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Chair

Mr. Leon Benoit

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● (1530)

[*English*]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good afternoon, everyone.

We're here today to continue our study of the renewal of Canada's forest industry. This is a follow-up study to the one done by the natural resources committee and presented to Parliament in 2008. We're hearing from witnesses in different categories and regions of the country about the industry.

Today we have five sets of witnesses with us.

We have, from Meadow Lake Tribal Council Resource Development LP, Ben Voss, president and CEO. Welcome to you, sir. We have, as an individual, Professor Sudip Kumar Rakshit, a Canada research chair in bioenergy and biorefining processes at Lakehead University. Welcome to you, sir. From the faculty of forestry, University of Toronto, we have Dr. Sain, dean and professor. Welcome to you, sir. We have one more individual here with us, from the department of chemistry at McGill University, Mr. Derek Gray.

By video conference from Vancouver, British Columbia, from Fortress Paper, we have Yvon Pelletier, president of Fortress Specialty Cellulose Inc.—welcome to you, sir—and Marco Veilleux, vice-president, business development and special projects. Welcome to you, sir.

Those are the witnesses today.

We will proceed in our usual fashion by hearing first from the witnesses in the order they are listed on the agenda today, and then we'll go to questions and comments from members.

I would like you all to keep your presentations within the seven minutes. We have five presentations and this does take a lot of time. We want to leave ample time for members.

We'll start with the witness from the Meadow Lake Tribal Council, Mr. Voss, president and CEO. Go ahead, please, with your presentation for up to seven minutes.

Mr. Ben Voss (President and CEO, MLTC Resource Development LP): Thank you very much. Good afternoon and thanks to the committee for the invitation to come forward today as a witness.

Forest renewal and the future of one of Canada's oldest industries is of great interest to the group I'm here representing today, MLTC Resource Development. MLTC stands for the Meadow Lake Tribal Council, as the chair mentioned, which is owned by nine first nations communities in northwest Saskatchewan. MLTC Resource Development is a private equity investment partnership that owns several businesses in Saskatchewan and Alberta. Our largest investments are in forestry, and we also own real estate, hotels, fertilizer distribution, trucking companies, and telecommunications services.

The chiefs and councils of the nine first nations have developed a very positive reputation for having strong governance and clear separation of business and politics. I'm proud to say that as a non-first nations person, it's very humbling to work for an organization that is helping Canada's indigenous peoples make a contribution and earn a stake in the economy and work towards prosperity. There is a key reason why MLTC has been so successful in forestry, and it's because we're owners. We own the mill. We own the forest management company. We own the harvesting, the trucking, and the value-added processing. As owners, we control the natural resource development, the planning, the infrastructure, and we control how the benefits are retained in the region.

At the heart of our business is NorSask Forest Products, a state-of-the art high throughput and technologically advanced studmill facility. We produce 135 million board feet annually and are on track to increase that with ongoing investments in technology and innovation. Our high quality two by four and two by six studs are sold across North America and sought after by our customers due to our exceptional quality, customer service, and reputation.

NorSask was one of the few sawmills to remain open in the downturn and has remained a viable and successful sawmill under some of the most difficult conditions. NorSask directly employs nearly 200 people and 75% are aboriginal, almost half of whom are first nations people and most quite young.

The regional jobs that are maintained in the planning, harvesting, transportation and maintenance, and use of the timber are well in excess of 1,000 people and many of these are also first nations members. All of these jobs are linked to NorSask and MLTC's role in forest management.

Despite our success and resilience, we face unprecedented pressures due to limited market access, infrastructure deficits, no rail service, low quota levels, high labour cost, shortages of skilled trades, and competition for government resources from foreign-owned multinational companies.

ln 2007 we could see that forestry had to change. Lumber markets were collapsing. The traditional model where a sawmill and pulp mill operate hand in hand was just not sustainable. The pulp mills depend on low-cost pulp chips, produced as a byproduct of sawmills, as well as large government subsidies for capital and electricity rates, to stay viable. Pulp markets were shrinking. Pulp mills were closing and the future was uncertain. Pulp mills are also supposed to use hardwood species to allow access to the softwood for a sawmill.

Good lumber depends on good fibre and Saskatchewan has some of the best in the world. We are not yet impacted by the mountain pine beetle and the market knows that. Yet, we are still dependent on pulp mills, typically foreign owned, to utilize hardwood and to buy pulp chips, unless we change our model.

Since 2013, we have invested more than $20 million into modernization, expansion, and recapitalization of our sawmill. As a result, we have put our money where our mouth is towards innovation and the confidence that lumber will always be a product in high demand, despite market cycles.

ln our view, the future depends on finding better value from our timber resources instead of just lumber and pulp. We need to ensure total fibre utilization, including the value-added use of our wastes. Our focus turned to bioenergy and in particular electricity generation and wood pellets. Wood pellets are simple enough as long as you can find markets. Electricity, on the other hand, is very hard to get into without cooperation from local utilities. ln our case, SaskPower is the provincial-owned crown corporation and holds a monopoly in the regulated market. ln 2013, we successfully signed a power purchase agreement to construct a 36 megawatt biomass fired power plant, the first in Saskatchewan.

ln 2014, we started construction on Saskatchewan's first wood pellet manufacturing facility with a design output of 10,000 tonnes per year of premium wood pellets for use in residential heating and environmental spill cleanup. We are very optimistic that this plant can be expanded as we continue to develop more markets across North America.

A key issue worth mentioning is that first nations-owned sawmills do not qualify for many federal or provincial funding programs. So all of this is done with private investment. We can't use the accelerated capital cost allowance, SR and ED, IRAP, or any other innovation funding programs, and the softwood lumber agreement usually prevents direct government funding to sawmills. So our investments in innovation have been internally and privately financed, which is a huge disadvantage compared to the rest of the forest sector and hampers innovation investing.

● (1535)

I can't leave here today without mentioning the softwood lumber agreement. Saskatchewan is often overlooked in the Canadian negotiations. We haven't got enough quota. Today we have three saw mills operating and enough quota for one. Other provinces, such as B.C.... I won't go through the list, but several of them have excess quotas. Negotiators seem unwilling to try to help Saskatchewan because of the fear that changing the agreement would jeopardize the fragile consensus and that we're better just to renew the status quo.

We are strongly recommending that the SLA be structured to give Saskatchewan it's fair share. Moving quota does not cost the other provinces any jobs, but if Saskatchewan doesn't increase it's quota, it could cost a thousand jobs.

In summary my recommendations to the committee are as follows: develop financial support programs and investment incentives for diversified forest products that first nations-owned companies are eligible to received; focus on continued skills trade program funding such as Northern Career Quest, which we feel is very successful; develop a new domestic focus on ensuring that community ownership models are supported, including loan guarantees or other financing programs; rebalance the SLA quotas to support the Saskatchewan saw mill industry without harming other provinces who have surplus quotas; and expand and enhance federal funding programs for innovative new technology investments to encourage domestic investment and newer leading edge technologies.

I want to thank you for your time today, and I'll do my best to answer any questions you may have.

I hope that our story has been a benefit to your committee's work and we can offer some proof that forestry innovation is alive and well in Canada.

Thanks.

● (1540)

The Chair: Thank you very much for your presentation.

We go now to our second presenter today, Professor Kumar Rakshit, Canada research chair in bioenergy and biorefining processes from Lakehead University.

Go ahead please, sir, with your presentation, up to seven minutes.

Professor Sudip Kumar Rakshit (Professor, Canada Research Chair in Bioenergy and Biorefining Processes, Lakehead University, As an Individual): Thank you very much.

First of all, I'd like to say that, as a professor, we usually make one-hour presentations—

Voices: Oh, oh!

Dr. Sudip Kumar Rakshit: —and with quick PowerPoints, but the instructions we had here was to stick to six, seven minutes. I'll try my best to stay within that seven minutes.

Second, I want to mention to you that I moved to Canada three years ago, so I have a bird's-eye view and a critical view, maybe a not-so-patriotic view, so I might say something that might not be correct, but that will be my view.

Third, I'm not a forester, but a chemical engineer trying to make value-added products from wood and cellulosic products, like agricultural residues. I'm in that field. I don't take care of forests; I try to make use of the wood of the forests.

Like any agri industry, the forest industry also goes through its cycles. It's hopefully going out of that low cycle to a more optimistic position with some sales from British Columbia to China. Yesterday it was mentioned that the renminbi hub in China is going to help, but my colleague just told me that the Russian supply to China is going to hurt British Columbia as well. But there are other ways in which we could be increasing our sales and industry. One is pellets, of course, if the housing market in the U.S. gets better, but we need to do something now strategically for the long term to be in the game. That's my story there.

As far as bioenergy and biochemicals are concerned, there are three important things to remember in making it from wood. One is to have the technology. In many cases we do have the technology, but it's not economical enough. A good example of that is making alcohol from wood. It is possible technically, but not at a price that is going to sell. You need to have technology, you need to have economics, and the regulatory policy issues have to be correct. Under these situations, it's going to work, and I'm going to cover a little of all of them.

First of all, the constraints to the economic development of bioenergy and biochemicals from wood include the fact that transferring the wood from the forest to the mill in Canada costs about $100 to $120 per tonne. That cost alone makes us less competitive than other emerging countries, where it is much cheaper.

Second is the nature of the raw material technology-wise. We do make a lot of products from starch in Canada. We make a lot of ethanol, we make a lot of other products from vegetable oils, but making them from cellulose is always a problem. That's nature's way. We cannot handle that. Cellulose and lignin are much more difficult molecules to work with and, hence, we are not able to make them at a competitive price.

