

Appendix 11

FPInnovations: A Canadian Center for Forest Products Research

Interview with J. P. Martel, Vice President for Strategic Partnerships, FPInnovations

FPInnovations was created in 2007 from three entities: the Forest Engineering Research Institute of Canada (FERIC), the Pulp and Paper Research Institute of Canada (PAPRICAN), and Canada's Wood Products Research Institute, known as FORINTEK (see Appendix 10). These not-for-profits were independent enterprises, and sharing of information about ongoing research was largely informal. In essence, they were operating as separate entities—perhaps even working in silos.

In 2006, the federal government asked the three organizations to come together and develop an integrated program that would be more cost-efficient and eliminate redundancies. The forest products industry, with limited resources to perform or fund research and development activities, saw this move as an opportunity to strengthen the entire value chain—an aspiration reflected in the organization's current vision and mission statements.

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VISION

A world where products from sustainable forests contribute to every aspect of daily life.

MISSION

Powered by creative people and world-class research, FPInnovations fuels the growth and prosperity of the forest sector by:

- Nurturing our people and scientific excellence within a diverse workplace
- Developing solutions to enhance competitiveness and sustainability
- Creating and seizing opportunities beyond traditional markets

- Accelerating innovation and enabling partnerships among industry, governments and academia

VALUES

- People: We believe people are our most important asset.
- Safety: We ensure safe work environment and practices that protect the health and well-being of the individual.
- Integrity: We are honest, trustworthy and respectful in all that we do.
- Innovation: We foster innovation and strive for excellence in all that we undertake.
- Sustainability: We care about the environment. We work to achieve sustainable solutions.
- Collaboration: We value teamwork and collaboration in all aspects of our business.

[end excerpt]

The following interview with an FPInnovations executive was conducted on July 11, 2016, and has been lightly edited for clarity.

Any comments on your program’s organizational vision and mission statements?

Martel: These statements were developed in the past three years. They resulted from some changes that were made inside FPInnovations. It helped to bring together the three different cultures from FERIC, PAPRIKAN, and FORINTECH. This MVP helped to develop a better internal organization culture. The staff were really involved in this, which helped create this common statement.

We want to play the role of serving the entire forest sector as a facilitator, leader, and innovative consultant, to bring capacity together throughout the sector and become the strategic adviser to the sector. We don’t just provide technical solutions, but more importantly, provide strategic advice and help smooth and improve the innovation system. How do you create wealth in the marketplace by taking ideas and concepts through the entire development process in the innovation–implementation chain to make it a new market segment.

It’s great to develop ideas and concepts, but the key is creating a fertile environment for investment in these ideas and concepts. We work to “derisk” the innovation pathway—get things

from the lab into pilot tests and demonstrations. At the same time, we work on market development for these new products. Nanocellulosic crystals was \$43 million, nanocellulosic fibers were \$40 million in investments to bring new products forward.

They are using a Stanford Research Institute process for evaluating investment options and are also using a “stage gate” approach and technology readiness levels. These are the three tools used to make investments in new products or define new products.

What is your business model and organization?

Martel: FPIInnovations is a not-for-profit world leader that specializes in the creation of scientific solutions in support of the Canadian forest sector’s global competitiveness and responds to the priority needs of its industry members and government partners.

It is ideally positioned to perform research, innovate, and deliver state-of-the-art solutions for every area of the sector’s value chain, from forest operations to consumer and industrial products. FPIInnovations’ staff numbers more than 525 (these came from the previous three organizations). Its R&D laboratories are located in Québec City, Ottawa, Montréal, Thunder Bay, Hinton, and Vancouver, and it has technology transfer offices across Canada.

Forest Innovation by Research and Education—FIBRE—is an organization that was established in October 2011 to build synergies among eight university networks funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) that are part of the NSERC Forest Sector R&D Initiative. As major partners of FPIInnovations, these university networks have become key players within the forest sector innovation system to help transform the Canadian forestry sector. Their role in the training of highly qualified professionals is crucial at a time when the sector faces major workforce challenges.

