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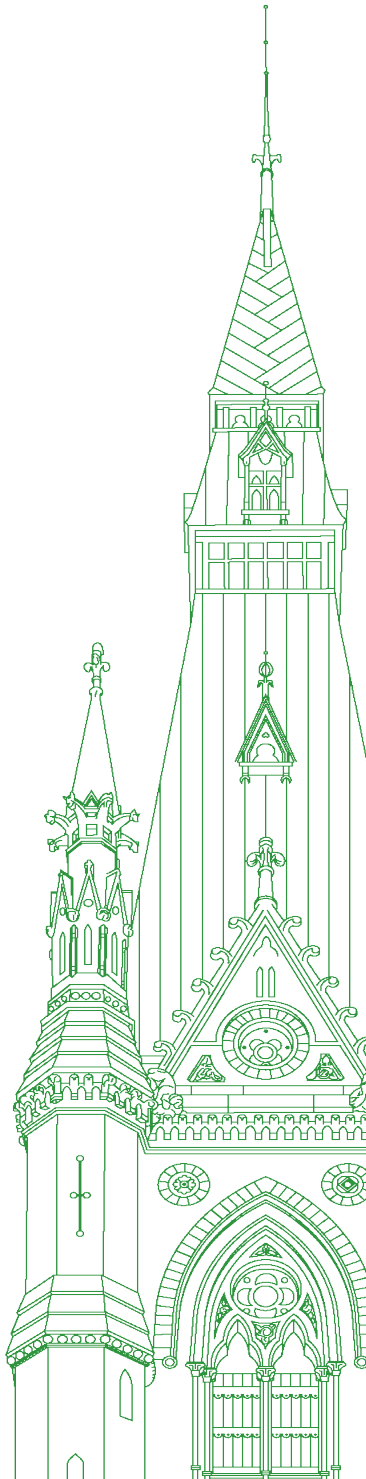

Chair: The Honourable Kirsty Duncan

Standing Committee on Science and Research

Tuesday, March 7, 2023

● (1100)

[*English*]

The Vice-Chair (Mr. Corey Tochor (Saskatoon—University, CPC)): I call this meeting to order.

Welcome to meeting number 32 of the House of Commons Standing Committee on Science and Research.

Today's meeting is taking place in a hybrid format pursuant to the House order of June 23, 2022. Members are attending in person in the room and remotely using the Zoom application.

Today, we are beginning our study of the support for the commercialization of intellectual property.

I'd like to make a few comments for the benefit of witnesses and members.

Please wait until I recognize you by name before speaking. For those taking part by video conference, click on the microphone icon to activate your mike, and please mute yourself when you are not speaking. For interpretation on Zoom, you can select, at the bottom corner of your screen, English, French or floor. I will remind you that all comments should be addressed through the chair.

I now would like to welcome our witnesses to our committee.

Each of you will have five minutes. I will do my best to get your attention when you have roughly a minute left. If you could keep it within five minutes, that would be beneficial.

For opening statements, we'll first hear from Mr. McLean.

Mr. Mike McLean (Chief Executive Officer, Innovation Asset Collective): Thank you, Mr. Chair.

Thank you to the committee for the opportunity to speak today.

My name is Mike McLean. I'm the CEO of the Innovation Asset Collective, which is a not-for-profit funded by the federal government to improve the ability of Canadian companies to implement IP strategy and increase their freedom to operate. IAC is led by IP experts who help Canada's entrepreneurs and innovators develop the IP positions they need to compete on the world stage.

Canada faces an ongoing IP challenge. Despite being a nation of innovators, we remain poor owners of IP, which is the currency of today's global economy. Intangible assets, as a percentage of Canada's economy, have been shrinking since 2000. Patent applications from Canadian enterprises have declined on a per capita basis since 2005. Canada is struggling to create strategies driven by IP and data. This raises concerns about our ability to compete in the global ideas economy. The OECD shows that Canada is lagging other advanced countries, with a predicted per capita GDP growth of only 0.7% per year through 2030.

Traditional incentives to increase investment, such as lower interest rates or tax breaks, are ineffective in the knowledge-based economy as they do not account for the ownership of IP and the control of data, which is required to ensure that a firm's investments in R and D turn into new revenue.

IP and data are exclusionary assets used to limit competitors or to capture the financial benefits of innovation that come in the form of IP or data rents. You cannot commercialize what you don't own. Only companies with sufficient freedom to operate can be assured of capturing the high returns that deliver prosperity to Canada's economy. In comparison, many countries are implementing strategies to successfully commercialize innovation and build dominant IP positions that secure an unequal share of financial returns.

China recently released a 115-point plan, called the “Outline for Building a Powerful Intellectual Property Country”, which highlights the country's dedication to becoming an IP superpower. South Korea, France and Japan have each established sovereign patent funds to advance those countries' IP positions. Centralized IP resources such as those in Germany's Fraunhofer institutes and Singapore's IP Office help propel those nations to the top spots in global innovation rankings.

The Government of Canada has recognized a need for change and announced its IP strategy in 2019. This included a $30-million investment in a pilot project, which became IAC. During our time as a pilot program, IAC has gleaned valuable insights from the businesses that form our membership.

Canadian SMEs face challenges in developing self-sufficient IP positions. The first challenge is the time required to build such a position. A single patent can take four to five years to issue. Building a portfolio of rights requires a long-term investment.

A second challenge is the limited capacity of talent in Canada with the necessary expertise. The majority of IP professionals in Canada are focused on securing IP rights or litigating disputes related to those rights. Only a small minority understand the IP strategies and commercialization models that are required to create sustainable differentiation in international markets.

The final challenge is the expense. Companies with limited capital will often focus their spending on building and selling products, rather than on securing the IP needed to sustain profitable growth.

Fortunately, there are solutions to these challenges.

It is possible to build a resilient ecosystem that can improve the freedom to operate for Canadian companies until they have self-sufficient IP positions, increase the capacity for business leaders to build IP strategies and ownership positions necessary for commercial success, and help fund the consistent activity needed across the board. Investment in collective approaches rather than individual firms is part of creating this resiliency.

IAC is proud to play a role in testing and implementing some of these concepts. We are building a patent collective that will protect Canadian clean-tech companies and increase their freedom to operate as they grow and access new markets. We have also sourced IP insurance to cover costs to defend or enforce IP rights. IAC's collective model allows Canadian innovators to access much-needed IP resources and cost savings.

To continue building the capacity of Canadian innovators and entrepreneurs also requires IP education that is focused on IP strategy and building capabilities within businesses to commercialize IP. We need to build IP-savvy business leaders. Programs like those funded by ElevateIP and IRAP's IP assist, or those built by IAC or IP Ontario will move this process forward.

Complementary to IP education is access to IP funding to encourage capital-constrained innovators to consistently act to secure the IP needed to scale their businesses.

Efforts are under way at the federal, provincial and regional level to help improve Canada's IP capacity. However, the investment in these programs is extremely limited compared with the billions of dollars spent annually on innovation. These programs require funding at an increased scale and the will to sustain them over the long term in order to deliver a systemic impact on Canadian prosperity.

● (1105)

Coordination and collaboration across these efforts is also needed to maximize impact for Canadian companies.

Canada has some of the best talent and expertise in innovation and an enormous opportunity to advance this country's economic growth, but the window of opportunity will not be open forever. We must act quickly to establish the strategies and infrastructure that are needed to prosper in a global ideas economy.

Thank you.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Now we're moving to our next presenter for five minutes.

Go ahead, please, Mr. Binette.

Mr. Louis-Félix Binette (Executive Director, Mouvement des accélérateurs d'innovation du Québec): Thank you, Mr. Chair.

[*Translation*]

I'd like to thank the committee members here today.

I am pleased to be here to discuss support for the commercialization of intellectual property.

However, as far as the biggest challenges facing society and the planet go, I think the real question we need to answer is this: In the years to come, will Canada be a net consumer of innovative solutions produced and invented elsewhere or a net exporter of solutions developed here?

What I want to talk about today is the role that an entrepreneurial vehicle like a start-up can play in that very race and the conditions required for that strategy to be successful.

First, I'd like to tell you a bit about Mouvement des accélérateurs d'innovation du Québec, or MAIN for short. MAIN is a not-for-profit organization established in 2016 by business accelerators and incubators. MAIN's mission is to strengthen the capacity of the start-up support ecosystem and exponentially increase its impact on the innovation development cycle.

We believe that start-ups don't succeed in a bubble. They are able to compete and thrive internationally because they grow within a supportive ecosystem that provides resources, networks, expertise and more. Our organization's goal is to ensure that every start-up anywhere in Quebec has access to the best available resources as early as possible to help it develop and grow.

In addition to fuelling this vast ecosystem, we undertake accelerator support projects across Quebec, taking into account geography and the diversity of ecosystem actors. We do that in partnership with a growing number of accelerators, incubators and other business support organizations, as well as mentors, experts and other consultants. We also forge strategic alliances with other national entrepreneurship organizations. It is our belief that, if more Canadians are going to launch start-ups, we need more entrepreneurs. As the steward of Quebec's ecosystem, MAIN is one of the five Canadian recipients under the Government of Canada's ElevateIP program, and we are very proud.

Before I go any further, I want to take a moment to clearly explain what a start-up is. Here is the simplest definition: an innovative company with high growth potential. In French, we sometimes call a start-up a “jeune pousse”. The difference between a start-up and a more traditional new company is that it focuses entirely on innovation in developing a product, service or business model, to quickly break into a market with huge potential.

Usually, start-up entrepreneurs and their initial investors spend considerable time and energy, not to mention huge amounts of capital, before turning a profit. It often takes years of spending and investment before a start-up sees a single dollar in profit. In many cases, a start-up even loses money on its first sales; not until the start-up scales its product or service does it have a shot at becoming profitable.