Third, emerging countries like Brazil, India, and China are making many of these chemicals at prices that we are not able to meet.

Fourth, and very important in the present context is the petroleum industry and the price of crude. It not only affects transportation fuel, as most people commonly imagine, but petrol crude also goes into making 5,000 products. Everyday plastic products, etc., come from crude. So it's not only transportation. I'll highlight that by giving you one example that is often quoted in Canada, that in the petroleum industry the amount of material that goes into making those plastics is 4%, with the remainder going into transportation, etc. But that 4% makes for 40% of the industry's profit. That's something we say we should be doing in the case of wood: trying to see if we could make things of higher value other than pulp and paper, and then gain the market.

Coming to some of the products in different stages of development—I can't list all of them, but will just give you a few —one is biocrude, which an oil company in Canada is now doing. From wood you make a product that is close to petroleum in its characteristics, and you can make a number of other products from that. You have polystyrene, you have succinic acid. All of us talk about succinic acid and amber in Sarnia, but if you look at the nitty-gritty of it, they're not making it from wood or cellulose but from cornstarch, which is a different game and much easier to do. In that case we have to look for what other types of products we have.

● (1545)

You have some products that are high-volume low-cost bulk chemicals, you have low-volume high-cost chemicals, and some in-between. After a lot of discussion, people in my field say that we have to look for that sweet spot in-between because we may not be able to do the other two ends successfully. We may not be able to do the bulk chemical, because the profits are small and we can't compete with some of these emerging countries. Cancer treatment from birch wood may be a good product, but it will be so small in quantity. So we look for those intermediary products, like cellulosic fibres or some of these polyalcohols, etc., which are in the market.

Also in Canada we have made a head start with some of these products. Nanocellulose is something that Canada has a head start with, but it's not a bulk chemical, so you'll not make as much money as if it were a bulk chemical.

There are issues of climate change and LCAs, which might someday turn away from...and disinvestment in petroleum, which might might make us look to wood in a different manner, economically and socially. But those are at different stages of development as well.

In conclusion, I'd like to make my suggestions, if you're making any decisions on these matters. There are five of them.

First is that we, as scientists, should not be working on the production of ethanol, because that's not going to get us any money —from cellulosics at least. We can get it from corn, we can get it from wheat and other things in Canada. And even for the other products, we have to wait for price of petroleum to rebound. At $60, even at $120, some of these products are not viable. At $60, it's definitely not viable.

Second, regarding the pellet industry, we are exporting to Europe as long as they are willing to buy. Even if we are going around the Gulf of Mexico and bringing it from British Columbia to Europe, they're still willing to buy. But then in my hometown in Thunder Bay, we are bringing in pellets from Norway or Texas—so-called advanced pellets. As a scientist and fellow citizen in that small town, I've asked many people to give us some money to create those advanced pellets, which can be kept in the snow and rain and they will still give you the heating power.

While we are selling normal pellets to the world, we are buying advanced pellets here. I'm saying this not with the view of that particular situation, but if we had the technology for pellets, then we could use more of the pellets in this country without buying and making silos at a high price. It's a matter of only a little bit of technology. If they can do it in Norway and other places, we can do it as well. We just need some inputs in that direction.

Third, some of my colleagues around the witness table are making dissolved cellulose products. Indeed, there are many companies in Canada that are now producing dissolved cellulose and exporting it to other countries to make into rayon, which is then sent back to Canada. As I was thinking about it this morning, I thought that this is a complete reversal of roles. I'm from India. In time of the British, they used to take our cotton from India and bring it to the United Kingdom, make textiles from it, and send it back to India. Mahatma Gandhi said that wouldn't do, that we weren't going to buy those clothes any more.

But we are doing exactly the same thing in Canada. We are making dissolved bulk now and sending it to India, Brazil, or some other country; they're making rayon and we are buying the rayon at a higher price with our own raw material. The question I'm asking here is, why don't some of these companies, with the help of the government and some policies put in place, make that value-added product here? Why not? How do we allow a product to get out of here, add value, then come back?

There are many examples of this. The City of Toronto's solid waste is sent to the U.S. You pay a price for the solid waste to go to the U.S., they put it into a landfill, then they grow tomatoes and sell them to Toronto. So you're paying twice. You're paying for it to be taken away and you're paying for the tomatoes again, while you could do that here.

That's a really easy-to-understand thing. We are doing the same thing with dissolved bulk as well.

Fourth, and last, when I came to Canada I was appointed as Canada research chair because in Thunder Bay—and I'm giving this as a typical example—we had five paper mills. Four closed and we were tasked with creating an institute called the Biorefining Research Institute. We said “Let's do something else with the word 'value-added"', but all the government funding agencies tell you, when you go to them for money, “Bring an industry that will pay 50% of the research amount”.

● (1550)

You are talking about professors always asking for money. How do I get that money, that 50%? I go to Resolute mill, which is barely surviving in Thunder Bay, and say, “I have this bright idea, can we do this together?” They'll say, “We don't have the time, the amount of resources, to give you that 20% or 30%”. So how do I get the money to do the research then?

I am not saying give professors money. I know of professors taking money and not delivering, but then industries cannot also expect that it's sitting there for them to come and take. So there has to be a mechanism that will be put in place to see that we at least try to deliver, that we just don't take the money and go away. But as the situation is for us, at least in Thunder Bay because we are away from the major cities, getting an industry partner who will help us to run a good industry-based project is nearly impossible. All funding agencies say 40%, 50%, has to come from industry.

My last point is that we need to think a little bit out of the box sometimes. If we want to make biochemicals, if you talk to a person who has worked in a paper mill, he's only talking about black liquor and white liquor. Maybe you have to go a little bit beyond that, and when I talked about strategic decisions, I'll just end by saying that a Saudi Arabian oil minister is famously quoted to have said, “The Stone Age did not end for lack of stone.”

That's why I started by saying that we have to be looking strategically for what to do with our wood when the petroleum era closes. That's the point I would like to make here with a few examples as far as I could.

Thank you very much. I didn't take one hour, but maybe eight minutes.

The Chair: Thank you very much, professor, for your presentation.

We go now to Dr. Sain, dean and professor, faculty of forestry, University of Toronto.

Thank you very much, sir, for being here with us today.

Professor Mohini Mohan Sain (Dean and Professor, Faculty of Forestry, University of Toronto, As an Individual): Thank you for having me here. It's my pleasure to be here today.

Before we start, I would like to make an opening statement from my global experience in the forest products industry.

Canada's forest is one of its largest resources. We have about 10% of the world's forests and we actually have 27% of the boreal forest. It is one of our most valuable resources, like other resources such as mining, oil, and others. I think it is time for us to look at our natural resources not as a commodity but as a value-added hi-tech technology throughout, and as a service.

Today we live in a global world, which I say is one world. There is no difference between east and west, south and north, China or India, or Brazil and Canada. Therefore, my first and foremost recommendation to the committee would be, even if you are looking as the softwood lumber industry and the softwood lumber treaty with the U.S., we should find ways in terms of regulations, policy, and other trades to facilitate this conventional, very profitable industry going beyond the United States, particularly to reach people in China, India, Brazil, Colombia—which has now become very important—and Chile.

Therefore, we have to think about this and how to capture the market. China is the largest market, which we can't deny. India is the second-largest market, and yet we haven't tapped into it. That's one important thing I want to stress.

The second thing I would also like to stress is that as dean of the faculty of forestry, I see many aspects of forestry and what you often don't think of as a forest product. For instance, the by-products from a pulp mill that we are manufacturing from near Montreal have a much higher value compared to our conventional fibre today because of the global economy and the expectations from Malaysia, Indonesia, and Brazil, where they are making eucalyptus at about $40 to $50 per tonne. I'm referring to two simple materials coming from the pulp and paper industry. One is the lignin, which is known as black liquor. My dear colleagues all know that the term is black liquor. The second is fibre.

We all know and very familiar in this country with making paper and boats. I would like to say, let's think in a different way and use those extremely valuable products in a different way. So with these two particular resources, I would like to call for a transformative change in our landscape of technology, and at the same time in commerce or business.

How do you want to encourage that? First and foremost, please do not undermine the brilliance of this country. I'm a citizen of Canada. I'm very proud to be a citizen of this country. I know the talents we have coast to coast. You go from British Columbia to Alberta to Quebec to Ontario and you have the largest intellectual capital diversity in the world. I can guarantee you that because I go everywhere in the world.

Therefore, if this young generation comes out with a new idea that uses some of this, particularly sources from the forest industry or forest biomass, please give them some chance to exploit their idea into a process of business.

What do I mean? I mean that you have to use strategy; you can't give to everybody. You have to link the forest industry to the existing mega-industry of this country. What I'm talking about is spectro-chemical. I'm talking about automotive. I'm talking about the packaging industry. I'm talking about electronics and the biomedical industry.

Personally, I believe that if these two ingredients, lignin and fibre, are carefully and in an innovative and transformative way nurtured as a spinoff, each industry can be served, and that will benefit us, not only by getting substantial economic and job creation, but also by making our country's image a greener one, a leading country in the world.

● (1555)

I would like to mention some of these products that we're talking about, specifically, fibre-derived products like the one I mentioned: a dissolved cellulose derived value-added product like rayon. Go beyond that and make it a carbon fibre. You can do that from lignin, which is one of the transformative materials coming into play for the right application of the transportation industry.

