



Investments in Forest Innovation

OCVCI/Paprican Forest-Based Chemicals Biorefinery Sault Ste. Marie, On

March 15, 2007



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Outline

1. Canada's Forest Industry Challenges
2. May 2006 Federal Budget Announcement
3. Forest Products Innovation (FPIInnovations) and Competitiveness
4. Next Steps





Forest Industry Challenges

- Significant increase in the value of the Canadian dollar.
- New international competition with lower fibre and labour costs.
- Cost of inputs (energy, fibre, chemicals and transportation) has increased.
- Low returns have decreased capital expenditures, particularly in paper manufacturing.
- Trade flows are hampered by the softwood lumber dispute with the U.S.
- Market prices have declined for a number of important products.





Federal Budget 2006

Canadian Response-\$400 million over two years

- Support Older Workers (HRSDC) - \$72.5 million – Announced October 17, 2006
- Combat the Mountain Pine Beetle (MPB) Infestation in BC - \$200 million – Announced January 12, 2007
- Strengthen the Long-term Competitiveness of the Forest Industry – \$127.5 million - Announced February 8, 2007





Industry Competitiveness (\$127.5 million)

Investment of \$127.5 M to strengthen the long-term forest industry competitiveness:

- Investment in Forest Innovations (\$70 M)
 - Restructuring the Forest Innovation System
 - Fibre Centre
 - Investment in Forest Innovation (FPInnovations)
- Expanding Market Opportunities (\$40 M)
 - Canada Wood
 - North American First
 - Value to Wood
- Developing a National Forest Pest Strategy (\$12.5 M)
- Create Human Resources Forest Sector Council (\$5 M)





FPInnovations and Industry Competitiveness

FPInnovations will advance industry competitiveness by:

- developing new technologies with industrial biotechnology, green chemistry, genomics, GIS and nanotechnology;
- adopting and implementing new emerging and breakthrough technologies underpinning continuous improvements in productivity and sustainability performance as well as new products from the forests;
- commercializing the most promising transformative technologies within an innovation system that is effective and forward-looking; and
- establishing Canadian leadership in forest sector innovation, creating opportunities for supplying knowledge and technologies in global markets.





Investment in FPInnovations

- Resources: \$55 million over 2 fiscal years
- Objective: To develop and adapt revolutionary technologies which will help transform Canada's forest industry and derive the greatest possible value from the Canadian forest resource to facilitate the competitiveness of the industry well into the future.
- Activities: Investments in Forest Innovation will provide funds for pre-competitive, non-proprietary R&D to address the development and adaptation of emerging and breakthrough technologies such as forest biomass, forest biotechnology and nanotechnology.





Potential Research Themes

Research Themes Under Consideration:

- **Flexible & Competitive Manufacturing** - New tools to add flexibility in product manufacturing, process technologies, precision forestry, forest inventory planning & productivity, fibre & wood quality characterization
- **New Product Solutions** - hybrid building systems & new composites, new appearance wood products
- **Next Generation Pulps & Papers** - process for ultra-lite papers and specialty chemical pulps
- **New Cellulosic Solutions** - production of industrial scale nano-material, cellulose crystals





Potential Research Themes cont'd

- **Biochemicals & Biofuels from Biorefining** - biorefinery technologies for lignin, cellulose and hemicellulose products
- **Bioenergy Production** - production of solid fuel & syngas
- **Cross Cutting Issues** – market analysis, GHG impact, economic modeling





FPIInnovation – Next Steps

- Consult with colleagues managing complementary technology programs within NRCan and in other government departments: AAFC, NRC, IC and EC.
- Exchange ideas on FPI program design which meets government priorities, program objectives, responsible resource management practices while building a spirit of collaboration with governments, academia and industry.





FPIInnovation Next Steps - cont'd

- Development of program management and governance structures, essential program elements, program terms and conditions and evaluation criteria all of which must be in place before there is any call for projects.
- Program Implementation (April 2007).





Thank You

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