It is widely recognized that numerous companies within the start-up ecosystem will never achieve the profitability and growth stage. That goes with the territory. They will never make it out of the “valley of death”, as it's known. A start-up is a unique vehicle and approach when it comes to entrepreneurship. A start-up is where innovation and entrepreneurship meet, in the space between research and action. All start-ups are a gamble. In betting on them collectively, we accept that not all our gambles will pay off, but we are looking for a few big wins that will ensure a return on all of our investments.

Luck inevitably plays a part in a start-up's success, especially timing in terms of when the company is launched, how long it takes to access the market, and what the geopolitical, socio-economic or health situation is. We do, however, have some levers at our disposal to improve a Canadian start-up's odds, not the least of which is intellectual property.

In Canada, we excel at innovation, but our capacity to commercialize that innovation hampers our competitiveness on the world stage. We don't claim to have all the answers as to why that gap exists, but one of the things we've heard from companies is this: protecting their intellectual property is a cumbersome and expensive administrative undertaking with little short-term gain. Another reason for the gap may have to do with how hard it is to get intellectual property out of public educational institutions, where it is trapped.

● (1110)

Development organizations all over Canada, like Quebec's newly created Axelys, are working very hard to overcome that, but the fact remains: obtaining or being granted a licence for intellectual property developed in the research lab of a public educational institution is time-consuming, expensive and frustrating. Oftentimes, the process leads to a dead end.

Let's look at the positives. Canada ranks well globally when it comes to patent activity, although my colleague here showed that the situation was different in the last few years.

Owning a lot of sneakers obviously doesn't make you a good runner.

Innovation is measured in market share, not patents. Over the past few years, all of Canada has stepped up efforts to commercialize innovation better.

Take Quebec, for instance, with the creation of Axelys and the launch of the Quebec strategy to support research and investment in innovation—representing huge investments in the entire innovation cycle.

Consider the steps taken by the federal government, in particular, the strategic innovation fund, the intellectual property strategy—which combines IP assistance with the industrial research assistance program administered by National Research Council Canada—the ExploreIP online resource, ElevateIP funding and the recent creation of the Canada Innovation Corporation.

[*English*]

The Vice-Chair (Mr. Corey Tochor): I'm sorry, but we are going to have to cut that off. You're over the five-minute mark.

Mr. Louis-Félix Binette: I'm sorry. Thank you.

The Chair: We'll now go to our first round of questions. It will be a six-minute round.

To kick us off, we have MP Williams.

Mr. Ryan Williams (Bay of Quinte, CPC): Thank you, Mr. Chair.

I want to start by thanking the committee for agreeing to undertake this study. I think it is very pertinent right now. It is very important to Canada.

Number one, when we talk about IP commercialization, we're talking about the economy, good-paying jobs and wealth. However, there is another side. We're even looking at national security and protecting Canada's knowledge—the currency of innovation, as Mr. Binette noted. In today's Globe and Mail, there was a good comment by Senator Colin Deacon, who noted that, over the past 20 years, the portion of Canadian-invented patents transferred to foreign firms has tripled from 18% to more than 50%.

Today, it is very pertinent to start this study. Hopefully, I speak on behalf of most of the committee when I say we're looking forward to the recommendations, in order to ensure Canada is capitalizing on IP.

This is for both gentlemen. I'm going to start with Mr. McLean and then Mr. Binette. Based on the work of their organizations, what is the single biggest roadblock for SMEs trying to commercialize their IP? In your opinion, how do we fix it?

● (1115)

Mr. Mike McLean: For me, the largest roadblock is the lack of understanding about IP strategy and approaches to capture and commercialize IP. Canadian companies do not have access to role models or peers who understand these issues. Our economy has been dominated by resource companies and financial institutions for a long time. Until recently, those businesses have not needed to build strong IP positions in order to succeed.

Our technology and knowledge-based companies, however, do. They don't have access to the right talent sets, peer groups and networks to build those capacities and understand those businesses. We need to build institutions and role models that can help drive that change and build successful companies that can then spawn others.

Mr. Louis-Félix Binette: I can complement this, because I agree with Mr. McLean's comments. From the point of view of start-ups, most early-stage companies—let's say pre-launch—are cash-strapped. They evolve, but there is less loose cash in Canada than in other markets.

The difficulty in protecting IP going to market will lead start-up entrepreneurs to make decisions based on having very little available cash in the early stages of companies. That is a disadvantage compared with start-ups in other ecosystems, which might have more access to early funding before their launch phase—their seed phase.

Mr. Ryan Williams: Mr. Binette, one statistic we look at compares us with the United States, which is probably one of the best in the world for IP generation—the United States and China. In 2019, the U.S. had 169 times the IP generation Canada did. We did around $39 million, and they did almost $6.6 trillion.

What is the U.S. doing that we aren't, in your experience?

Mr. Louis-Félix Binette: From what I can see, it's this. Someone out of a U.S. university can come up with an idea, through a little research they did in a lab, and say, “I could turn that into a company, if I had the money.” Based on that, they can raise $1 million—no questions asked—and start exploring how they can take that knowledge out of the university and turn it into a company.

You can't do that here. It happens, but it's on an exceptional basis. That, for me, is a real difference. That first $1 million is how you explore the fit between knowledge and an eventual market.

Mr. Ryan Williams: How does venture capital in Quebec compare to, say, the U.S.? Can you comment on Quebec, or maybe Canada, and our venture capital environment or infrastructure?

Mr. Louis-Félix Binette: Venture capital is the same from coast to coast to coast. Venture capital in Canada will come in once you have a product. If you've started commercialization, you've already shown the market will buy your product. Venture capital starts at the seed phase. Pre-seed funding is very rare, and there is very little what we call friends, family and fools money. These are people who are willing to invest very early on based on an idea. Of course, the risk is greater, but that's why we call it *capital de risque* or venture capital.

The way venture capital is structured in Canada mostly, with a lot of partners and funds handling institutional money, the ability or the willingness to take a lot of risk and to move pre-seed has some obstacles to that.

Mr. Ryan Williams: Do you think Canadians are able to invest or take risks the same as Americans, or does there seem to be a cultural shift among Americans versus Canadians with risk?

● (1120)

Mr. Louis-Félix Binette: That's a tough question. I'm in the business of accompanying start-ups and making them succeed on the coaching side, if you want. However, definitely, our tolerance to risk.... A lot of the early capital for start-ups comes from public institutions, which are by nature risk-averse. No one wants to be seen in the newspaper as having funded a failed company, even though, as I explained in my intro, that's part of the recipe. It makes it a little harder to take risks. There might be institutional framework reasons for that. It might be that people who have a lot of money in Canada are not very willing to spend it or spray it on different ideas. There might be other alternatives.

Mr. Ryan Williams: Thank you.

The Vice-Chair (Mr. Corey Tochor): Thank you very much for that.

We're now moving to Mr. Collins, for six minutes.

Mr. Chad Collins (Hamilton East—Stoney Creek, Lib.): Thanks, Mr. Chair.

Thanks to the witnesses for attending this morning and providing evidence and information to us.

Mr. McLean, I'll start with you.

You emphasized in your opening coordination and collaboration. I think the word that Mr. Binette used was “ecosystem”. He talked about almost the same theme. How does the federal government help with that? How do we make those connections?

I read the previous report that was undertaken on IP strategy at another committee. That study occurred about five years ago. It talked about a concierge service helping with those networks, whether for small or medium-sized enterprises and/or post-secondary institutions, and getting them to those people who were the investors.

How does the federal government help with that process?

Mr. Mike McLean: There are two steps that can be taken to address that collaboration aspect. The first is creating a simple map of the programs that are available at all levels of government, so that entrepreneurs can quickly understand where they can get the help they need. The second is understanding that we have a limited capacity of experts in this country to deliver on some of these programs. We need to identify where there is redundancy or where there are opportunities to share resources between these efforts, so we can maximize the impact of the experts we do have.

Mr. Chad Collins: Mr. Binette, can I ask you the same question?

[*Translation*]

Mr. Louis-Félix Binette: I'm going to answer in French, if you don't mind.

Clearly, one of the challenges Quebec and Canada face is connecting entrepreneurs with existing resources. There's a concentration of resources, whether in IP or elsewhere.

The real challenge right now is finding the right resources and supports. That burden falls entirely on entrepreneurs. As I explained, for a start-up, anything that is a burden, a weight or a waste of time as far as accessing existing resources goes is a risk, a disadvantage that hinders its ability to compete with potential international competitors.

The real challenge is creating a support continuum and ensuring that, as soon as we discover companies with high growth and innovation potential, we connect them with the available support services. We can't wait until they find out about our services through a Google search or a social media ad.

Only then can we make the most of the limited resources we have and eventually build a significant body of data and knowledge on how start-ups move from the lab to the market. That will tell us which connections give start-ups the biggest boost throughout their life cycle. We don't have those data at the provincial or national level because we don't have any data standards to measure a company's growth.

Currently, we look at patents and sales, but for start-ups, sales are a latent indicator because they come later, as we know. When we focus on sales and revenue, it's too late to know whether the start-up made good progress during the three, four, five, seven or eight years of development. That's what we're seeing these days with tech companies.

[*English*]

Mr. Chad Collins: Thank you for those answers.

As a former city councillor, I had the opportunity to work with my municipal council on supporting the McMaster Innovation Park. There's lots of great work going on in the innovation park, leveraging private investment and working with local employers in terms of finding ways and means to generate wealth and generate employment locally.

How does the federal government then make sure that we're not all working in silos. In that instance, there was provincial support provided to the university to help with the construction of the innovation park, as well as ongoing funding to assist with their operations. The municipality contributed in terms of providing resources to purchase the lands that the innovation park sits on, and of course there have been federal investments that have been made by our government to help with all kinds of studies and work that goes on in the innovation park.

What role can the federal government play in terms of leveraging assistance from the provinces, from municipalities?