Today, if you see a Boeing 787, that Boeing 787 is 40% lighter. The wings are lighter. They need less fuel. That particular carbon fibre can be derived from lignin sources.

As another example, today as I speak our cars are using forest product biomass from micro- and nano-derived fibre. Introducing biotechnology and nanotechnology as a synergy, and introducing that as a commercial product, is not a new thing for Canada. We are the leaders in the bioeconomy, and we have to lead that and foster that the way we can.

The other thing I want to mention is to facilitate research institution, academic base innovation commercialization by promoting young entrepreneurs—not by seeking jobs, but by creating jobs. Ask them to create jobs and they go and create their own jobs and innovations in those areas. The areas I mean are biocomposites, bionanocomposites, carbon trading, by nurturing biorefinery and the bioeconomic platform.

Facilitate policy and regulations to capture new market and better spinoffs for the forest product industry in novel green products and ecological and health services. I also want to mention that forests can serve our health sectors. Forests can serve our ecological success in the urban communities.

I'll go into that in a little bit of detail. Encourage them by giving a tiny amount of seed money to make one commercial product. That might lead to the rise of our conventional forest product industry. I would encourage the conventional forest industry to look for this successful spinoff for licensing or acquisition. Why is it so important? Branding and the mechanism of international strategy are important. The small company can do that. If a company like Resolute, or others like Timbec, come forward and acquire this company and become a megacompany in the world, they can make this happen much better.

The other thing I want to mention in these few minutes is to promote legislation that includes a government procurement policy aspect. If a small company is striving to get its first commercialism product, we should have a procurement policy so that we can buy their product the fastest and so that they can have in the world market one commercial product. It's important for China to know if this company already has a commercialized product. They will not trade with us unless this company has a new commercial product. Therefore, government has the role and should continue that role in the landscape.

One more important thing that we've not realized yet is the urban forest economy. Here I refer to carbon trading and the health of the forests. Today's economy is about sustainable cities. Seventy percent of our citizens live in urban landscapes, which is is concrete and big. Tall buildings [*Inaudible—Editor*] should be considered, with all kinds of legislative challenges overcoming that and making it happen. This is the time we should make it happen. This is the platform. We have the technology and we should have the will and guts to make all those drivers. I know that in Toronto it's the firefighters. We should have sufficient landscape to make it safe, and we know that we have that safe. This is the time to make it happen.

Recreation and the health service should be a tool in that particular area.

I wanted to mention that in today's economy, if we want to survive, it is all us. There is no division between Alberta, Saskatchewan, or Quebec. We have to work together, not repeat what we are doing, and not repeat the funding what we are doing. We have to have a synergy so we can have the maximum use of our resources.

Thank you very much.

● (1600)

The Chair: Thank you very much, professor, for your presentation.

We go now to Dr. Derek Gray, Professor, Department of Chemistry, McGill University.

Thank you for being here today, sir, and go ahead with your presentation.

Dr. Derek Gray (Emeritus Professor, Department of Chemistry, McGill University, As an Individual): Thank you for the opportunity to talk to the committee.

As the committee is only too aware, for more than a decade it's been obvious that this is a time of radical change in the forest products industry. The effects on companies and workers in the industry, particularly in smaller mill towns across Canada, have been effectively disastrous. Some of the details are given in a *Globe and Mail* article from last December, which lists at least a dozen mills that have completely closed. My colleagues here know, as you do, that there are many more. This is pretty gloomy.

However, I'd like to suggest that there really is a silver lining to all of this. In my opinion, in the last decade, perhaps spurred by this disaster, there's been an outburst of creativity encompassing science, technology, and the innovative effort with regard to lignocellulosic materials. It's been supported by universities, companies, and government. So I don't think it's as gloomy as I originally thought when I was trying to write this.

Some examples of the creativity and progress include things my colleagues have already mentioned. There is the biorefinery concept. The craft mill is no longer a craft mill, it's a method for making a range of products from the forest resource in as efficient a manner as possible. I completely agree that the use of wood-based materials and composites, which Mohini mentioned, in the automotive and even aeronautical field, which is our big field, and the use of engineered wood structures in building could be a great market.

Essentially, my interest is in the production and use of nanocellulose-based materials. So I'll spend the rest of my time talking about that. There are two main classes of nanocellulose. The first is cellulose nanocrystals. Really, if you imagine a grain of rice and then shrink it by about a million times and make it out of cellulose, that's cellulose nanocrystal. The other is cellulose nanofibrils, which are really shaped like a strand of spaghetti but are roughly one-millionth of the width of the strand of spaghetti.

Since the early 1990s, NSERC has been supporting our fundamental research on cellulose nanocrystals through the Discovery Grant process. Our problem was that we could make only very small quantities in the lab, and if people want to test applications, they want enough stuff to play with. That was taken care of by a scale-up undertaken by the Pulp and Paper Research lnstitute of Canada, which is now FPInnovations. This led to the formation of CelluForce, a joint venture of FPInnovations and Domtar, which, with government support, established Canada as a leader in nanocellulose production.

I've listed a few Canadian companies that are currently involved with nanocellulose production. CelluForce, of course, is in a mill in Windsor, Quebec. The Domtar mill in Quebec is probably still the world's largest facility capable of making cellulose nanocrystals. Alberta lnnovates Technology Futures can produce nanocrystalline cellulose at a smaller pilot plant facility in Edmonton. Cellulose nanocrystals can also be made by a novel process developed by NRC researchers at a biochemistry laboratory in Montreal; and they were available for awhile from Bio Vision Technology in Nova Scotia. Developmental quantities of cellulose nanocrystals are also available from Blue Goose Biorefineries in Saskatoon. As well, and perhaps most exciting at the moment, a five-tonne-a-day cellulose filament facility was recently dedicated at Kruger paper mill in Trois-Rivières.

In all cases there was provincial and federal government support for these undertakings. Most of this industrial activity can trace its roots back to NSERC support and research. I think combining academic and industrial efforts is the way to go for new materials.

There have been many applications suggested for nanocellulosic materials. A lot of them, as was mentioned originally, tend to be of really high value but really small tonnage. It's not going to make much difference to the forest products industry. However, there are a bunch of larger-scale applications on the horizon.

● (1605)

One of them involves these cellulose nano-filaments, which, although they're a product of the pulp and paper industry and can be made with relatively small modifications of current plant, can be used by the pulp and paper industry to improve the properties of paper and board, especially strength and surface properties. These nanocellulose products have been suggested as additives for oil and gas recovery. It looks like they're going to be good for improving the curing properties of concrete. Applications in reinforcement and barrier properties of packaging could be a huge market for such materials and as reinforcing agents in polymer composites.

There is a lot of competence in that area among the gentleman also here at the table.

But we have to face the fact that it will take much more than nanocellulose itself to replace the lost production currently across the Canadian pulp and paper industry, but at least we can hope that these sustainable, carbon neutral resources and materials will contribute to a whole bunch of new markets for Canada's vast forest resources.

I have no recommendations for the committee, but I'd be happy to answer any questions you can pose on this matter.

Thank you very much for your attention.

The Chair: Thank you very much, doctor.

We'll go now to our final witnesses by video conference from Vancouver, from Fortress Paper. We have Yvon Pelletier, president of Fortress Specialty Cellulose Ltd., and Marco Veilleux, vice-president, business development and special projects.

Welcome to you, gentlemen. Thank you very much for being with us here today.

Go ahead with your presentations, please.

[*Translation*]

Mr. Yvon Pelletier (President, Fortress Specialty Cellulose Ltd, Fortress Paper): Mr. Chair and members of the committee, it's an honour to appear before you today. Unfortunately, we can't be there in Ottawa with you, but we are still pleased that we can join you by videoconference.

[*English*]

Fortress Paper Limited, for those who don't know, is a holding company based in Vancouver. Today we have three major investments in three companies. One in Switzerland, making banknote and security paper, and the two are dissolving pulp mills in Canada, which I'll cover shortly.

The history of Fortress Paper has been to target the higher-end product, the higher-value product. If you look at the history of our investments they've mostly been in higher-margin types of product and, definitely, the dissolving pulp going into textiles, fibre has been a target of the company since late 2009-10. We also have other opportunities down the road, which I'll cover shortly.

As was explained by some of our colleagues, we're starting from a paper pulp mill. The base is our paper pulp process, but we take it to the next level. We take the cellulose from the wood and purify it and ship it mostly to Asia to be transformed into rayon.

We'll cover some of the very interesting comments that were made earlier. The rest of the components, which are lignin and hemicelluloses, are used today mostly for energy purposes, but a lot of work is being done to use hemicellulose that is produced from our process and converted into other higher-value products.

Why textiles?

The growth in textiles is much higher than that of global GDP. In 2014 the market was about 93 million tonnes, and in 2016 it is forecast to be 101 million tonnes.

If you look at the type of fibre that makes up the textile fibre market, you will see that 67% is synthetic fibres, polyester mostly, and the other large portion is cotton. As some of you may know, cotton has plateaued and its availability will be decreasing down the road. Rayon is there to pick up the slack, the opportunity, and it's growing much faster than the other fibres. It is a growing market with a lot of potential down the road.

Fortress bought assets in Quebec in 2009. The first was the Fortress Specialty Cellulose mill in Thurso Quebec. It was converted to dissolving pulp in late 2012, has a capacity of 200,000 tonnes, and it can go back to paper pulp. It's not what we want to do, but it can if a really depressed market does occur. The conversion of dissolving pulp and the construction of a cogeneration facility on the site was done with a significant investment of over $300 million.