Of the networks under FIBRE, most are NSERC strategic networks led by universities:

- ForValueNet Network and Value Chain Optimization Network (both led by Laval University);
- Bioconversion Network (University of Guelph and University of British Columbia);
- LignoWorks (University of British Columbia);

- Green Fibre Network (McGill University);
- Sentinel Bioactive Paper Network (McMaster University); and
- NEWBuildS (University of New Brunswick).

One network, ArboraNano—the Canadian Forest NanoProducts Network—is a business-led Centre of Excellence.

FIBRE's mandate comes from a partnership comprised of FPIInnovations, NRCan, NSERC, and the Forest Products Association of Canada (FPAC).

Some of the industry executives had talked to the NERSC leaders about the fact that there was money flowing into the sector, but it wasn't having as big an impact as desired by industry. The relationship was crystallized into an MOU. Priorities were defined and subnetworks were created to focus effort on the key projects. An FPIInnovations representative was on the board of each of the networks. The projects have reached the end of the seven-year life. Now, they are coming to an end. Discussion is ongoing about how funding might flow to the evolving types of relationships. They are shifting to cooperative research and development agreement (CRADA) types of relationships. One of the changes is that matching funds will be sought for the next iteration. They are also looking at ways to improve the relationships with the universities that were involved through FIBRE.

Do you have a governing board? I see that you have a Board of Directors, a Partners Committee, and a National Research Advisory Committee. How are these organized? Who sits on them? How do they interact?

Martel: The Board of FPI had two functions: the business of the original research institutes, how do you optimize R&D and returns; they also had a role in developing the broader strategy. Originally, the business management was the stronger focus, now it has shifted to the broader strategy. FPI is really focused on developing high-level goals and speaking with one voice. FPAC (the industry representative group), federal and provincial governments, industry, and related sectors (biochemical industry) are on the Board. Not only funders—they are important—but new and different players. So FPI is trying to diversify the Board to reflect where they think the “game changers” will occur in the future.

The National Research Advisory Committee (NRAC) reports to the Board on the strategic balance in the research portfolio. Some NRAC members are members of the FPI Board of Directors, some aren't.

For each of the 11 programs, there is a program advisory committee. Representatives from governments and industry sit on each of those, focused on identifying new trends and activities. Program advisory committee recommendations go to NRAC.

What is your relationship to the Canadian Council of Forest Ministers?

No official relationship. FPI is one of the major players in the research systems of interest to them.

Your 2015 activities report says: “Over the next five years, our Research and Innovation Plan will focus on strong value propositions that address technical or scientific needs, and assist with transforming the industry. We will focus our research resources on: Maintaining a Quality Fibre Supply; Developing Innovative Manufacturing Processes and Products; and Environmental Sustainability and Social Licence.” Please explain.

Martel: This approach will enable FPIInnovations to provide increased value to members and governments while leveraging expertise from organizations focused on other research areas.

What's included or excluded from FPIInnovation's portfolio of research? It doesn't seem to cover the entire spectrum of forest management research, like forest insect and disease controls, wildlife habitat improvement. What about social sciences, such as recreation? How are decisions made on “what's in or what's outside of the portfolio?”

Martel: The focus of FPI is more about what was the “downstream” portfolio of work in the predecessor institutions (FERIC-PAPRIKAN-FORINTEK). The “upstream” components of research, like forest inventory, fire research, etc., traditionally have been the domain of Natural Resources Canada and the Canadian Forest Service (CFS) research. So the work on the biological side remains the focus of the CFS research centers. FPIInnovations has continued and improved the relationships with the other CFS work.

The social science side is of interest. FPI has a strong interest in working with Aboriginal communities. They are providing business development support with First Nations. They don't get into negotiation of agreements, simply technical support identified by those communities.

Markets and economics: is this work mostly statistical reporting, or do you also get into market analyses and forward-looking projections of markets?

Martel: Yes, this is a relatively new part of the program and part of the “derisking” work.

Are changes likely under the Trudeau government?

Martel: A bit too early to tell. Clearly, new governments have new focus areas. Climate change and controlling emissions are priorities of the new government. The forest sector is a contribution to solving the climate change and clean technologies. That's the position FPInnovations is going to present to the minister.