I think, Mr. Binette, you talked about a regional approach that some have taken. You've given clear examples in Quebec.

To both of you, how do we support that integration through three levels of government with the private sector and other stakeholders who might be at the table as well.

● (1125)

Mr. Mike McLean: I think the key piece for the federal government is building national infrastructure that can be deployed to local needs. The local organizations may not have the resources or capacity to build the infrastructure needed. The government, though, has the contacts with the businesses, and they really understand the needs of those organizations and the needs of their local areas. If we can establish national-level infrastructure that can be deployed and put into the hands of those types of individuals and organizations, then that really has a multiplier effect in my mind.

[*Translation*]

Mr. Louis-Félix Binette: The accelerated growth service, through Innovation, Science and Economic Development Canada, ISED, is one thing that comes to mind. The idea behind the service is to help entrepreneurs by bringing a number of government stakeholders with supports to the table, instead of making entrepreneurs seek out each of those stakeholders separately. They just have to knock on ISED's door. That's the first phase.

I think the second phase would be to invest as much as possible in existing front-line resources on the ground. That's where you can get the different levels of government to work together. Think of business accelerators and incubators, as well as university accelerators. It's really important to invest in front-line resources, give entrepreneurs full flexibility to access programming very quickly, and reduce the red tape for entrepreneurs when dealing with those organizations. Keep in mind that entrepreneurs put a lot of time and energy into answering to authorities at each level of government for each of the programs they participate in. A start-up shouldn't have to hire experts in administrative management.

[*English*]

The Vice-Chair (Mr. Corey Tochor): I'm going to have to cut you off there on this round. I'm sure there will be other MPs who will have some questions you can expand on.

Now we're moving to the Bloc member of Parliament, Maxime Blanchette-Joncas, for six minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ): Thank you, Mr. Chair.

Thank you to our witnesses for taking part in this important study.

My first questions are for Mr. Binette, from Mouvement des accélérateurs d'innovation du Québec.

Mr. Binette, you couldn't have been clearer in your opening remarks. You raised some very important points. Obviously, we have a choice, so we need to decide whether we want to be net consumers or net exporters. I think that lays it out clear as day.

You just recommended some solutions, including establishing front-line resources and reducing red tape. You mentioned federal organizations such as Innovation Canada. Organizations that provide venture capital come to mind, like the Business Development Bank of Canada. Do you think that's a tangible and easy-to-access solution?

I realize that venture capital isn't available to everyone, and it's not something that's easy to access.

Can you tell me how we can bring venture capital into this? Also, how can we develop IP and make it more accessible, as well as protect it?

Mr. Louis-Félix Binette: That's a very good question. It's quite complex.

A start-up is created to bring something innovative to the market. That's different from a small or medium-sized business that is looking to innovate or change how it does things.

The approach is what needs changing, whether we are talking about the Business Development Bank of Canada or another organization. We need to accept the fact that we don't support a set of companies in a distinct way. Instead, we support a pool of companies in a geographic- and sector-specific way, in the hope that some of those companies will succeed.

The approach to risk is different. We don't measure the individual risk of each company. We take a pool of companies and hope that some of them will be successful. For an investment fund, sometimes it's enough for one company to succeed in order to replenish the entire fund. That one transaction out of the 20, 30, 40 or 60 can be enough. According to the information, a company has a one in 250 chance of making it. We need to take a pool-based approach and accept that some companies won't make it.

The benefit of IP is that, when a company doesn't make it, that property remains. It can be reused and transferred to another company in that sector. It can be resold and enhanced in different ways. Let's not forget that entrepreneurs who didn't succeed are still entrepreneurs. They'll go on to start other companies.

That's why I think a pool-based approach is a good way to go.

● (1130)

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Binette.

I gather that it's about sharing the risk within the pool, instead of concentrating or spreading it in a more tangible way.

Do you think the support available to start-ups has changed in recent years?

Mr. Louis-Félix Binette: Absolutely.

It's changed in two ways. First, we've seen a real increase and specialization in support mechanisms and organizations. They are helping start-ups in specific demographic situations and sectors. They build networks and capacity to address the needs of a certain category of start-ups. We are also seeing some accelerators and incubators really take off. Two accelerators in Quebec, McGill University's X-1 Accelerator and École de technologie supérieure's Centech, were recently ranked among the top 10 university accelerators and incubators in the world by UBI Global.

We are really seeing players that have created a critical mass, established a strong presence and built the support capacity to be considered among the best in the world. Obviously, a start-up that receives incubator support from Centech or X-1 Accelerator enjoys not just tremendous visibility, but also tremendous opportunity in terms of developing an international client base, accessing investment and so on. It's a huge advantage. That's a recent development in the ecosystem worth recognizing.

Mr. Maxime Blanchette-Joncas: Thank you.

Can you talk about the diversity of Quebec's start-up ecosystem?

You brought up some models that work well. I know that the Quebec government had the Québec Research and Innovation Strategy 2017-2022, which ended. The current strategy is the 2022-2027 Québec Research and Innovation Investment Strategy, or QRIIS2 for short.

Do you have any real-life examples we could look to as models to help us develop a clearer plan? Mr. McLean talked about the obscurity of the current ecosystem, and rightfully so. There's an effort to bring it to the regional level and help companies, but that plan doesn't reflect the different realities across Canada.

Mr. Louis-Félix Binette: I think we are facing similar challenges. I mentioned the creation of Axelys, but there's still work to do. Creating the organization is only the beginning. We have to rethink the flow of IP, from the lab to the market, and encourage more researchers to become entrepreneurs and start their own companies.

The funding model for accelerators and incubators is being transformed. It's important to take less of a project-based approach, while giving organizations an opportunity to grow in the long term. There are still questions around performance criteria, which we would like to see for the benefit of accelerators and incubators and the support ecosystem as a whole. There are also questions about how to standardize those criteria across Canada and build a start-up continuum.

I work in Quebec, but I would like to see those criteria in place across Canada. That way, we could look at the needs of a Quebec-based start-up and determine that the best resource person to help that start-up was in Alberta. Those connections need to be made as early as possible. We need to adopt a holistic view that takes into account the gamut of start-ups we have in Quebec. We have to be able to manage our start-ups. If, as a country, we can't learn to manage a start-up pipeline, our chances of success are lower. After all, we can't improve what we can't measure.

Mr. Maxime Blanchette-Joncas: Thank you very much, Mr. Binette.

[*English*]

The Vice-Chair (Mr. Corey Tochor): Thank you very much.

Now moving on to the five-minute round, we have....

I'm sorry. Finishing up the six-minute round, we have Mr. Cannings.

I almost slipped that one by you.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): I may be tired today, but I was sharp enough to catch that. Thank you.

Thank you both for being here this morning. I was at a meeting last night with the Coalition for a Better Future. I think they're looking at 21 key performance indicators for the Canadian economy writ large. One of them is IP. They point out, as I think Mr. Williams did in a different way, how far behind we are. The United States is probably one of the leading countries in the world. I think they have $7,500 U.S. per worker of IP investment every year. In Canada, it's $2,300 or $2,400. The coalition has set a target. For 2030, we want to be up there with the U.S., in that ballpark.

I'm trying to get a sense of whether you think that's a totally unreachable goal or if that is something we can reach. What do we have to do to get there? It's a very high-level question to start with, and I'll try to drill down later.

● (1135)

Mr. Mike McLean: Companies are hungry to learn about this. We go out and talk to small and growing companies. They know they don't know. They want answers. They want help. We've gone from zero companies in our membership less than two years ago to over 190 companies engaged, and more are being added every week. Companies want to learn. They want to do better. They want to succeed. They just don't know the path there.

I think Canadian entrepreneurs will take us there. They just need to be given the tools to help them do so.

[*Translation*]

Mr. Louis-Félix Binette: I'd like to add something, if I may.

I think we've built a culture, especially in Quebec, where we tend to come up with solutions to our problems. I'm talking about immediate problems people face in a factory or the community. The fact of the matter is this: we still haven't understood that the solution to our problem can also help people with the same problem in other parts of the world. If we follow the right steps, and that includes protecting IP, we can make those solutions available. We don't have that reflex. Thinking big is a mentality that needs to be nurtured. If we can fix the problem at home, we can fix that problem anywhere.

[*English*]

Mr. Richard Cannings: Mr. McLean, you mentioned some of the government programs. I think IRAP has an IP assist program. Maybe you could expand on that and compare it to what's available in the United States.

Does the United States just have a different culture about venture capital, or are there also American government programs that help companies?

Mr. Mike McLean: There are very limited government programs in the United States, because they're not needed. The expertise on building IP positions, on utilizing IP positions to help grow companies and on driving new revenue into companies using intellectual property is all there. It's in the ecosystem. They practise it every day, so they do not need to drive systemic change into what they're doing, because it already exists. We're trying to change something that is a problem, and we need significant resources deployed in order to do that.

The IRAP IP assist is a great program that's providing funding to entrepreneurs to talk to specialists and experts about strategy and to pursue the activities that come out of those strategies. That's been a great tool. We work a lot with our members who are using that tool.

The ElevateIP program that is being launched now, which MAIN is going to be a part of, will drive IP education and funding out through five key accelerators across the country.

IAC has focused on clean-tech companies in our pilot. We currently have a proposal in to expand our program and give it a longer-term future.

There are a number of good efforts under way that are small, and they need to be ramped up.

Mr. Richard Cannings: Monsieur Binette, you mentioned the need for help at the very early stages. You talked about, for instance, a university researcher who has an idea.

When should we be providing that assistance? Is that assistance only available now when you have formed a company and when you've attracted some investment? How can we get involved early on?

I hear of university professors I know who come up with ideas and immediately, that IP goes somewhere else.

Mr. Louis-Félix Binette: The incubation assistance is there, but there are still a lot of obstacles that researchers have to go over to launch a company. If you look at AI and software, it's often easier for a Ph.D. to just get out of the university system and rewrite an algorithm than to try to take the algorithm they've developed in their Ph.D. out of the university. It's workable, but it's a workaround.