We also have another company in Quebec, called Fortress Global Cellulose in Lebel-sur-Quévillon,, where we invested up to $40 million. The business model we developed for that mill was to turn it into a softwood dissolving pulp operation. It would have been one of the lowest-cost softwood dissolving pulp mill in the world. Unfortunately, this project was stopped last year following the implementation of the import duty on new products by China, on new capacity coming into the market. That duty is 23.7% on new assets being built in Canada. That project is no longer on the map.

● (1610)

We talked about the different programs that have been put in place by the federal government since 2008, and we've been involved in most of them, and we can say that there have been some excellent programs—and still are—but one of the first ones that came in the depressed period of 2008-10 was the pulp and paper green transformation program. It was an excellent program, flexible and easy to access, and it generated significant investment and increased the competitiveness of the sector. Many of the mills today that are still here producing and creating jobs have used that program.

The other program, as you know, that's still in place is the IFIT program, and as Dr. Gray was mentioning earlier, so much work has been done in the last five to ten years to develop new products that the demand for IFIT is beyond its funding capability. There's about 10 times the demand for IFIT funding. So there is a lot of good potential for ongoing development in the industry.

We also want to thank the federal government for the ongoing support to R and D to help the transformation of our industry.

Fortress has invested significantly in the secondary transformation of the industry, and I like some of the comments that were made earlier, and we'll be aligned with some of them. One hundred per cent of our production is exported to Asia, with much of our dissolving pulp returning to Europe and North America—and we didn't talk to each other before the call to make our speeches similar—and it comes back in the form of non-woven napkins, wipes, and textile products that are displacing non-environmentally-friendly fibres such as polyester and cotton.

Tertiary industries can be developed in Canada and should be encouraged and supported. There is potential to develop tertiary products in Canada today. The Fortress Speciality Cellulose Mill is a good example of the integrated model promoted by FPAC a few years back and is part of the future of our industry: a dissolving pulp mill with a cogeneration facility and a neighbouring successful hardwood lumber company. The potential exists to develop the integrated model further by expanding into biomaterial, biochemical, and bioproducts, eventually supplying a fibre-producing unit for the high-end textile industry here in Canada.

Canada needs to support and develop the environment for further innovation to take place and new products to see life. We need to attract new players in our industry such as textile, chemical, food, and pharmaceutical companies. We must communicate and educate Canadians and the world that future products will likely be made from renewable resources, and one of the most practical renewable raw materials is wood.

Fortress fully understands the importance of tertiary industry development in Canada. Tariff barriers such as the import tax imposed by China on dissolving pulp produced in Canada since 2013 have caused significant financial harm to our company, and also halted a $300-million investment project in Lebel-sur-Quévillon, Quebec.

We have investment strategies but lack financial capacity and support. One of our thoughts is, is the government ready to facilitate such new product development and innovation in Canada by creating an easy-to-manage development fund for green products?

Thank you for your time, and I'm looking forward to some of your questions.

● (1615)

The Chair: Thank you very much, Mr. Pelletier, for your presentation.

Once again, I want to thank you all very much for being here today and for your fascinating presentations. This is the kind of discussion I was hoping would take place on innovation, and the discussion will continue with the questions and comments from our members, starting with Ms. Crockatt, for up to seven minutes.

Ms. Joan Crockatt (Calgary Centre, CPC): Thank you very much, Mr. Chair.

Thank you to all of you.

I think today I've actually experienced the enthusiasm and the palpable excitement there is around this industry, as we're hearing more and more of the resurgence of our forest sector through the witnesses at this committee , and it's because of gentlemen like you who are spurring a lot of the innovation that we're seeing.

So I want to thank every one of you for your contributions there.

I wanted to start with Mr. Voss, in part because he's from my old alma mater of Saskatoon, and my nephew actually works for West Wind Aviation. So we have a few connections here.

Also, I think there are a couple of innovations that you're telling us about that are particularly exciting. One of them is employment for aboriginals, which is something we've been working very hard on to see if we can improve. So you have strong aboriginal employment at the same time that you're advancing a technological revolution. I wondered whether you could tell us more about why you think that has been successful. Has the government had any role in helping you advance that along, and if so, how has that happened?

● (1620)

The Chair: Go ahead, Mr. Voss.

Mr. Ben Voss: Thank you.

Maybe I'll work backwards in terms of the employment connection.

Ms. Joan Crockatt: Sure.

Mr. Ben Voss: We have gone through a bit of an occurrence that's common in Saskatchewan now where there is a labour shortage. We have a lot of skilled trades shortages, and there is also this extremely high unemployment rate with aboriginal people, which we're also familiar with.

The Meadow Lake region has an abundance of aboriginal people, young people in particular, so the average age among the population is 17. The Meadow Lake Tribal Council has 13 members, half of whom live on-reserve, and the other half are off-reserve. There are big distances between the communities.

We've been working closely with the regional colleges and the professional and technical colleges to implement as many skilled trades training programs as we can. There were some federal programs we partnered with, one in particular called Northern Career Quest. I mentioned in my notes that it has been very successful. We would love to see it return and be rejuvenated because it's had the best outcomes of any program we've seen, largely because it's extremely flexible. It's able to address the immediate needs that are usually not compatible with typical funding programs, so that's been fantastic.

When we went back to the market looking for employees, we found that aboriginal people were the primary applicants, so we just had to make sure that our workplace was really embracing them in terms of their unique youth-oriented needs, which is not really an aboriginal issue but it happens to be just something that's part of the new generation, but we also had to—

Ms. Joan Crockatt: What do you mean by that, though? Maybe you could be specific.

Mr. Ben Voss: Well, we have lots of under-25-year-olds. They have specific desires in life in terms of what they look for, so we've been pretty good at trying to help them and support them.

We have a unionized environment as well so it's working with the union on top of that to adapt some new thinking.

Overall I'd say that we've tried to pull on every lever we could to pull together that workforce and make it successful. It's not without its challenges. We do have—

Ms. Joan Crockatt: Could you maybe be specific on one or two points that you think have actually made that difference for you so that the committee can be a little bit more knowledgeable about some best practices?

Mr. Ben Voss: If you compare us to other forest companies in Saskatchewan, we have by far the highest aboriginal employment. The normal would be perhaps 5% or 10% whereas we're at 75%. We're owned by first nations so there is going to be some strong policy around making sure we put emphasis on promoting job creation among our membership. There are a lot of stakeholders who want to see that happen. Federal government departments want to see it happen. They want to see people moving off social assistance and moving into the workforce, so there is a lot of support.

The Meadow Lake Tribal Council has a number of very successful health and social programs that are active in getting people through graduating from grade 12, getting them into post-secondary training, and getting them into pre-qualification in trades, and that's led to a large number of candidates who are able to come forward to apply for jobs. We don't really have a temporary foreign worker program. We have an abundance of applicants, generally from the region, so it's a bit of a good news story that way.

We would like to see a lot more emphasis on life skills development and helping people integrate when they move from a very remote rural community into Meadow Lake, which is not that urban, 5,000 people, but it's still a big shock for a lot of people.

Ms. Joan Crockatt: Yes.

Mr. Ben Voss: What is it like to rent an apartment, build a lifestyle, get a family established, and put down roots? That's not really common for a lot of young people so we need to help them understand those things. When we strengthen those things they become long-term, stable employees and commit themselves to the company.

We have a lot of strong candidates right now, a lot of shining stars. We're using them as examples to help recruit more like them, and it's going well.

Ms. Joan Crockatt: If you had a recommendation for government, of the programs you've accessed, which would you say you want to see us strengthen and continue? What do you think is a best model that's worked for you?

Mr. Ben Voss: Northern Career Quest, totally.

Ms. Joan Crockatt: Northern Career Quest, okay.

Mr. Ben Voss: Yes, it's a Saskatchewan-specific program. I know that other provinces have looked at it. It's been very successful.

There are some models in Alberta and B.C. that we're looking at as well that are specific to forestry, but we really like Northern Career quest. It's great.

● (1625)

Ms. Joan Crockatt: Thank you.

Dr. Sain, I wonder if I could ask you about the following. We had a tiny conversation just leading up to this when you were saying, “Oh, we could have some products from Toronto being used in collaboration with Alberta”. We're going to need a lot of help in Alberta in the next while because of low oil prices, of course.

Prof. Mohini Mohan Sain: Right.

Ms. Joan Crockatt: I wonder if you could just talk a little bit about the federal programs you've accessed, what has worked, and what you see in the future being some best practices or some newer opportunities.

Prof. Mohini Mohan Sain: First, I think that Alberta has huge forest resources and because of the revenue generated by the oil sands somehow it has not been as much of a revenue-generating sector for Alberta for a long time. This is the time, I think, where companies like Alpac have recently changed, as well as many other smaller companies, in trying to introduce many forms of new technology, like nanocellulose, lignin dried materials, and fibrous automotive applications, and by recommissioning forests inside oil sands industry lands.

It's a huge opportunity for Alberta. Even in mining you have land that needs to be reclaimed. Why not have the Alberta forest industry develop a management skill that would will allow them to grow forests at a fast rate and turn it into grain? Then you can use part of it as bioenergy in a sustainable way to run the system in your oil sands industry. That's one simple example that can give a tremendous stimulus opportunity.

