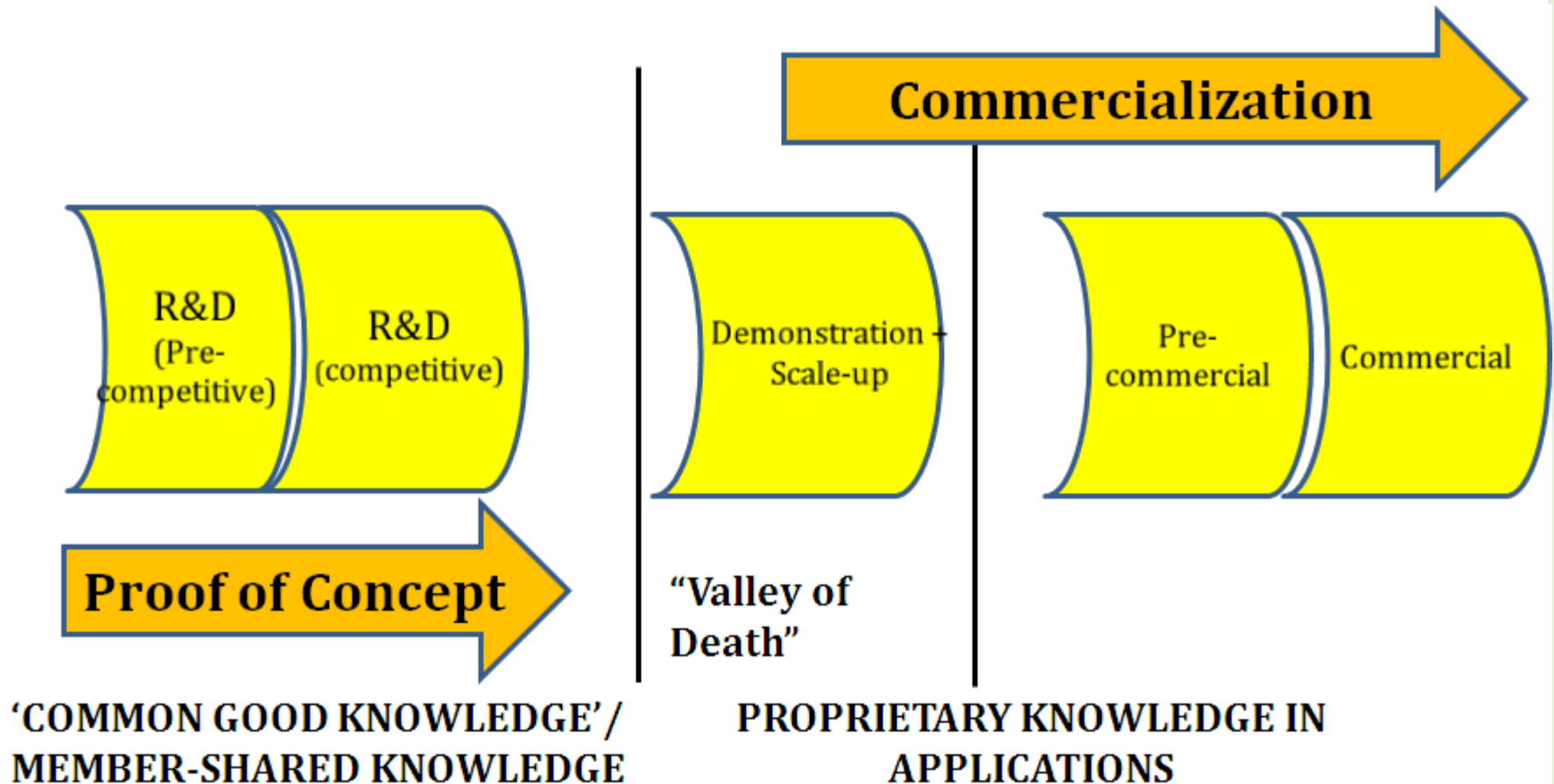


-Fostering innovation

-Continuous Value Creation

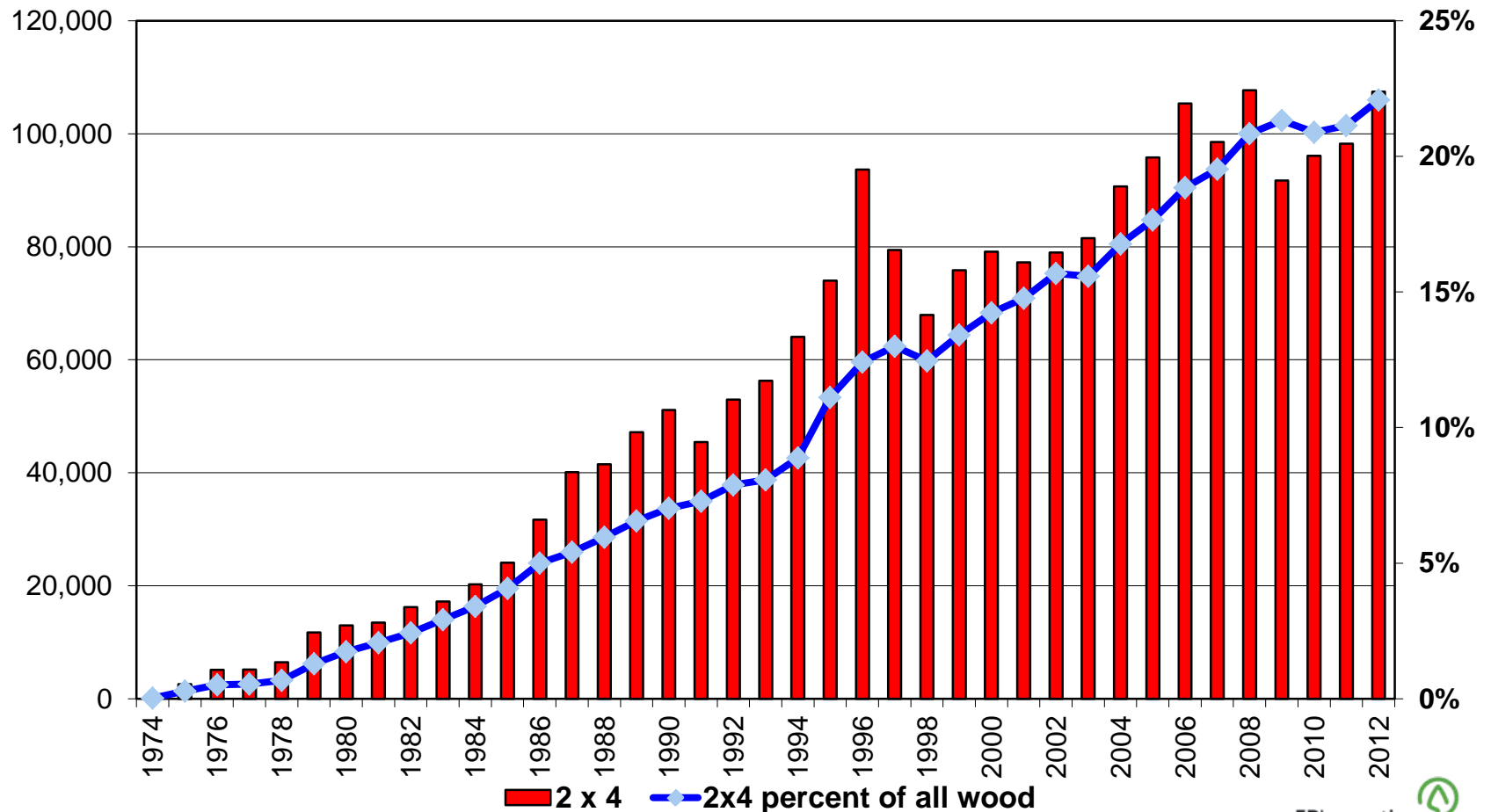


Managing Product Innovation



Examples from FPInnovations

Japan 2x4 Housing Starts



Examples from FPIInnovations



Examples from FPInnovations

Advanced heavy timber / glulam systems



Examples from FPInnovations



Earth Sciences Building
UBC



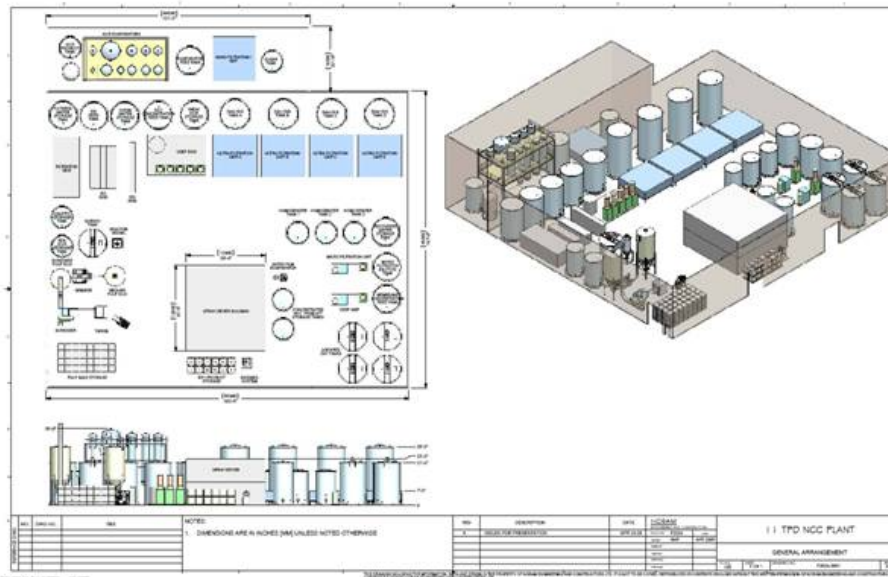
Examples from FPInnovations



Examples from FPIInnovations

NCC


- FPIInnovations-Domtar Joint-Venture
- Cellulforce Demonstration Plant (1 ton/day)



- \$42M investment (Federal/Provincial/Private)
- From grams to tons in less than 3 years




Examples from FPInnovations




**Performance
Innovation
Transport**
An FPInnovations Group

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PIT Fleet Program

PIT focuses on developing, testing, and implementing fuel-saving strategies and technologies for fleets of all sizes and types. We work with our members, in their operating environment, and with their equipment to provide solutions that meet their needs and are ready to be implemented.

[For more details](#)

Discover PIT!

- PIT is an engineering department that fits into your own organization! Our team consists of engineers, technicians, eco-driving trainers and fleet management specialists.
- Our passion is to help fleet managers reduce their costs and their environmental impact by banking on the implementation of the best solutions.
- Whether you manage a [trucking, municipal or public service fleet](#), we have solutions for you!
- Our business model is based on membership. You become

Events

PIT - FPInnovations @ ExpoCam 2013Booth 5023

April 11th, 12th and 13th 2013
Place Bonaventure, Montréal

Energotest 2013

News

Free registration at ExpoCam2013

PIT Signs First Urban Transit Project with CUTA

PIT Signs First Urban Transit Project with CUTA

PIT 2013 Annual Meetings

The very first PIT Municipal Annual Meeting was held last January 22nd.

PIT Liaison Program

pit.fpinnovations.ca/

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a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