To answer the first part of your question, which I think is important, it's an emulation game. Growing a company to a billion-dollar valuation is not something you learn in a program at school or in an incubator. You make it, you learn how to do it and then you help others make it. That is why an ecosystem....

We mentioned the U.S., but they have a size and a cash advantage. However, look at what happened in France recently, or Sweden or Israel, which may be comparable nations to Canada. It's an emulation game, so the more velocity there is and the more entrepreneurs there are who have grown a company based on IP assets, the more they will grow other companies and the more their employees will—

● (1140)

The Vice-Chair (Mr. Corey Tochor): Thank you so much. We're out of time now.

Officially moving into the five-minute rounds, we have Dan Mazier for five minutes.

Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC): Thank you, Chair.

When I was on the environment committee, studying the development of clean technology, we heard a lot about the “valley of death”, which is a period between development and commercialization. Why does the valley of death exist and how can we support Canadian industry through it?

I guess that can go to Mr. McLean and then Mr. Binette.

Mr. Mike McLean: The valley of death is probably outside of my expertise as an IP practitioner in the start-up ecosystem.

Mr. Dan Mazier: Okay.

Mr. Louis-Félix Binette: The valley of death, as I mentioned in my intro remarks, is the period in which you will invest a lot of money developing a technology without the assurance that it will sell. The valley of death extends to the early commercialization period, because when you have a highly technological, highly innovative solution, there is a fair chance that your first clients will get a prototype-level solution and it will probably cost you three or four times, 10 times or 100 times more to produce that first prototype than you can actually get from the sale.

The more you sell, the more your balance sheet goes into the red. That's the valley of death.

Mr. Dan Mazier: How can Canada support industry through that valley?

Mr. Louis-Félix Binette: The principle of acceleration is that we need to get the start-ups to experience all the roadblocks and mistakes that they might experience in the market as quickly as possible, so that they spend less time and money in that valley of death and can start delivering to clients rapidly—but not too quickly because there's a risk to that too.

Mr. Dan Mazier: Okay. Thank you.

The government launched a program that facilitates and centralizes funding for clean-tech projects called the clean growth hub. I asked the government what percentage of projects reached commercialization after they received government funding. I was advised that “the Hub does not collect information on the number of projects that reach commercialization stage after receiving government funding”.

The government isn't measuring the commercialization results of research and development funding. How are we able to know how we are doing on this front?

Mr. Mike McLean: That's a great question. I agree. Without measurement, we don't have data to act on.

I would build on that, though. When I get engaged with other government funding programs in looking at how they evaluate intellectual property as part of that—never mind commercial success if that's not being measured—the IP measurement is an identification of what is foreground IP and what is future IP or background IP, so that they can track what money has been used to create what IP.

There is no consideration or evaluation of the value of that IP and how it's going to be used to further their business. There's no framework for that evaluation. That skill set is not in that math, so that's something that needs to be built.

Mr. Dan Mazier: If I'm hearing you right, the government could do a better a job in monitoring the outcomes of these funding initiatives right through the whole process.

Mr. Mike McLean: Monitoring the outcomes and understanding what the inputs are in the proper context....

Mr. Dan Mazier: Mr. McLean, is your organization the only group the government contracts with to help SMEs with their IP needs?

Mr. Mike McLean: We are the only not-for-profit that is fully funded to pursue IP needs. Yes, there is funding available for other programs that flows to service providers, etc.

Mr. Dan Mazier: Okay.

Is there anything that other countries are doing better than Canada when it comes to the commercialization of intellectual property and what can we learn from them? We've talked about the U.S, but it's a big world. Is there something else we're missing here that could come out in the study?

● (1145)

Mr. Mike McLean: The one example when it comes to intellectual property that I really like is Germany and their Fraunhofer institutes. They centralize the management and commercialization of intellectual property in a single group. Rather than having a diverse set of actors, all with different motivations and different skill sets, they've concentrated intellectual property into a single licensing practice, with very skilled expert people running that, and that has had a lot of success. That would be something I would look to as a model that can be used here in this country.

Mr. Dan Mazier: Mr. Binette, do you have anything to add to that?

Mr. Louis-Félix Binette: To one of your first questions, it's an obvious flaw that a company that gets government funding, from whichever level, does not have a dossier, a file, that we can track over time and that assumes.... Very few start-ups succeed without government support at some point, but if we can't see the pipeline, we can't manage the pipeline of start-ups. That's an obvious flaw, and it shouldn't rest on the start-ups' shoulders to provide that data.

We work on some solutions that we could bring to this. We work with Canadian partners through ElevateIP and others to try to share common standards in measuring the progress of start-ups and to have an ecosystem-wide view of how our—

The Vice-Chair (Mr. Corey Tochor): Thank you so much. We're out of time on that one.

Mr. Louis-Félix Binette: Thank you very much.

The Vice-Chair (Mr. Corey Tochor): Moving on, for the Liberals, we have Mr. Sousa.

Mr. Charles Sousa (Mississauga—Lakeshore, Lib.): Thank you very much, Mr. Chair.

Thank you, witnesses, for your presentations. I appreciate how you were able to identify and prioritize some of the challenges faced within the industry—in IP, start-ups, scaling, commercialization and monetizing these initiatives. I appreciate some of the solutions brought forward in terms of co-operation, collaboration and enabling us to have more resources.

Those are nice words, but practicality has to be taken here. We've heard other members talk about measurements—what gets measured gets done. What I'm hearing is that, on one hand, we're not doing enough to start up and facilitate small businesses, IP and ventures. On the other hand, we're not getting any success. You just referenced the fact that, for IP, start-ups and new ventures, the ability to succeed is minimal. Perhaps one in 10 or one in 50 has that big bang and big payoff.

There is a great degree of risk. There is a need for risk tolerance and appetite. Because of the relationships we have in the legislature, there is no risk tolerance in government. The moment things lose, we don't do them. This is a real dilemma for us, I presume. That's why academia and the private sector seem like a good mix as we go forward with these initiatives. It's because the private sector....

Mike, I think you explained how the U.S. has great tolerance and enablement in building those partnerships as they go forward.

I want to look at this in a couple of ways. The white-glove approach has been talked about quite a bit, here: that the government needs to be there to facilitate and provide resources. I have an issue, though, with the adjudication of these deals. We don't want government being the one to adjudicate deals, so we're reliant on outside sources. However, we're then going to be criticized that we're providing money and we're not getting any payback. The payback is seven years down the road, in most cases, in my understanding.

Perhaps, in the next round of questions, we'll talk about enforcement, the whole notion of piracy and all the other stuff, such as China. I need to better understand their strategy and also their enforcement. To what extent are we protected, as a result of some of those initiatives?

Let's go back to start-ups and adjudication.

How do we measure and support government initiatives, without prejudicing the government for not being the ones adjudicating? Do you get my meaning? You want the government to participate, but you don't want it to put its hands in the deal. How do you do that? How do you find that solution?

I'll go to you first, Mike.

Mr. Mike McLean: It's giving freedom to people in the marketplace who have the expertise and risk tolerance to go out and build solutions—

Mr. Charles Sousa: In the private sector...?

Mr. Mike McLean: I'm with a not-for-profit, so—

Mr. Charles Sousa: You're both not-for-profit. That's the point I'm trying to make. Is that the solution?

We have to find a way to enable these IPs, new ventures and Ph.D.s, because if they don't get it done through government supports, they will go to the U.S. They're going to Silicon Valley. They will get sold out, and then our scaling opportunity is gone. We have MaRS, Communitech and things at Ryerson. We have all kinds of people trying to incubate and accelerate some of these deals.

You're telling me, though, that it's not working. I suggest it probably is working. It's taking a bit longer than we need. How do we get the private sector to assume some of that risk? How do we get those pension companies to participate?

● (1150)

Mr. Louis-Félix Binette: That's such a good question, and a tough one. You're asking the tough questions.

Obviously, we're not-for-profits, but we're in the private sector in our way. We decided to band together, not to make profit but to try to bridge the gaps we see between where we are now and where we'd like to be. In other countries.... Israel has an amazing system, but the army and military service contribute a lot to the sort of dynamics they have.

I think government money should act as a bridge to bring us to where we need to be in terms of knowledge and understanding, to get the first success stories and a critical mass. However, that's not going to happen by putting in more weight and saying, “I'm going to help you with your IP, but if you sell, you're going to have to give me that money back.” No. It's “I'm going to help you with your IP, but if you sell your company for $50 million, I'm going to tax you when you buy a house, yacht or whatever with this $50 million, but I'm going to incentivize you to reinvest that $50 million in risky projects.” We need to create skin in the game and incentivize.

It's all right. We will lose some and we will buy some. We will also buy IP that was developed in Germany and Israel to feed the growth of our companies. We need to do this and incentivize, rather than make everything heavier or create a heavier load.

The Vice-Chair (Mr. Corey Tochor): We're out of time on this one. I apologize.

We're now moving on to the two and a half minute rounds with MP Blanchette-Joncas.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Chair.

I'm coming back to you, Mr. Binette. In concrete terms, what are the consequences for companies, for the Canadian economy, of not developing IP?

Mr. Louis-Félix Binette: The main problem is that if we create companies without intellectual property, we will create X's Uber, then Y's Airbnb, then some other platform from Z that is the flavour of the day. Not all companies that test the ability of real inventions—that's what intellectual property really is—to succeed in the marketplace will prevail. However, those inventions will remain with us, and out of every industry's 10 or 15 failures, there will be one that succeeds by building on the failures of others. So, investing in companies that produce and attempt to commercialize knowledge is investing for the long term in order to create an asset class that gains value and increases the potential for new entrepreneurs and new companies on these projects.

Mr. Maxime Blanchette-Joncas: Thank you.