Next, because you are aligned with the petrochemical industry, it is very easy for Alberta's forest industry to give feeds to this industry. As an example, nanocellulose can be used as a material for drilling partners, for example. There's a huge amount of petroleum chemicals going there and it's polluting the mud. Instead, you could have a biochemical that is very environmentally friendly and can replace that. There are many, many applications. I don't want to bore you all, but I consider them—

The Chair: Thank you, but you are out of time, Ms. Crockatt.

Thank you, sir.

We go now to the Official Opposition. Mr. Rafferty, up to seven minutes.

Mr. John Rafferty (Thunder Bay—Rainy River, NDP): Thank you, Chair.

I do agree with you, Chair, that this is a fascinating panel today, and thank you, clerk, for making it all happen.

I was interested in the comment that Mr. Pelletier made. He talked about attracting new partners. One of the ones you mentioned was pharmaceuticals. That got me thinking outside the box, and I think it was Professor Sain, or Professor Rakshit, who said you have to think outside the box. So I'm thinking outside the box. My question is for our two chemists here.

A few months ago the House of Commons passed a motion that we're going to try to get rid of microbeads, because they're filling up our waters, they're filling up our lakes. As you know, Dr. Rakshit, even pristine Lake Superior is not rife with them, but they are there.

To clarify, microbeads are all those things that pharmaceutical companies put in their products—toothpastes and face washes—which end up going through the system because water treatment doesn't collect them. Maybe I'm not the first one to think outside the box on this one and I'll be disappointed if I'm not the first one, but what opportunities might there be to replace those microbeads with a wood product? Nanocrystals, if you don't shrink them a million times, maybe just shrink them 1,000 times, then maybe they'll....

Maybe both of you, Dr. Gray and Dr. Rakshit, could answer that.

The Chair: Dr. Gray, go ahead, please.

Dr. Derek Gray: Thank you, Mr. Chairman.

Yes is the answer. Cellulose is a relatively abrasive polymer and it would work very well as both a stabilizer for lots of toothpaste and stuff like that, so there are many applications that are being looked at. At the moment, it's simply a question of whether the material is available in the right quantities at the right quality for commercialization.

● (1630)

Prof. Sudip Kumar Rakshit: He's more of a chemist; I'm more of a chemical engineer.

It is certainly possible to do it, in the sense that you can make these nanocellulose and cellulosic fibres into smart chemicals, or you can add some characteristics to them that will help get the product to work.

Mr. John Rafferty: So let me ask you, how can Canada be the first one to do this, before other people listen to this and say, "That MP had a good idea here"? How can we do it first, and what kind of government support would help us do that first? That's in general terms because, as you say, there are lots of different sorts of applications, but I'm thinking of microbeads right now.

Hon. Geoff Regan (Halifax West, Lib.): It all started right here.

Mr. John Rafferty: It all started right here in this place.

So what needs to happen to make that happen, because you're talking about price? You're talking about quantities. If you think about what microbeads are used in now these are enormous quantities we're talking about that would be required. What needs to happen and I'm assuming there's a government role here?

Dr. Derek Gray: I don't know how to answer quickly within one minute, but the answer is yes. There's competence in that area at universities, particularly at McMaster University in Hamilton, because there's a mixture of colloid chemists there and people who make nanocrystals, and they're very good at looking for money. So the answer is a combination of NSERC research in the fundamental area, because you have to stabilize these particles, but also CRD money. The real problem is finding a Canadian company that's willing to take on Procter & Gamble. That's the problem. In fact, Procter & Gamble has supported this sort of research at Hamilton as far as I know. That's one contributing factor.

I think one of my colleagues mentioned the need for entrepreneurs. Since people are making handmade soap in kitchens, it would be almost possible if they could buy the nanocrystals to do the same for say toothpaste and cleaning materials. But we need an entrepreneurial activity among students.

If I could just take another minute of your time....

Mr. John Rafferty: Go right ahead, sir.

Dr. Derek Gray: The CREATE program of NSERC is actually encouraging, in giving the soft skills to graduate students and post-docs to pursue entrepreneurial activities. So the answer is it's being done. You just need to get as an MP on the case of the people. I'll give you a list of names.

Mr. John Rafferty: Thank you. I would be happy to. I don't want the patent, by the way, on that. I'm just suggesting that the government could have the patent on it.

Do you want to make a comment, Mr. Rakshit?

Prof. Sudip Kumar Rakshit: I don't want to disappoint you, but you are not the first one to think about it.

But there are two other aspects of it that come up, because the problem we have in Lake Superior is not a common problem that would exist in most other parts of the world. You have a solution to a very typical problem. That brings me to a point I didn't mention during my presentation, which is can we make some products that need the types of materials that only we have?

Unfortunately, and that goes for even a new product like this or anything else, emerging countries always catch up. I'll give you an example of that. In the type of wood we have, we have long fibres that are of much better quality cellulose than those of the eucalyptus, but now over the last 10 or 15 years some of these countries, Brazil, etc. have created, developed, eucalyptus that also has long fibres. So there's not going to be a time that we're going to say we did it first so we're going to stay ahead. We have to continuously be moving ahead; otherwise they're going to be copying us or getting the technology in place anyway.

Mr. John Rafferty: Do I have time for a quick question to Mr. Voss?

The Chair: One quick question.

Mr. John Rafferty: Mr. Voss, you briefly talked about the softwood lumber agreement. I just want your thoughts. It's coming up next year. It's my understanding that if nothing is done, the status quo will simply be maintained.

Did I hear you correctly that you're not entirely sure that's the way the government should go to renew an agreement that looks the same?

Mr. Ben Voss: There are two views on this one. If you make any minor changes at all, then the U.S. is going to jump all over it and want to open the whole thing up for massive renegotiation. So our Canadian negotiators are always hesitant to try to change anything and hope that the status quo just gets renewed. But Saskatchewan has been treated unfairly in the whole agreement throughout. When there weren't sawmills running, there was enough quota. But now that lumber markets have returned, three sawmills are now running where there used to be just one and there isn't enough quota. Whereas with the mountain pine beetle, you had extensive sawmill closures in other provinces and excess quota. So it wouldn't take much to shuffle it around a little bit, but there's a view that this might must just jeopardize the negotiation.

● (1635)

The Chair: Thank you and thank you, Mr. Rafferty.

We go now to our Liberal member on the committee, Mr. Regan, for up to seven minutes.

Hon. Geoff Regan: Thank you very much, Mr. Chairman.

I was interested in Dr. Gray's comment about Procter & Gamble. I've heard it argued that the U.S. has about 20 enormous companies like Procter & Gamble that can afford to do a lot of their own research, which gives that country an enormous advantage in the research area. I don't know how we create more of those in Canada. Think about that for a moment while I turn to Mr. Pelletier for a moment.

[*Translation*]

Mr. Pelletier, you talked about the need to attract new players to the industry. How can we do that?

Mr. Yvon Pelletier: Many of our clients elsewhere in the world don't have any production facilities in Canada. I think that if we were to work with the federal and provincial governments to put in place programs that would help them set up in the provinces, certain production sectors could be very competitive. Those efforts would help bring clients to us. We know of some who consider setting up in Canada, but they don't take the next step. With the right conditions in place, I believe we'd be able to attract them given the tremendous advantages we offer. As was said earlier, we have a considerable amount of fibre. And if you look around the world, our fibre is of high quality and competitive. It's not the same as what they have in Brazil, but it is competitive.

Energy-wise, some provinces have very low energy costs as compared with the rest of the world. So we do offer certain advantages.

And you are no doubt aware that the cost of investing in Canada is quite high. I know, having done it myself, back with my old company and now. New investors are reluctant to invest $100 million, $200 million or $300 million in Canada. We need to encourage them to set up facilities and make new products here.

Hon. Geoff Regan: Should we be doing more biorefining in Canada? Is that something you see happening? What role would the government play in that area?

[*English*]

I would also like to have the comments of Dr. Gray and Dr. Rakshit on that, if possible, if there's time.

The Chair: We'll hear from Mr. Pelletier, first.

Mr. Yvon Pelletier: Okay.

Thank you.

Our mill is moving toward biorefinery.

We talked about the IFIT program, which is excellent. The problem right now is that we submitted...and not enough funds are available. We have a two-to-five-year plan to go more into biochemical and bioproducts, but our financial capability right now is not strong enough to do that on our own. These are new products, and there's risk, etc. The IFIT program is a good fit for us to help us get there faster, not in 10 years, but maybe in two to five years. We're also working with the provincial government to see if there are avenues to expedite some of those investments. It's definitely a model that works.

The Chair: Thank you.

Mr. Gray.

Dr. Derek Gray: Going back to your first question, it's hard to fight Procter & Gamble. It's no easy task.

I think we have to take an end run around Procter & Gamble. There's a lifetime for all large corporations. Small countries like Finland manage to develop world-class industries from nothing, using a population base that's much smaller than Canada's. We need to encourage the entrepreneurs to start the next Procter & Gamble.

● (1640)

Prof. Sudip Kumar Rakshit: I'd like to answer the other question about the biochemical tertiary-level product.

One of the key problems with that is the cost of crude petroleum. There are many examples of products that can be made from bioresources, but they are not made economically in the correct scale. There are a number of parameters. It has to be in the correct scale and it has to be made more cheaply than the raw material cost, especially now with crude at $60—or even $100, if we're not competitive, but at $60 we'll have to wait. One of the first comments I made is that we'll have to wait for the petroleum price to rebound before we think of some of them. In the meantime we have to see if we can cut costs in different ways.

