

Transformative Technologies Pilot-Scale Demonstration Program (PSD)

EXPRESSION OF INTEREST (EOI) REQUEST

to the

Canadian Forest Products Industry

for the

Implementation of on-mill site pilot-scale demonstration plant projects that showcase new/emerging highly transformative technologies at the pre-commercial development stage with the potential to enhance the competitiveness of the Canadian Forest Products Industry.

February 22, 2010 (Deadline for submission)

TRANSFORMATIVE TECHNOLOGIES PILOT-SCALE DEMONSTRATION PROGRAM

Under the Natural Resources Canada Transformative Technologies Pilot-Scale Demonstration (TT-PSD) Program, up to \$20 million is available during the 2010–2011 federal fiscal year (April 1, 2010 to March 31, 2011) for the development of on-site pilot-scale demonstration projects of new/emerging highly transformative technologies. This initiative will be delivered in collaboration with FPIInnovations and will focus partnering with other parties on projects involving forest sector technologies at the pre-commercial development stage.

Specifically, funding will support the establishment of pilot-scale demonstration plants at existing commercial forest product facilities in selected locations across Canada. The objective of these pilot-scale demonstration plants is to provide an opportunity to apply engineering principles and demonstrate research readiness in an industrial environment, which will ultimately lead to commercial applications that will help transform Canada's forest industry and facilitate the competitiveness of the industry well into the future.

This Expression of Interest (EOI) is an initial step in a selection process to identify the highest ranked projects in Canada to receive funding support from the TT-PSD Program. Projects submitted through this EOI will be evaluated based on criteria outlined below. The intent of the EOI process is to develop a short list of projects for preliminary consideration. Project proponents will be contacted starting in early March 2010 to confirm details of the proposed project, possible terms for the negotiation of partnership agreements/memoranda of understanding and, if positive ultimately, prepare formal partnership agreements.

Eligible business partners for this program could include, but are not limited to, forest products companies, equipment suppliers, provinces and not-for-profit research organizations.

The TT-PSD funding is available only until March 31, 2011. All reimbursable project costs under this program must have been incurred prior to March 31, 2011, to be considered eligible.

SELECTION CRITERIA FOR ELIGIBLE PROJECTS

A TT-PSD Program Oversight Committee is being established; it will include representation from FPIInnovations, Natural Resources Canada and other technical experts to review and evaluate all project EOI proposals in accordance with the following criteria.

Partnership/Financial Criteria

- Confirmed multi-party business partnerships which include at a minimum an established forest products company and federal/provincial/municipal government and other supporting partners. (Broader and more diverse confirmed partnerships may be favoured.)
- Private-sector capital and in-kind contribution committed to the project. (An appreciable level of private investment proportional to the cost of the project is required.)
- Demonstration of long-term financial viability of the project partnership participants.
- Preliminary business case analysis for full-scale implementation of the proposed technology that presents a potentially sound long-term business opportunity and leads to an investment decision and implementation of pilot scale demonstration funded by NRCan (eligible expenditures include economic/business analysis, engineering, purchase of materials and supplies and equipment needed for construction) and its partners.
- Financial feasibility of the project to use the TT-PSD funding to implement the pilot project within the program time lines, while guaranteeing successful project completion if the project continues past the TT-PSD funding deadline.

Technical/Project Characteristics Criteria

- Project is an opportunity to demonstrate through an on-site industrial pilot-scale demonstration plant, new/emerging highly transformative technologies at the pre-commercial development stage relating to forest products industrial activities. (Priority may be given to technologies developed in Canada.)
- Feasibility of the project presents an acceptable level of technical risk. (As the technology being proposed is likely new/unique, how will technical risk be mitigated/minimized? Describe the level of experience of partners to undertake similar industrial projects.)
- Technological innovativeness/uniqueness of the project in both a Canadian and global forest industry context.
- Potential economic or competitive significance of the technology to the Canadian forest industry (e.g. potential for the technology to be employed elsewhere in Canada and its likely positive economic, competitive and/or environmental impact on the sector).
- Linkages of the project to the Canadian forest sector innovation system and the potential for the project to contribute to Canadian technological leadership in the forest sector.
- Public good benefits of the project for the Canadian forest products sector as a whole (e.g. degree to which intellectual property generated would be of general benefit, degree of access to the pilot-scale demonstration plant the proponent will be willing to offer, other broader business/marketing sector-wide benefits the Canadian forest products industry could obtain from the project).
- Location of the proposed project that promotes maximum integration and synergy with the existing Canadian forest products industry capital stock.
- Estimated socio-economic impact of the proposed pilot-scale project and, in future circumstances, of full-scale Canadian deployment of the proven technology (community and employment benefits).

DESIRED EXPRESSION OF INTEREST RESPONSE FORMAT

Proponents responding to this EOI are asked to submit their project information in a maximum five-page Word file or in PDF electronic format. All information contained in the EOI documents will be considered *confidential* in nature. Furthermore, it is important to indicate « confidential » on each EOI document.

A. Covering letter which:

- describes why the proposed project should be considered for NRCan/FPInnovations' TT-PSD Program based on the specified program/project criteria;
- provides an executive summary of the proposed innovative technology, project characteristics, potential long-term business perspectives, and industry transformative potential for Canada's forest products sector if the technology demonstration is successful; and
- profiles the potential business partnerships involved and their respective background and history in innovation-related projects.

B. Complete proposed project and partnership arrangement information, including:

- detailed description of the proposed project, the innovative bench-scale technology proposed to be scaled up and the proposed project location;
- approximate project time lines for design development, tendering, construction start-up and completion;
- estimated project costs/budget broken down in key main components at approximately +/- 30 percent;
- detailed description of the proposed partnership arrangement, the diversity of expertise offered, the experience of key partners in similar projects, financial stability and commitment of the partners;
- detailed description of the anticipated results and outcomes of the pilot scale demonstration project including the results of bench-scale research and testing conducted in laboratories to support the project.
- breakdown of various parties proposed contributions to the overall project (cash and in-kind); and
- any other technical or project organization aspects that may require consideration.

C. Discussion on how the proposed project meets the technical and pilot plant characteristics program criteria:

- clearly articulate how the proposed project meets the program criteria; and
- provide and explain any supporting facts, figures and estimates of expected impacts.

D. Supporting documents:

- letters confirming key partnership commitments or intent;
- list of key project contacts (proponent, partners, etc.); and
- any other supporting information the proponent deems critically important to support the EOI process.

CONTACT INFORMATION, CLOSING DATE AND TIME

All electronic submissions must be sent to the following e-mail address:
info@fpinnovations.ca and copied to tt-psd_program@nrcan-rncan.gc.ca.

All electronic submissions must be received by February 22, 2010, at 4:00 p.m. Pacific Time.

For any additional information on this program or the EOI process, please contact:

1. Mr. Christopher Kanters
FPInnovations
570 St-Jean Boulevard
Pointe-Claire, Québec H9R 3J9
Telephone: 514 630-4114
Facsimile: 514 630-4105
2. Mr. Robert Jones
Canadian Forest Service
Natural Resources Canada
580 Booth Street, 7th Floor
Ottawa, Ontario K1A 0E4
Telephone: 613 947-9041
Facsimile: 613 947-7399