I would like to return to a more economic perspective. Yesterday, we learned that according to the latest economic study on Canada by the Organisation for Economic Co-operation and Development, or OECD, Canada must increase its productivity, not only to become wealthier, but also to improve its standard of living. I'm trying to explore with you what correlation there may be between the development of intellectual property, the development of innovation, and how the federal government can play a concrete role in all of it. We are well aware that we are lagging behind in development, as Mr. McLean mentioned earlier, when you compare Canada to all the other OECD countries in terms of gross domestic product.

What can the government do to support the development of productivity, innovation, and, of course, intellectual property?

Mr. Louis-Félix Binette: At its core, productivity is the piece of the pie we are able to produce in this country, based on the work we do.

Obviously, large companies must improve their productivity. How will they achieve that? They will achieve that by acquiring technology solutions. If they acquire foreign technology solutions, their performance comes at the cost of foreign acquisition. If they buy technology developed by Canadian startups, their performance will increase because of Canadian-developed technologies, the benefits of which will be seen when that technology is commercialized in the rest of the world.

So this already provides opportunities for large companies to innovate, and for SMEs to continue to innovate and to undertake their digital transformation, called Industry 4.0, among other things.

However, there is a piece of the pie that we don't see, because it doesn't exist yet, and that is what startups are building. They're building what could become 20, 25, 40% of Canada's economic pie; that slice is going to be a value-added slice, because we're going to come in and address issues like climate change and provide solutions to health issues, socio-economic issues, etc.

That slice of pie doesn't exist yet. It may be tempting not to invest because we don't see the benefits in the short term. Yet there is a real risk in not doing so, and it is the one I was criticizing: we will become consumers of solutions invented and produced elsewhere, whose profits will go into the pockets of foreign investors.

● (1155)

Mr. Maxime Blanchette-Joncas: Thank you very much.

[*English*]

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Next, we have MP Cannings for two and a half minutes.

Mr. Richard Cannings: Thank you.

I want to follow up on another aspect of this, and maybe it's a totally different part of the problem with IP in Canada. If you have a start-up that has IP, manages it properly, gets it registered, owns it and then goes through valley of death, maybe sometime in that journey, when it comes out, it needs to expand, so it's looking for investments. Often, especially here in Canada, and I hear about it all the time, it gets bought by a bigger company from the United States, Germany, China or wherever. I assume that IP is then lost to Canada.

Is that a part of the problem you deal with, or is that something that's going to happen anyway? What can we do about that part?

Mr. Mike McLean: It's going to happen until we scale Canadian tech businesses that can provide a centre of gravity for our own intellectual property. We need to have Canadian businesses large enough to be buying our own start-ups and buying intellectual property that's been developed within our universities. Until we can get our companies to scale, it's going to leak. We need to get our companies to scale. We need to put in place the infrastructure and tools so that we can help our companies protect their intellectual property, so that they can grow and so that some of them do get to scale and become that centre of gravity.

Mr. Louis-Félix Binette: There are many examples in Canada. Look at the Waterloo ecosystem. That was born from one company taking a lot of risk. In the public conscience, that company is not seen as a success, but look at all the repercussions of that company. First, it is still alive. It's still producing very cutting-edge technology, and look at the ecosystem and the number of entrepreneurs who have grown around it.

We will probably sell 20 companies to have one of those companies create a new meteoric impact somewhere in Canada that we can't predict. We will sell some companies. The first thing we can do is to try to delay that sale or make that sale more valuable. How can we sell it for more money so we can reinvest it here?

Then we also need to be looking at opportunities and support. Someone talked about the BDC earlier. Maybe the BDC should come in, look at a tech company and say, “How can I help you acquire IP that was developed elsewhere and bring it into your IP portfolio in Canada?” That's also a strategy.

It's a mix of things. We can try to delay, but inevitably we will sell some IP companies.

Mr. Mike McLean: I have one further thought based on that. BlackBerry, which you were talking about, built IP capacity in this country. If you look at the IP experts who know how to utilize IP, you see a lot of them came from that route. For those large companies that do build success, they build capacity that then spreads elsewhere.

Mr. Richard Cannings: I would say perhaps to Mr. Williams that the reason we're doing this study is because Jim Balsillie was before us and talked about this very thing. I'll leave it there.

The Vice-Chair (Mr. Corey Tochor): Thank you so much to our witnesses for appearing here today.

We will suspend briefly as we set up for our next panel.

● (1155)

_____(Pause)_____

● (1200)

The Vice-Chair (Mr. Corey Tochor): I'd like to make a few comments for the benefit of our new witnesses.

Please wait until I recognize you by name before speaking. For those taking part by video conference, click on your microphone icon to activate your mike, and please mute yourself when you're not speaking. I'll remind everyone that comments should be addressed through the chair.

I would now like to welcome our witnesses to our committee.

We'll open with five-minute opening statements and then rounds of questioning from our different members of Parliament. For your opening statements, I will try to get your attention when you have one minute left. Please try to keep it within the five-minute block for scheduling.

Dr. Taylor, you have the floor for five minutes.

Mr. Jeffrey Taylor (Chair, National Research Advisory Committee, Colleges and Institutes Canada): Thank you so much.

Good morning. Before I begin, I would like to acknowledge that I am speaking with you from the traditional and unceded territory of the Algonquin Anishinabe nation.

My name is Jeff Taylor, and I am the chair of Colleges and Institutes Canada’s national research advisory committee. I'm also the associate vice-president of applied research innovation at the Nova Scotia Community College. I'm very happy to be here today. We would like to thank the Government of Canada for this opportunity to speak about how we can better support the commercialization of intellectual property.

Colleges occupy a unique position in Canada’s innovation landscape. Our members, over 140 colleges across Canada, facilitate demand-driven innovation through college-applied research. In contrast to other research conducted at post-secondary institutions such as universities, college-applied research is different in three key ways. One, the research question is generated externally, usually by a small or medium-sized business partner. Two, the research is conducted quickly, with 85% of research projects done in less than one year, and, three, of key relevance to this hearing, any intellectual property generated during the project is turned over completely to the business partner. It stays with industry. This is because colleges have a mandate to support local and regional economic development, and we think the people best placed to commercialize or exploit IP are our business partners.

We view this role played by colleges as particularly critical, given Canada's long-standing concentration of R and D activity within the post-secondary education sector. I'll just throw some numbers at you quickly. Canada ranks 20th in the OECD for the proportion of GDP spend on R and D and it ranks fourth for the proportion of R and D conducted in the higher-education sector versus other countries. In Canada, 39% of total R and D is performed by the higher-ed sector. This contrasts to 18.7% in Germany, 23.5% in the U.K., and an OECD average of 16%.

What this means is that in Canada the post-secondary education sector is the key driver of innovation broadly and the generation of intellectual property more specifically. This means that post-secondary institutions have built strong reputations as hubs for research support, along with our associated facilities, equipment and expertise, but despite our proven model of generating IP for businesses, colleges' impact is limited by funding. According to internal analysis, Canada's colleges received only 2.39% of tri-council funding in 2020.

While our reach is countrywide and colleges are often the only post-secondary institutions in more rural, remote or northern communities, our funding limits our opportunities to help businesses generate new IP, iterate on existing products and explore ways to improve labour productivity. With reach to almost every Canadian community, colleges can be better leveraged to provide these supports and draw connections between businesses and other supports they may need.

I would like to offer three recommendations to you on how the Government of Canada can better support the commercialization of IP. The first is to improve support for the generation of intellectual property by enhancing funding for college-applied research. The entire college sector is united in its call for improved funding. Instead of fighting historical trends, let's leverage the capacity we've built in the system to help it drive innovation for small and medium-sized enterprises.

The second is to explore funding for colleges to offer education and other wraparound supports on the importance of IP rights to businesses with whom they collaborate. The expansion of IP education and IP supports to businesses through colleges is a natural extension of their role as research support entities, although, absent funding, it is unlikely that colleges will be able to fully embrace this role.

The third is to consider more broadly the contributions colleges can make to programs oriented at improving commercialization outcomes in the post-secondary sector, like the government's proposed Lab2Market program that's just coming online.

I'd like to thank the committee once again for this invitation to speak to you today, and I look forward to expanding on our views through questions from committee members.

Thank you.

● (1205)

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that presentation.

Now we'll go to our six-minute panel. Starting with the Conservatives, we have MP Lobb for six minutes.

Mr. Ben Lobb (Huron—Bruce, CPC): Thanks very much for your presentation.

Ten years ago, Gary Goodyear was the minister of state for science and technology and our previous witness, Mr. McLean, talked about the Fraunhofer institutes and everything about this, and applied research versus basic research. At that time 10 years ago, Gary came out and said, basically, that we need to really focus on applied research, not to dismiss basic research but that we need to really double down our efforts on applied research. The colleges were very supportive of this at the time, 10 years ago. Of course, at that time, though, there was a huge critique because they said we were getting rid of basic research.

How do you balance the competing interests, let's just say? It is kind of competing interests between college research and university research or basic research. Can we do both? That's the first question. Can we do both and everybody's happy in the same sandbox?

● (1210)

Mr. Jeffrey Taylor: Thank you for your question.

Ten years ago, I worked in universities in Canada and in the U.S. University research is so essential. We have world-class universities here in Canada, and we absolutely need to rely on them to produce that basic, fundamental knowledge that we all need.

On the other end of the spectrum, though, we have businesses that are trying to answer day-to-day questions about how they can increase sales, reduce costs, derisk an equipment investment and improve a process. There's a big gap between that business pull and that fundamental, basic knowledge produced at universities. I would argue that applied research is the bridge between them. That's really where colleges live and want to thrive. I think that we can not only have both, but I think we need both. It's essential for us to have a strong, thriving economy in Canada.