For example, in the case of bioethanol, which I see as the lowest denominator, we've been trying to do this for maybe 25 years. These traditional things will not work, and we'll have to do genetic engineering and such things to get there. I'm not saying that we have to stop; we have to go on to look for a cheaper technology.

Hon. Geoff Regan: Mr. Voss, I mentioned to you earlier that my mother was born in Medstead, and you said you were born 10 miles down the road. She grew up there, I should say. She was born in Glenbush, as a matter of fact.

That isn't the only the reason I want to ask you a question, though. You talked about the need for expanded and enhanced programs. What federal programs would you like to see created, enhanced, or expanded?

Mr. Ben Voss: IFIT has been mentioned, and that would be a great one. We've been interested in applying for that particularly related to our bioenergy initiatives because they are somewhat cutting edge, and when you can't attract funding, you're typically always defaulting to lower technology solutions that are more comfortable for banks. Innovative investing is directly linked to the leading edge, so if you're going to try something new, banks aren't interested, and investors aren't that excited about risk.

So you default to the proven technology, the ones the engineers will guarantee will work, and that's what you build. If you want to build something exciting and new and adapt technologies from universities, which we would love to do, qualifying for funding is tough.

There are all kinds of things that were mentioned. In the pelleting industry we could go with torrefied pellets which is a brand new market that replaces coal. It would be a fantastic new technology, but it's a little bit unproven in Canada. We would have to import the technology from other places or work with universities to develop it further. We would love to partner more in that.

The programs I did mention that work for most of the forest companies, like accelerated capital cost allowance or SR and ED programs, don't work with first nations-owned companies. Our corporate structure doesn't qualify, so there are some gaps there. We would love to see those gaps addressed because we're being penalized, essentially, compared to our peers.

The Chair: Thank you, Mr. Voss.

Thank you, Mr. Regan.

We'll start the five-minute round now with Mr. Trost, followed by Ms. Block, and then Monsieur Caron.

Mr. Gray, you talked about having to do an end run around Proctor & Gamble. Why not sell the technology to them, or work with them?

Dr. Derek Gray: Yes, this works in some circumstances. You must have a receptor. You must know someone there who's keen and who trusts you. It takes time to build this up. The company's almost too big. It's difficult to move in any given direction. They're not going to risk their markets by wasting time on something that's not clear.

But the answer is yes. You can certainly work with them, and you can certainly work with them as a supplier. For example, a supplier of nanocrystal cellulose will get validated by Proctor & Gamble, and they will buy it. But they will almost certainly want to make sure they have two suppliers. This is the other facet you always meet up against.

The Chair: Sure. Thank you.

Mr. Trost, go ahead, for five minutes, please.

● (1645)

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair.

Some of this has been a little bit covered, but I want to ask the question more directly. I guess Mr. Pelletier would be the best person to answer the question.

You referred to both the green transformation program, and we've had quite a bit of discussion about IFIT. Walk me through again why those programs were productive, not just for you as a company. I'm not trying to be ungracious here, but everyone who comes in front of us always says whatever money you give me is good money, and so we are a little bit interested in not just how it was good for the company, but how it was good as a program for the overall industry, and of course, for the communities affected.

So walk me through green transformation. That was a bit of a bigger program not carried forward in quite the same sense, but IFIT has been renewed, and it's possible it could be renewed again in the future.

So walk me through. Why were those two such strategic investments for the industry overall? Use your company as an example, and work from there.

Mr. Yvon Pelletier: We've been involved since the beginning of the program many years ago with the government and FPAC and so forth. That has allowed us a lot of potential in our industry to improve product cost and productivity and so on. The green transformation program was related mostly to existing assets and to improving the current assets.

The problem is that we've had a period of very challenging times and difficulty accessing money. The green transformation program helped many of us in the industry to get from one quartile to the next on the cost curve. It did made a difference so that perhaps 50% more assets weren't closed in the last five or seven years. They're here today and they're thriving and they're building and developing and so forth. That program, I think, was key in keeping many assets thriving today.

I hope that answered the question.

I think IFIT has been a good program. A lot of good projects have come out of it. Under the recent renewal, which I think I mentioned earlier, it was oversubscribed more than 10 times, with a billion dollars plus in projects submitted versus $94 million or $96 million being available over the two- or three-year period. So further to the points made by my colleagues earlier, a lot of good research has been done, but to finance those projects today we need government assistance.

As was mentioned by my colleague earlier, we can't go to our bank or typical financial institution to finance these projects. We don't get the money, so we need the provincial and federal governments' assistance to move forward.

Tons of projects are available today to get us to another level of competition.

Mr. Brad Trost: Would I be correct—

Mr. Marco Veilleux (Vice President, Business Development and Special Projects , Fortress Paper): If I may say, in the application for the PPGTP program especially we did not face the constraints we normally do for pre-funding or pre-spending, so the application rules of the program were much easier. I think that's one of the keys, along with the spirit of the program, which was to modernize the industry, namely, the ease of access to the fund and the ease of access of applications. There was good governance through the NRCan team and a very rapid deployment of the fund, with a couple of criteria that made it very easy. That's in line with some of the comments made earlier today.

Mr. Brad Trost: Let me just close this, because I have about 20 seconds for the other panellists.

Would that flexibility you observed in working government programs make the dollar value go further than having overly prescriptive, narrow programs? That's what I heard from the testimony here. I want to know if the other four gentlemen, more from academia but also from business, think that would be a correct observation.

Mr. Gray.

● (1650)

The Chair: I'll just take an answer from one of you.

Mr. Gray, go ahead then.

Dr. Derek Gray: The answer is yes.

Certainly from the academic point of view, the flexibility of the discovery grants, which are essentially seed grants to try what you like, is absolutely great. I'm the envy of all my colleagues south of the border.

The Chair: If someone would like to ask that question to the others, that would be fine.

We'll go now to Ms. Block.

You have up to five minutes. Go ahead, please.

Mrs. Kelly Block (Saskatoon—Rosetown—Biggar, CPC): Thank you very much, Mr. Chair.

I want to echo my colleagues' comments in welcoming you here today. It has been a good discussion so far. It may come as no surprise that coming from Saskatchewan, I'm going to direct a lot of my questions to Mr. Voss.

I will state for the record that my family and I spend a fair bit of time in Meadow Lake Provincial Park. I guess it's involved with a facility that's on Jeanette Lake. I can recall about a decade ago attending consultations when the park was doing some work to try to reconfigure the roads to accommodate your industry, and I think even your organization, in trucking lumber out of park. While we lost direct road access to Flotten Creek, we got great roads out of it and the access to our facility greatly improved. We're grateful for that, and we're very supportive of all of the economic development that has happened in that area as a result.

I wanted to follow up on some of the things that you said in your opening remarks. You talked about some of the challenges you have accessing federal programs. I know that NRCan has a long-standing relationship with your organization through the first nation forestry program and the aboriginal forestry initiative, so I want to give you an opportunity to share with us how that has helped contribute to the work that you do and the success of your business.

Mr. Ben Voss: We work with a wide range of federal and provincial programs, but mostly federal ones. FPInnovations is a huge partner and a recipient of a lot of federal funding.

The aboriginal forestry initiative has been an ongoing partner in many ways. For example, when we need to apply a brand new technology in the harvesting of timber, we need to train those individuals on how that technology works—it's pretty high-tech these days, not chainsaws and skidders as it used to be—so we benefit directly that way.

We work very closely in community consultation. There's a lot of work done on sustainable forest management. That has, as you mentioned earlier, a lot of implications for our discussions of our forestry plans with our communities, including non-aboriginal communities. There's a strong emphasis on that. We have a number of infrastructure-related matters that are captured under that, like studying how to be more effective at using the base infrastructure, such as the roads, and making sure we don't destroy it with overuse.

There are always a number of initiatives that we're able to capture with those programs. The dollar amounts aren't huge and they're not capital related, but they are helpful. As an aboriginal company, we do have some good relationships with those national programs that have been active. I think most of those groups have been relatively excited about MLTC, because we regularly get visitors. Probably at least once a month some other aboriginal group from across the country comes to tour our operations, to understand Mistik Management and how it's been possible for this first nation group to own the saw mills and all of the associated industries for more than 30 years.

Mrs. Kelly Block: It was back in December 2007, recognizing the structural and conjunctural factors that the Canadian forest products industry was going through, which many would have called the worst crisis in its history, that this committee embarked on a study and tabled it in 2008.

The purpose of this study is to take a look at what's happened over the last seven years in the industry. I know you came on with MLTC right around the time this industry would have been at its lowest point.

● (1655)

Mr. Ben Voss: Yes.

Mrs. Kelly Block: Can you describe for us how the industry has changed over the last seven to eight years?

Mr. Ben Voss: As I mentioned earlier—at least in Saskatchewan, and we do see it across the country—you typically saw a really big company owning the forest industry. Weyerhaeuser was the dominant investor in Saskatchewan and they owned the sawmills and the pulp mill. It was this idea that they both had to work together. One would support the other in good times and bad, and they'd make these two products, paper and lumber. Then Weyerhaeuser left. They sold everything and walked away and everything closed. We were one of the only independently owned mills. We survived. We were able to maintain some competitive advantages and remained open, which was a big achievement.

