

Challenge Synopsis

FPIInnovations is interested in leveraging its expertise in its proprietary softwood/hardwood pretreatment process and its technology for the separation of feedstocks into high quality lignin and sugar streams. The challenge is to explore novel ways to convert those streams into sustainable high-value bioproducts that are competitive with similar chemical-based processes/products.

Challenge Statement

FPIInnovations, a leader in the development of high-quality lignin and sugar streams from sustainably harvested forest-sourced biomass, is seeking innovative ways to further convert those streams into high value-added bioproducts. Market focused solutions shall drive efficiency improvements and/or cost reductions and consider the entire value-chain in its approach. Solutions should also result in the development of unique sustainable products that are low-carbon alternatives to existing high-demand products having significant growth potential.

Context

Canada's forestry sector is a significant economic engine for Canada with over 200,000 associated jobs and \$24 billion in GDP. In recent years, this economic engine has been threatened with flat to declining commodity markets both domestically and internationally. In order for the forest sector to sustain growth, it shall take a critical role in the bioeconomy and innovate through the production of high value-added bioproducts. FPIInnovations has developed considerable expertise in processes that convert both hardwood and softwood feedstocks into high quality lignin-based chemicals and sugar streams. These streams need further conversion into high-value products that are sustainable and competitive with products created through traditional chemical and oil & gas conversion processes.

Response Criteria

- Solutions that are TRL level 6 or higher are preferred
- Relevant business activities should relate to materials/resins, chemicals and/or bioplastics
- Solutions should be novel with proven freedom-to-operate
- Ventures that offer a partial solution should be open and willing to work with other ventures to create an end-to-end solution
- Only non-confidential information should be submitted at this stage



The Opportunity

Applicants must be willing to operate under the rules of the Low Carbon Business Action In Canada Project – www.lcbacanada.eu

About FPInnovations

FPInnovations is a private not-for-profit organization that specializes in the creation of solutions in support of the Canadian forest sector's global competitiveness.

We are uniquely positioned to implement innovations in direct partnership with the Canadian forestry sector. We are also ideally positioned to perform state-of-the-art research, develop and scale up advanced technologies, and deliver innovative solutions to complex problems for every area of the sector's value chain, from forest operations to consumer and industrial products.

FPInnovations' R&D laboratories are located in Montréal, Quebec City, and Vancouver, and it has technology transfer offices across Canada.