I mentioned in my opening statement that colleges have 2% dedicated to them, of the overall tri-council budget. It's 140 colleges fighting over 2% of the budget. I think there are 110 universities in Canada and they have 98% of the budget. Therefore, I would kind of be alarmed to hear universities complain that they're getting boxed out of any funding.

Mr. Ben Lobb: We never know who can complain about what, I guess. That's always fair to say.

Maybe you can offer a frank assessment on the next question that I want to ask you.

Are our community colleges across the country really at a teetering point right now? They're coming out of COVID. There are issues with hybrid, issues with international students, enrolment declines and students not making it through the first semester because they're not prepared.

This may be a bit beyond what we're talking about today, but in a way it isn't. We want to make sure that these students who do the research.... Are we at a critical point right now with our community colleges in Canada? Are they at risk?

Mr. Jeffrey Taylor: Related to the question broadly about community colleges at risk, I'd say no. Enrolment is still strong, and we still have a lot of opportunity to even grow, I would say. As the broader skills and microcredentials terminology become more commonplace for education, colleges are really able to occupy that space quite effectively and nimbly address that call to action, so I wouldn't be concerned at all about the future of colleges.

However, to answer your question related to this committee today around IP, I would be more concerned about how we're having to turn partners away due to our limited funding. Between 2020 and 2022, we had to say no to 12,000-plus partnership requests to support innovation with businesses because we just don't have the money. The receptive capacity is there. We want to do this. Every college across Canada is very connected locally to its community and wants to help start-ups and small businesses succeed, but the funding is really limiting us right now.

Mr. Ben Lobb: Okay, that's fair enough.

The federal government is going to be involved in any funding, and the provincial government likely is in there for some as well.

One of my issues has always been—and you did mention it in your statement—that whatever the outcome is, if it's positive, the business itself has the ownership of it, which is good for the business. However, the federal government is an investor, kind of like a venture cap investor in the research. The previous witness says you get it back in taxes and you get it back in this and that, but....

Is there an issue with that? I'm not saying there is, but are there any philosophical issues with governments continually pumping money in but not having any ownership of any of the benefit that comes out of it? I'm not saying it one way or another. I'm just asking the philosophical question.

Mr. Jeffrey Taylor: Philosophically, I'm not sure I have the best answer for this.

I think every business partner we work with is quite happy to be able to leverage some government funding support. Every project we do is with a partner, and we always require them to provide some skin in the game, so it's not just kind of a “free ride” for them.

The knowledge translation of having the IP stay with the partner is where we think it should be to get the most commercialized value out of it.

Mr. Ben Lobb: I know it's probably difficult to say, but what is the average value of a research project that a college would look at? Is it $50,000? Is it $150,000? What would it be?

Mr. Jeffrey Taylor: Yes, there's a spectrum, of course. A small, stage one project with a partner is typically around $25,000. As we progress and grow that relationship, we would expect to grow more and more.

Of course, we don't just work with small businesses. We also can work with large corporate entities. We would expect them to have more skin in the game and higher dollar-value projects.

● (1215)

Mr. Ben Lobb: Okay.

I guess I'd just say this: In southwestern Ontario where I'm from, if an agricultural manufacturer or an automotive manufacturer wanted to come in to a college and do a project, why wouldn't it just fund it itself? Why would it come begging to the federal government or the provincial government when, if it's $250,000 or $150,000, a mid-sized automotive manufacturer should be able to come up with that money? Why do they ask or why do these colleges ask the federal government for this when it maybe even slows the project down? Why is it good for the feds to come in when a business could afford to do it?

Mr. Jeffrey Taylor: My quick response to that question is to please visit your local college and have a tour around. You'll see tremendous facilities, equipment and expertise that your example business probably just doesn't have in-house. Is it going to go out and spend $10 million on a state-of-the-art 3D metal printer just to do a project, or is it going to go first to the college down the street that has one and do the project there? It will derisk its investment down the road. It will make it feel more reassured that the project will be successful.

We have tremendous facilities—

The Vice-Chair (Mr. Corey Tochor): Thank you so much. We're out of time on this round. There will be a chance to explore this a bit more in additional rounds of questioning.

Up next is Madam Diab online.

Ms. Lena Metlege Diab (Halifax West, Lib.): Thank you very much, Mr. Chair.

Mr. Taylor, welcome to our committee. It's wonderful to have you there. You're in person. I'm not—I'm actually celebrating the wonderful events happening on International Women's Day—but I want to welcome you there. I know that you're the associate vice-president of applied research and innovation at NSCC, and of course, you're there in your capacity as chair of the national research advisory committee at Colleges and Institutes Canada.

I just want to take it from your last comments. Of course, I have visited my local college. I know very well the Nova Scotia Community College, all the campuses and all the great work that's happening. I know that you oversee a thriving entrepreneurship, research and innovation, with international programming, engagement from industry and technology, and all kinds of strategic partnership activities.

You also ended by giving us three recommendations, but towards the end, you spoke about the government's Lab2Market initiative. That's a new one for me. I'm just going to ask you to please expand on how this program could leverage colleges. Also, after that, how do you see colleges as involved in the Canada innovation corporation? What is the role that you would envision?

Mr. Jeffrey Taylor: Thank you, Ms. Diab. It's so good to see you again. I remember when you were an MLA in our Nova Scotia legislature. You were briefly the minister of labour and advanced education. You always made time to come to our campuses, attend events and speak with our students. It's great to be able to work with you on this particular file today.

Those are two new programs you brought up: Lab2Market and the new Canada innovation corporation. I think not everything is figured out for those programs. They're still in the development and design phase, so I don't think we can talk about them fully yet.

If we start with Lab2Market, from what I understand, it is really meant to enable graduate students, post-doctoral fellows, people in a university lab, to get their IP out into the marketplace, to commercialize. I think there's a bit of a gap there because colleges don't have graduate students. They barely have post-doctoral fellows. It really becomes a very university-centred program very quickly.

I think it's certainly possible for colleges to grow into this space. We could certainly develop more fellowships. I can tell you—this is from your backyard, Ms. Diab—that we have a great relationship with Dalhousie University. There's one program—I believe it's a master's in computer science program—that has a co-op term. The students actually come over to our labs at NSCC and will spend their co-op working there, getting hands-on experience in trying to solve real-world problems. Then they go back and finish their work at the university. It's a chance for inspiration and collaboration to occur between institutes, all with the hope that IP will come out of it and be commercialized.

I think there's an opportunity with Lab2Market for us to think more about how colleges can play in that space. Certainly, I'll be working on it locally, and I hope that nationally we can become a little more coordinated.

With regard to your second question about the Canada innovation corporation, we have done great background work, meeting with officials as they develop their planning documents. They just launched a blueprint recently. We were so pleased to see that colleges were called out specifically in the blueprint. From what we understand, this corporation is not going to be providing direct funding to colleges and universities but will rather be business-focused. However, with the IRAP—that's the industrial research assistance program—moving over to the Canada innovation corporation, I'm confident that we'll be working together with them.

We've worked with the IRAP for years. The money flows to a business partner, but then the college research is funded by that partner. There are models there that I know will work well, and we look forward to exploring that more with the innovation corporation.

I mentioned before that, in the last two years, we turned away about 1,400 potential partnerships. I'm hoping that these new investments, both Lab2Market and the Canada innovation corporation, can help prevent that from happening more in the future.

● (1220)

Ms. Lena Metlege Diab: Mr. Taylor, I know the government provided an injection in budget 2021 to support and sustain college applied research as well as SME innovation. Can you expand on the value of that investment and how it supported innovation throughout the pandemic?

Mr. Jeffrey Taylor: Yes. Thank you for that question.

In 2021, the government generously boosted the budget for college applied research to $45 million. We very much appreciate that injection of capital. When the first call for proposals went out, there were 153 applications for $188 million, so clearly there's capacity in the sector to consume the $45 million and much more.

Part of the funding was to try to establish more collaborative research across colleges, and there was $118 million proposed to do that, but only $13 million could actually be funded.

We're so fortunate in Nova Scotia. We were able to receive one of those. We partnered with College of the North Atlantic in Newfoundland and Holland College in Prince Edward Island to look at mapping kelp beds all around the east coast of Canada, around Nova Scotia and Newfoundland. Then we harvested samples of the kelp to send over to Holland College to their culinary institute, Canada's smartest kitchen, where they actually developed neat food products out of the kelp: kelp chocolate, kelp sushi, kelp salad and all kinds of different things. Eventually, they will become products that go to markets and exports. They could develop a whole new aquaculture sector around kelp. That was a $2-million project.

These sorts of investments clearly grow the economy in so many unique ways. The sky's the limit when we get together like this.

Ms. Lena Metlege Diab: In the time remaining, can you expand a bit more on how our colleges are currently addressing the IP aspects of applied research?

The Vice-Chair (Mr. Corey Tochor): I'm going to ask that the response be provided in written form. We're already over the time period.

Ms. Lena Metlege Diab: Thank you.

The Vice-Chair (Mr. Corey Tochor): We will now move to Mr. Blanchette-Joncas for six minutes. Thank you.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much, Mr. Chair.

I welcome the witnesses joining us for this second hour.

At the risk of repeating myself, I'm going to return to a topic I've mentioned before, which is research funding in Canada.

We have with us representatives from Colleges and Institutes Canada. I took the time to prepare myself and read their pre-budget brief. I thank them for that work.

The first recommendation put forward in this brief is to increase funding for research and development in Canada. Let me read the title: “Canada's Innovation Slump”.

It states that in 2020, Canada ranked 20th out of 36 OECD countries in terms of the proportion of GDP spent on research and development. While the OECD average was around 2.7%, ours was 1.6%. In fact, we've lost ground, because in 2001 we were spending 2% of our GDP.

It seems that for some people in government, science is witchcraft. You don't do science projects with incantations, repeating that science is good, and that you're going to develop innovation. We need concrete measures, which requires investment.