The pulp mill that's still running in Meadow Lake went through receivership; it's now foreign-owned. There were all these massive transformational changes and major bankruptcies. They all settled things out, but the industry's a lot less big-thinking than it used to be. There isn't that cohesiveness and that coordinated effort of the past. It's fragile, from the perspective that the relationships aren't that productive amongst the parties. We're kind of different, because we're first nations-owned, but most of those foreign companies don't really understand that. They don't really understand the relationship between first nations and the forest sector, which is obviously a pretty big thing these days. We have a lot of educating to do, typically to help them understand why it's important and why it's a good thing. And I would say the coordinated investment in the industry is really lacking. Those are the big things. Maybe they were there before, but through the crisis they really haven't improved that way.

Regarding the technological innovations, which we've heard lots about today, there's a struggle to get those investments together, so nobody's been plowing a lot of money into massive new mills, at least in Saskatchewan, to build something innovative. It has pretty well been a matter of, how do we keep the traditional industry going? How do we be sustainable? We just had to make a decision to go out on our own and try to be independent and build some new things and make it work.

The Chair: Okay, thank you, Mr. Voss.

Thank you, Ms. Block.

We go now to Monsieur Caron, Ms. Perkins, and then Monsieur Morin.

Go ahead, please, monsieur Caron.

[*Translation*]

Mr. Guy Caron (Rimouski-Neigette—Témiscouata—Les Basques, NDP): Thank you, Mr. Chair. I'd also like to thank the witnesses for their presentations.

I'm going to focus on Mr. Veilleux and Mr. Pelletier, from Fortress Paper.

Before becoming an MP, I was an economist for the Communications, Energy and Paperworkers Union of Canada, which represented workers at the Thurso plant during a difficult period, marked by considerable talk of diversifying the industry. When the plant was purchased and converted, it was wonderful news for the municipality and workers.

You said that the industry and your company were having a rough time given the complaint from China. I have a few questions about that. I know you asked the Canadian government to get involved, and it did. That intervention took the form of a special tribunal. Where does the process stand now?

Mr. Yvon Pelletier: It's following its course. I believe the governments are in the midst of setting up the tribunal or committee that will review the complaint. As you know, it can be quite a lengthy process.

Mr. Guy Caron: We've been through it numerous times, especially in the softwood lumber industry.

Are you worried that this kind of complaint, whether from China or another country, will have a chilling effect on the industry's diversification, especially when it comes to cellulose or rayon pulp? Conversion and new markets are possible in other areas as well.

Mr. Yvon Pelletier: With respect to dissolving pulp used in rayon production, specifically, three major project investments have been the subject of talks in recent years. Two were completely cancelled, one being ours. There's no doubt that China's implementation of an import duty on Canadian dissolving pulp brought major investment opportunities in Canada to a halt. As for whether that could have repercussions on other products, I would say it depends on China's influence on the market in question. Obviously, China has the potential for protectionist behaviour and isn't necessarily competitive in certain areas.

● (1700)

Mr. Guy Caron: Thank you very much.

I can also see that, when it comes to our markets, we have no control over the actions of other countries.

What measures would you recommend in order to minimize the risks from these kinds of issues, whether in terms of your products or other diversified products?

Mr. Yvon Pelletier: From my many years of experience, with China, among others, I would say that the most important thing is the relationship between the various parties. If we are to keep market opportunities open, we must maintain a very good relationship with the Chinese government and, certainly, improve that relationship.

Mr. Guy Caron: Canada is less competitive in certain areas today than it used to be, for example, in newsprint and pulp, in general. Obviously, our capacity has decreased given that we've lost the ability to compete and that production has shifted to other parts of the world.

As far as products like cellulose, and dissolving and rayon pulp are concerned, do you think there is still potential for expansion for your company, your competition, even? Is there still enough room in the market for Canada to play a role?

Lastly, I want to ask you a corollary question. At the global level, where does the competition stand?

Mr. Yvon Pelletier: As far as plants go, I think that, in the short term, within the next five years, the tax on exports to China will really minimize the potential for conversion. In five to ten years, the market will continue to expand. India and Indonesia, for example, are increasingly growing their markets. That means that other markets will open up, as will new opportunities.

As for the industry's ability to compete, we are in the second quartile. Between 40% and 50% of our production costs are at the international level. That's public information. Our plants can be competitive within that window.

Mr. Guy Caron: In a nutshell, then, despite the current legal dispute, there is still room for expansion. And without that dispute, Canada could become an enviable player in the global market more quickly.

Mr. Yvon Pelletier: Absolutely.

The Chair: Thank you, Mr. Caron.

[*English*]

Ms. Perkins, go ahead, please.

You have up to five minutes.

Mrs. Pat Perkins (Whitby—Oshawa, CPC): Thank you, Mr. Chairman.

I want to thank all of you for your presentations today.

It's been very enlightening. Where do we start with all of this because you've all got such great input?

I'll start with this concept of the entrepreneurial opportunities.

I think it was Dr. Gray who spoke about the funding that's required to do the entrepreneurial end of getting some of these products going. In the bamboo industry, I know you may be familiar with what they've done with respect to clothing, bedding, towels, and all sorts of other things that they're doing with bamboo now. It's in very high demand. You're talking about another method of using wood that could ultimately become high demand.

We've got things going on in government investment, a lot of things going in universities, such as robotics in innovation and sciences. I think $10 million in the form of a research grant just went to a combination of Simon Fraser University, the University of Ontario Institute of Technology, and Ryerson, for a program. It really was about entrepreneurial opportunities utilizing folks in the science and technology fields to try to bring new innovative products online.

Are you familiar with any of that?

● (1705)

Dr. Derek Gray: Not with that specific program, but within the CREATE program there is a network of universities across Canada. There is the FIBRE network, which is a network of all the other networks concerned with wood products and with the environment related to the forests. It's a very active set of networks. It's meeting on Monday. Part of that meeting is to encourage graduate students to learn about entrepreneurial activities, for example. They have a sort of systems approach, and throw the students in to try to learn the techniques that are necessary. So the answer is yes, the money is coming in from the—

Mrs. Pat Perkins: We should look at that a little bit further and see whether there are these opportunities in the programs that are existing right now—

Dr. Derek Gray: If you want to see what's happening in that, google "FIBRE", which is directed by Dr. van de Ven out of Montreal. Lots of people here are involved with it; it's right across the country.

Mrs. Pat Perkins: Okay, I'm glad to hear that. I'll hear a little bit more, obviously, in a minute.

Mr. Voss, you talked about a quota problem, about there being an abundance of leeway in B.C. and that it's tight in Saskatchewan. What's the opportunity for the government to deal with any of that? How does your quota system work and who governs it?

Mr. Ben Voss: The softwood lumber agreement, which is managed by the department of international trade, has an organization that negotiates with the U.S. on the terms of the agreement, and Canada is divided into many different regions. Saskatchewan is part of the eastern Canadian region; Alberta, and B.C. are another region. There are different options that have been negotiated for how quota is used and the duties that are paid on exports to the United States.

Saskatchewan was given a very small amount of quota at the time it was negotiated. There wasn't much lumber production. There wasn't really a prediction that B.C.'s lumber production was going to decline significantly; but the mountain pine beetle has been worse than expected, so they have an extra quota that was established years ago. They're not using it all. Saskatchewan has now increased its output because we have no mountain pine beetle, so there's—

Mrs. Pat Perkins: There's no ability within the Canadian envelope of this agreement to trade off the location in which the wood is sourced.

Mr. Ben Voss: There is a way to do it.

Mrs. Pat Perkins: That won't compromise your agreement with the States?

Mr. Ben Voss: Well, that's the trick. There are different views. Our view would be that they could do it quite easily and it wouldn't jeopardize the negotiations because there wouldn't be an overall change in the quota across the country, but the negotiators are very sensitive about the possibility that any change at all, even subtle changes, might result in the U.S. side—

[*Translation*]

Mr. Guy Caron: Thank you kindly, Ms. Perkins. That's all the time we have for this round of questions.

It is now over to Mr. Morin for five minutes.

Mr. Dany Morin (Chicoutimi—Le Fjord, NDP): Thank you very much.

My questions are for Mr. Veilleux and Mr. Pelletier.

I want to start by saying how disappointed I was to hear you give your presentation in English. I will be asking my questions in French.

I was pleased to hear you talk about the investments in forest industry transformation, or IFIT, program and its importance. My Conservative colleague, Mr. Trost, said that it was important for every federal dollar to go farther, and I agree with him. But it all boils down to the numbers.

Last year, the Conservative government proposed beefing up the program by $90.4 million over 4 years. As you mentioned, the needs of the forest industry are great indeed. In its pre-budget report, the Forest Products Association of Canada asked the government to increase the program's funding by $500 million over 6 years, because that amount accurately represented the forest industry's needs. Obviously, it's music to your ears when the forest industry gets money from the federal or another level of government.

I want you to talk about projects that you'd like to carry out if the federal government were to enhance the program's funding, projects that would be a boon for not just Canada's forest industry, but also the economy, as a whole. I'm often disappointed that the Conservative government, whose financial resources are limited, gives more money to the automobile sector than to the forestry sector.

If the federal government were to beef up IFIT program funding by $500 million, as requested by the Forest Products Association of Canada, what projects would your company, as well as the others represented here today, put forward?

● (1710)

Mr. Yvon Pelletier: I am going to answer your question, and then I'd like to follow up on an important point that was raised earlier in response to the previous question.

There were projects valued at more than a billion dollars that would lead to new product development and strengthen the industry's ability to compete, as well as promote the use of fibres here in Canada. There are a tremendous number of projects in various industries, be they wood, paper or pulp.

Without getting into specifics, we are continuing to develop the biorefining component. Some of our projects will enable us to use residue, which has some value, and develop it in order to manufacture new products that will replace plastics, fuels and the like. And all those efforts will make us more competitive.

The research that's been done over the last five or ten years holds significant potential and can certainly help Canada's industry grow more quickly and make it stronger.

Now I'd like to follow up on what was said about bamboo fibre.

Mr. Dany Morin: Excuse me, Mr. Pelletier, but I don't have much time and I'd like to ask you another question.

Mr. Yvon Pelletier: Okay.

Mr. Dany Morin: You mentioned biorefining. Do you support the Forest Products Association of Canada's request that the government redirect all undeployed capital from Sustainable Development Technology Canada's $500 million NextGen biofuels fund to a biorefinery fund that would cover the full spectrum of bio-energy, bio-chemical and bio-material opportunities?

Mr. Yvon Pelletier: Absolutely. We've looked at the fund numerous times. According to the comments we've heard, it's not being used because it's difficult to access. What's more, there is considerable potential there to advance the forest industry.

Mr. Dany Morin: Do you have the sense that the federal government isn't all that willing to change the eligibility criteria for those programs?

Mr. Yvon Pelletier: I can't really answer that, given that the request is fairly recent, if I'm not mistaken. So I can't comment on that.

Mr. Dany Morin: Do I have any time left, Mr. Chair?

[*English*]

The Chair: Your time is up. There will be another round going to the New Democrats.

Next we have Mr. Leef.

Mr. Ryan Leef (Yukon, CPC): Thank you very much, Mr. Chair.

Thank you all.

Some of the testimony was interesting. It was pretty technical and very different from what we've heard in this study so far. It's going to be an excellent addition to what we've already heard.

I'm just wondering if I could ask a question of each of you, if we have the time to go through it. It's perhaps a bit of a pie-in-the-sky question, but maybe you'll be succinct. What do you see Canada having right now that no other country has that we can build on? I don't mean to restrict that to the raw resource itself, but include innovation, skills, human resources, diversity, political action, volumes of product, policies, or legislation. You can run the gamut if you want. Where does Canada stand in terms of the one thing nobody else in the world has?

The Chair: Dr. Sain, go ahead, please.

Prof. Mohini Mohan Sain: I think Canada is a leader in developing the biorefinery concept. In particular, the products coming out of the university are not even comparable to any other vast quantity. I think our focus should be in that direction and we should work with our whole sector of forest products and others to advance that, and commercially that will make the market. This is the fundamental thing.

The second thing is about entrepreneurship The young generation wants to create their own companies, and they're creating their own companies. I can tell you, from the University of Toronto we create 364 companies every day. I have forest students who've created companies. We have to nurture that. We have to give them support so that they can have a commercial product, which can then be picked up by a factory like Mr. Pelletier has. That will integrate us and give it global market and capital. I think these are the things we need to do.

Thank you.

● (1715)

Mr. Ryan Leef: Thank you.

The Chair: Go ahead please, Professor.

Prof. Sudip Kumar Rakshit: Starting from the raw material, and you said not to talk about that, but since we have that, we have been working in all of these areas. In many areas we are leading, as I mentioned repeatedly, on the nanocrystalline material, carbon fibres, and such things.

As I have repeatedly said, there are many products, in spite of these innovations, where we are not able to meet the price, sourced from the crude petroleum oil industry. When the price bounces back, we will be in the game again.

We have the know-how, we have the scientists working on it, and entrepreneurs are working on products that are not bulk products but high-value small-volume products, but many of them are restricted by their sourcing from other raw material.

Mr. Ryan Leef: Thank you.

The Chair: Mr. Voss, do you want to speak to that?

Mr. Ben Voss: I can add a little different flavour. I'm an engineer and I love technology.

We do have tons of interesting innovation in Canada, but probably the one thing I'd say that no one else has said is that we're close to the U.S. market. The biggest consumer market in the world is right next door—a six-hour drive. It really is easy to produce here and ship into that market, and globally most companies want to position their production here if they can access the market. So that's a natural advantage that I don't know if we're capitalizing on as well as we could.

The whole concept of exporting the raw material and bringing it back here could be definitely explored further as some low-hanging fruit.

Mr. Ryan Leef: Thank you.

The Chair: Thank you.

Mr. Pelletier or Mr. Veilleux, go ahead please.

Mr. Yvon Pelletier: One point that we've made in our presentation, which Mr. Voss just spoke about again, is that we need to repatriate some of the products that are being made elsewhere. I think we need to create the right hosting conditions together. There are some people looking at that, but as I said, they are not taking the extra step because the hosting conditions are not quite there.

We need work, again, at the federal and provincial levels, and with some partners to create those hosting conditions, and I think we would bring in some products that are very innovative, that have gone through the development cycle.

The development cycle, for everyone's information, is not one or two to three years. It's five, ten or fifteen years for a product. The product I'm talking about has been in the market for 15 years and it's starting to get going right now.

We need to bridge the gap between now and 10 years, and there's not enough of that happening. We need to create those hosting conditions to bridge that gap.

[*Translation*]

Mr. Marco Veilleux: There is another key point. Canada's forests are sustainably managed. We do an excellent job of managing that resource; we are leaders in that respect. We have access to a renewable fibre that will be there for years to come. That's a key condition. We also have an extensive research network in Canada; we have many people with a lot of passion for forestry and the forest industry. Those are things that give our industry and Canada, overall, an advantage, but we have to put the right conditions in place to attract tertiary processing.

The Chair: Thank you.

[*English*]

Thank you, Mr. Leef.

Finally, we'll go to Mr. Caron and Mr. Rafferty.

[*Translation*]

Mr. Guy Caron: Thank you, Mr. Chair. You're right, I will be sharing my time with Mr. Rafferty.

I just have one question. Mr. Pelletier, my sense is that you really wanted to say something about bamboo. And now I'm going to give you that chance.

● (1720)

Mr. Yvon Pelletier: Bamboo was one of the products mentioned earlier, but it represents a small share of the market. I talked about another fibre, Tencel, that could be developed in Canada. It holds a large share of this new market and there's potential to develop that market here, in Canada. These people want to invest all over the world and haven't necessarily made their final decision. It would be beneficial to sit down with them in order to create the conditions they need to build their manufacturing facilities here.

Mr. Guy Caron: Thank you.

[*English*]

The Chair: For 10 minutes, please, Mr. Rafferty.

Mr. John Rafferty: Thank you very much, Mr. Chair.

Dr. Rakshit and Mr. Voss, you both talked about the problems that Canada has in being competitive. You mentioned, in particular, transportation and markets. I wonder if you both could answer this briefly.

Where does the federal government have a role, or maybe a more robust role, to play in narrowing this competitive gap that you're both talking about? Either one can go first.

Mr. Ben Voss: I will talk more to bread and butter issues than innovation-related issues.

The infrastructure deficits are massive. In the period from 2007 to 2010 the rail line to Meadow Lake was ripped out, which seems unbelievable when you think of the need to move product to market. There's no rail line any more, so now we invest tens of millions of dollars a year to pave highways to move product to market. The issue that is front and centre right now is that grain and all related products are struggling to move their product to market. We have to go by truck; rail is not reliable. That is a fundamental national issue that should be addressed. That is the role of the federal government.

When it comes to the ability to adapt new technology, you would find that most federal government programs encourage you to create jobs, but not necessarily to cut jobs. Investment in technology cuts jobs and it's a good news story because that preserves jobs. Would you rather close the mill because it's not viable, or invest in new technology and training people to run new technology? We have a great opportunity to look at adapting some of our programming and to look at that realm of our economy where we focus on training people in much higher technology fields to run this high-tech equipment rather than just be a labourer working in a plant. I think that's where most young people want to go anyway.

Prof. Sudip Kumar Rakshit: If I understand your question correctly, one of the problems is the cost of transportation, as I said earlier. When you compare that with emerging economies, their transportation and labour costs are low, and they don't have environmental requirements. All of this makes our processing.... More than $120 only for the transportation cuts into a lot of the revenue.

When it comes to existing pulp and paper mills, such as the mill in Thunder Bay that was mentioned, I see them in 10 years time being an energy producer rather than a paper or pulp producer. They're already heading in that direction, where 50% of them will be producing pellets rather than.... Talking about pellets, as all of us know, we used to send pellets from British Columbia to Europe, but there is a possibility that it would now be sent even from Thunder Bay because of some of the new technologies for transferring the pellets from the smaller boats to bigger boats. It used to be a major cost factor. At least one company, Rentech, has developed some technology that would make it—

Mr. John Rafferty: Do I have a moment?

Prof. Sudip Kumar Rakshit: I don't know what other strings are attached to that. When I first came here I used to find it very strange that it's possible to export from British Columbia and not from Thunder Bay, but now Rentech seems to have solved that problem. If they have solved that problem—they have a 10-year contract, from what I hear—then more companies can be doing that, and that will take care of some of these companies that are having problems staying viable.

Mr. John Rafferty: Thank you.

The Chair: Thank you all very much for being here today. It was a fascinating meeting and it did add to our study substantially.

Thank you to Mr. Voss, Dr. Gray, Professor Rakshit, Dr. Sain, Mr. Pelletier, and Mr. Veilleux. Thank you so much. We do appreciate your being here. We look forward to putting the information you've given us into our study.

The meeting is adjourned.