It is usually said that we compare ourselves to console ourselves. However, I feel rather embarrassed. It's inconceivable that Canada, a G7 country, is the one and only country that has cut its investment in research and development over the past 20 years. I will make a point of repeating this message ad vitam aeternam, hoping that people will grasp the gravity of the situation.

I'm going to get to the heart of the matter now, although research funding is an important topic.

Mr. Taylor, you mentioned earlier, with respect to the inadequate funding of research in Canada and the lack of support from the federal government, that over 12,000 partnership offers from the institutions you represent had been turned down. I would like you to tell us today about the concrete and direct consequences of the federal government's lack of financial support for research. You mentioned that you receive only 2.39% of the money provided by the three funding agencies. I'll round it up to 2.4%, to be generous. I am capable of being generous, Mr. Chair.

● (1225)

[*English*]

Mr. Jeffrey Taylor: Thank you for the question.

I'll give you a bit of history on the funding we've had over the last 10 years from the funding council. In 2013, it was 1.87%. In 2015, it was 1.99%, and in 2020, it was 2.39%. It's a flat 2% within a rounding error, but there is a small uptick there.

Of course, we're very grateful for that increased funding that comes to us. I think there's a chance to build more momentum and increase funding in the—

[*Translation*]

Mr. Maxime Blanchette-Joncas: Excuse me, Mr. Chair.

The French interpretation isn't working.

[*English*]

The Vice-Chair (Mr. Corey Tochor): We'll stop for a second and confirm.

Your time is stopped at two minutes and 10 seconds.

Okay. We believe the translation is working now.

We'll resume, Mr. Blanchette-Joncas.

Mr. Jeffrey Taylor: Okay. Coming back to the question, I was citing some numbers of funding that we've received in colleges over the last 10 years. In 2013, we were at 1.87%. In 2015, we received 1.99% of tri-council funding. In 2020, we're at 2.39%. It's a flat 2% within a rounding error, but there is a small gradual uptick for which we're very grateful. We think we can probably build on that momentum and be able to grow that more.

If we look at NSERC data, just in the last two years at NSERC, 1,400 proposed partnerships were stalled because of a lack of funding, so there's definitely an appetite to see that increase.

The importance of rebalancing these investments.... Of course, the importance of fundamental university research I don't want to discount at all, but I think growing the envelope for the college and community innovation program would be a great opportunity here. Absent this move, we're leaving opportunity on the table.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much, Mr. Taylor.

In your brief, you also raised the possibility of expanding the contribution of CEGEPs and colleges to programs aimed at, among other things, the subject of our study today, namely, support for commercializing intellectual property.

You also talked about the possibility of a new national platform, which would enable the transition from labs to the marketplace. This would be an ongoing opportunity to promote commercialization.

Can you tell us more about that?

[*English*]

Mr. Jeffrey Taylor: Thank you.

Right now, we believe that IP staying with the partner is the best strategy, but our projects are funded in a very limited way. It's almost transactional. It's "Yes, partner, thank you for this project. We'll work with you. Here's your product. Here's your result. Here's your validated process. Good luck."

We don't have any funding for wraparound supports. We don't have funding to do follow-up and really guide any IP strategy for the partner. We make referrals, of course, for part of this larger ecosystem. We're happy to connect them to their partners, but they're largely on their own once the project ends.

We're quite proud of how short and sharp we are and how fast we can move with the projects. I think I mentioned that 85% of college projects are done in less than a year, and we really pride ourselves on that, but that can be limiting for the business partner who's trying to figure out what to do with their IP when they're done.

Support for relationship development and wraparound supports on a national scale—a national framework for that—would be wonderful. Right now, I expect it's very ad hoc and piecemeal. It's different from college to college to CEGEP, and it depends really on what kinds of funds the partner would have, so it's quite limiting for a lean start-up enterprise.

● (1230)

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

We're out of time on that round. Now we'll move on to the next member of Parliament.

Mr. Cannings, you have six minutes.

Mr. Richard Cannings: Thank you.

Thanks to both of you for being here.

I'll continue on this line. I'm interested in more details.

You say that you turned away thousands of potential partners because the funding wasn't there. First of all, at what stage are these companies coming to you? Are they full-fledged companies and is this something where they just want to work on a new product? Are they real start-ups with very limited cash? I'm just wondering if you have a sense of what kinds of companies are coming to you.

Mr. Jeffrey Taylor: It would certainly be a spectrum across the board. This is a fun fact that I share: Every Canadian is a 30-minute drive from a college campus, everywhere. Colleges serve people in large urban centres right down to the most rural of locations, and that really means we serve start-ups that just have an idea that they want to get off the ground right up to much more established businesses. It is all very SME-focused. We don't do a lot with giant corporations. Sometimes we do, but we're much more focused on the small enterprises.

Certainly, at Nova Scotia Community College we have worked with a spectrum of partners, from a start-up that just has a neat idea of how they can take their hobby—maple syrup tapping in their backyard—to market, helping them get out there with new culinary innovations, right up to very large, well-established, 50-year-old local businesses. We just did a project with a company called Kohltech, a window manufacturer in rural Nova Scotia. They wanted to integrate a solar panel into their windows, so there's a product on the line now that shows how you can put up a nice, clear-glass window, and if you put it in the sunlight it generates electricity for your home. We helped them with the integration of that product. It can be sort of across the board.

The breakdown of partners is 67% small and medium-sized enterprises, 14% large corporates and 14% non-profits.

Mr. Richard Cannings: You say you had to turn these down because the colleges didn't have the funding. Would we need more faculty? Would we need more facilities? How is that broken down? If the governments were to provide more funding to colleges, what do you need the most to say yes to these requests?

Mr. Jeffrey Taylor: That's a great question.

The funding really goes toward expert knowledge—that could be your faculty comment, so a bit of staff time—and consumables and equipment are a large part of what's going on. If we're going to integrate a solar panel into a window, we need to buy a lot of equipment to make that happen. I don't mean a lot, but we'd need 10 thousand, 12 thousand or 15 thousand dollars' worth of equipment to make that happen, and that can be a barrier for a small business. That's just not an expense they can afford on their books.

Mr. Richard Cannings: I guess a criticism we hear of Canada, or at least where Canada differs from other countries, is the amount of private sector investment in these innovations. I'm just wondering if you have any comments on how we can get that to change, whether IRAP or the new innovation corporation funding will help that. I am just wondering where we can make a difference.

● (1235)

Mr. Jeffrey Taylor: The business expenditures in R and D—that statistic—are tough for Canada. I agree. I love to think that colleges are part of the solution for this, and that's because we really leverage the industry's contributions in this space. For a partner who needs us to do a project for them to develop a new innovation, we're not going to just give it away. We need them to put some skin in the game, and it's a long-term journey, of course, to get that stat up to where we maybe want it in Canada, but we can slowly tease that along and increase the leveraging amount the business is willing to put in when they start to see benefit. I think colleges can really play a role in solving that problem.

Mr. Richard Cannings: Thank you.

The Vice-Chair (Mr. Corey Tochor): Thank you very much, Mr. Cannings.

Moving on to five-minute rounds, we have Mr. Williams.

Mr. Ryan Williams: Thank you, Chair.

Thank you, Mr. Taylor. It's great testimony so far.

What is the success rate of applied research at our colleges and institutions? What I mean by that is, if we're working with 10 different businesses and fund them, how many are commercialized and what is the success rate of those? Do you have statistics for that?

Mr. Jeffrey Taylor: Thank you for the question.

I don't know if I have stats on hand for that in front of me. I'd like to think that, if we had better IP wraparound supports, we would be able to work with the businesses, follow up and help them with their IP journey post-project. Right now, it's often, like I said, transactional. We do the project, we give it back to them and then we hopefully direct them to a good way to go, but we don't know what the long-term journey of that IP is.

We do know—and I'm sure you know and this committee knows—that for firms that own their own IP, exports are higher. They pay better wages and there is more growth, so owning IP is definitely an important part of ensuring that they go on in the right direction. However, we'd need some investment for wraparound and follow-up to really be able to answer that.

Mr. Ryan Williams: I would ask you to submit that to the committee later, if you can get that information.

Would you know if individual colleges or polytechnics would have that information that they could submit?

Ms. Anna Toneguzzo (Director, Government Relations and Policy, Colleges and Institutes Canada): We will certainly follow up on that to provide the committee with additional details. Yes, I think we could get some data for you.

Mr. Ryan Williams: I think it's very important.

Ms. Anna Toneguzzo: We could get some examples as well.

Mr. Ryan Williams: Yes, examples would be good as well.

This committee just finished a research project on colleges and applied research across Canada, and colleges stuck out. It is the same for my colleague, Mr. Blanchette. We were very pleased with the results from colleges and universities across Canada in all provinces including Quebec.

The statistic we heard before was that 95% of Canadians live within 50 kilometres of a college across Canada. What's really important about that when we look at Canada is that Canada is very rural. Only 95 municipalities in Canada have over 100,000 individuals, and 3,500 municipalities are rural in Canada with under 100,000. Colleges are more prevalent across those rural communities.

When I was involved with economic development in my region, which is very rural, we really looked at clusters and working with accelerators across Canada. Those clusters, if they scale and grow, will then develop IP and will be successful in Canada.

Universities do a great job with applied research on a lot of disparate emerging technologies, such as quantum, biotech, etc., but we found that there are a lot of emerging small and medium-sized enterprises in Canada that work in the college system. If we have those statistics, we can further relate how, to your three recommendations, we can help grow those IP rates, giving the rights to Canadians, and fund R and D for those different models as well as, obviously, IP property rights, etc.

Do you agree with that? Is there anything you'd like to add to that?

Mr. Jeffrey Taylor: No, and 100% this is great. You should be where I am. This is a wonderful answer.

Mr. Ryan Williams: Well, I am here now.

The next stage I would like to ask about, as we talk about IP, is growth-stage companies or scaling companies. Is that something on your radar?

You know, we've talked about this for years, how Canada has a really big problem with not seeing its companies scale. Sometimes when we do see that—and we've talked about a lack of venture capital, etc.—those companies end up in foreign hands and the IP ends up in foreign hands. Do colleges see scaling Canadian companies, scaling SMEs, as a priority?

Mr. Jeffrey Taylor: Yes, it's certainly part of the strategy overall to help businesses innovate. We're hopeful that this new Canada innovation corporation is really going to be focused on that challenge you just brought up, the kind of ceiling that happens when businesses try to scale in Canada. In part of their blueprint documentation, that seems to be one of their priority areas of focus.

We would offer a spectrum of services and try to tailor opportunities for everyone from a start-up to a large corporate partner. I go back to my Nova Scotian examples. Irving Shipbuilding has the big contract to build warships for the next 30 years. We work with them all the time on everything from workforce needs to R and D projects, so we can certainly address the spectrum of business challenges.

I think capacity is there within the sector. It's really the funding limitation that we get jammed up with.

● (1240)

Mr. Ryan Williams: This the last question, Mr. Chair. I have 10 seconds.

In terms of funding, because you have a large alumni network and you work directly with Canadians who own businesses and SMEs, do you think you could come up with a strategy that would help see venture capital grow, with maybe 50-cent dollars to government dollars, through the college system and their networks to local companies?

Mr. Jeffrey Taylor: I love that question.

VC is often brought up as a bit of a challenge for the Canadian ecosystem, and I think establishing better VC and better access to it through our college network, for example, across Canada could be a tremendous opportunity for us.

Mr. Ryan Williams: Good. Thank you.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

We now move to the final five-minute round of questions.

MP Sousa, go ahead, please.

Mr. Charles Sousa: Thank you, Chair.

Just to follow up on that last question, venture capital is the biggest problem we have, I suspect, and the ability for the government to then have that risk tolerance to initiate some of that is not in our wheelhouse. You don't want us adjudicating these deals and participating, but you do want the funding. I like the notion of having a partnership with the private sector, and some of the colleges that I've visited, be it Niagara or elsewhere, have done a great job of dealing with local businesses, as you've just explained with Irving out on the east coast.

There were three recommendations you made. One was about funding. The second one was about funding, and I'm not sure what the third was. Perhaps you could just reaffirm. One was to enhance college funding and the second one was to explore funding for educational purposes. What was the third?

Mr. Jeffrey Taylor: The third one was specifically looking at new programs that are being developed by the government, like the Lab2Market program, for example, and ensuring that colleges have an important role to play in those programs.

I mentioned earlier that the Lab2Market program is largely focused on graduate students and post-doctoral fellows in university labs. While I think we can be helpful and do stuff in that space, it's perhaps a little university-centric, so it's about finding a way to have colleges break into these programs.

Mr. Charles Sousa: Yes, you've commented on how 98% of the funding now goes to universities and only one or 2% is going to the colleges, and you want a bigger piece of that pie to facilitate some of the practical solutions. Our previous witnesses talked about how you can't commercialize and you can't monetize what you don't own. You want to own these IPs and initiate some of this within Canada and scale them, but you also want them to win.

In order for that to happen, in providing the funding alone—and we've heard some criticisms that funding is actually not as strong as it can be or should be—what's really at risk is who that funding is coming from. We want a bit more of that risk tolerance, because we're risk averse. The traditional banks of Canada are risk averse too. That's not what they do. They're not taking equity risk.

The equity, by its nature and by its very term, is equity owned by the investor. We heard criticism already that we don't want the government to just throw money out at a deal. We want the government to actually have an equity stake so it benefits, but that's not what government is there for. We're there to promote, enhance and encourage investment from the private sector. We're there to encourage and provide a stimulus by which some of the private sector can grow, create jobs and succeed. That's the role of government.

Do you want government owning businesses? Do you want government being in the sector that actually operates these and takes equity risks and then suddenly changes its scope? Do you want us to provide regional sources, regional investment? We want to inspire some of that growth, and you want government to provide some of that funding to those colleges to initiate that very issue. The measurement of our government's engagement isn't by way of success in the choices we make. That is up to the private sector and that's up to the colleges to provide some of that adjudication. It's up to the government to provide resources and stimulus. I suspect that's what I'm hearing you say.

That measurement has to be done in that capacity, so how do we then facilitate government engagement but not then be critical of government for making the engagement? The opposition will say, “You're investing in crap.” I'm sorry. It will say, “You're investing in deals that don't work.”

The fact is, deals do work on occasion. That's the payoff. How do you equate that?

● (1245)

Mr. Jeffrey Taylor: Maybe I'll give you a story, a success story, and we can use it as an example. It's another local Nova Scotia story.

This is about a rural machine shop, I'd call it, and an entrepreneur. A husband-and-wife team were running their own business and hiring local people. He had a neat idea to develop what I think is called a “slouch correction” device. It's like a seat belt that people in a wheelchair would use. If you have a spinal cord injury and you're in a wheelchair and your posture becomes an issue, this is a sort of seat belt device to correct that.

We helped him innovate. It was a $15,000 project. We helped him to have a prototype and build the thing. He said, “I think I've got something good here, but I can't buy the IP. I don't have money. I don't know how to file this. Could you guys do me a favour? Could you file to register this patent, and I'll buy it from you two years later, some period of time later?” We did that, and we used government money to do that. We sold it back to him and recovered that investment, and he is now employing 40 people in rural Nova Scotia, not just to do this particular device but to build other things. He now has experience with IP and patents, and he knows how to go down this road.

That's a very anecdotal story. It's a one-off. I wish we could scale it up and do that at every college in Canada all the time.

Mr. Charles Sousa: Yes, it is a great story, and we want to see more of that.

Again, it's the stimulus by which the government engaged to facilitate this, but you also have to be tolerant that, in many of those instances, you won't succeed—

The Vice-Chair (Mr. Corey Tochor): We have to wrap up, Mr. Sousa. We're 36 seconds over. I won't cut off witnesses, but I will cut off MPs when they are over their time.

I appreciate the witnesses for being here today.

We won't suspend, but we'll take a small break and then come back for committee business. We will still be in public when we return. We will recess for a quick two minutes.

● (1245)

_____(Pause)_____

● (1245)

The Vice-Chair (Mr. Corey Tochor): We'll get back into the committee business. We have two matters that we have to discuss. First of all, the clerk has distributed a draft supplementary budget for our study on the international moon-shot programs. As explained by email, we slightly underestimated our expenses when adopting the original budget for the study. The supplementary budget of $2,550 will cover what is left. Is there a motion to adopt the supplementary budget?

It is so moved. Is everyone in favour?

(Motion agreed to)

The Vice-Chair (Mr. Corey Tochor): Moving on, the chair would like to share an update regarding the committee's proposed travel in relation to the study of big science in Canada. I will turn to the clerk for this information.

The Clerk of the Committee (Mr. Keelan Buck): Thank you, Mr. Chair. I'll go quickly.

As we heard at the last meeting, the travel period from January to March 2023 is coming to a close very soon. We have not received the House's approval to travel during this period, so the chair has instructed me to begin planning for the next travel period, which is April to June 2023.

I remind you that this process has four major steps. First, a preliminary proposal is submitted to the liaison subcommittee. If this is accepted, then a detailed budget is submitted to the liaison subcommittee. If this detailed budget is accepted, it's up to the House to adopt a motion to actually authorize our travel. Only once we receive this authorization from the House can the committee actually begin spending from the budget it adopts. That means booking flights, accommodations, etc.

As I mentioned by email recently, the committee is now at step two of this process for the April to June period. The subcommittee has accepted our preliminary proposal, and at the chair's instructions my logistics team and I have researched and put together a draft detailed budget for the proposed travel. This was distributed last week.

As indicated in the draft budget, we would be visiting the same sites as originally planned. The travelling group would still include seven MPs, two analysts, a clerk and the necessary interpretation staff. After considering several factors, Madam Chair instructed me to plan the travel for the break week in May, so that's Sunday, May 21 to Saturday, May 27. It's for those dates that this budget is made.

To proceed to the next step and continue the travel planning, the committee needs to adopt a budget before Friday this week, which is March 10. If members have any questions, I'll do my best to answer them, but I do know we have limited time.

● (1250)

The Vice-Chair (Mr. Corey Tochor): Seeing that there are no questions, as the clerk mentioned, the draft travel budget has been distributed. If we want the travel planning to continue, the committee needs to adopt a budget and submit it to the SBLI committee no later than this Friday. Is there a motion to adopt this travel budget?

Seeing that there's a motion to adopt the budget, are we in agreement to pass the motion?

(Motion agreed to)

The Vice-Chair (Mr. Corey Tochor): Finally, I remind you that the committee agreed to send a list of proposed witnesses to the clerk for the IP commercialization study by tomorrow, March 8. Once the deadline has passed, the combined list will be reshared. As always, the analyst can offer witness suggestions upon request, and the wish-to-appear list is also regularly updated and shared. That is the end of what I have for committee business.

Now we have Mr. Blanchette.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Chair.

I have two items to raise.

First, I would like our analysts to give us the status of the draft report on our study of research and science publication in French.

I would like to know when the draft report will be ready for our initial analysis.

Mr. Grégoire Gayard (Committee Researcher): With respect to the report, it is currently being translated. The first draft is still underway, and we are waiting for the translators to make a few final edits before submitting it to the Committee.

Mr. Maxime Blanchette-Joncas: Could you give us a sense of when the Committee can expect to receive the draft?

Mr. Grégoire Gayard: I can't give you a specific date—

The Clerk: If my colleague doesn't mind, I would like to interject.

We realize the meeting is public, but the Committee Chair's office will make a decision on this sometime in March. We can assume that will be within a few weeks. The translation is proceeding.

Mr. Maxime Blanchette-Joncas: Very well.

If I understand correctly, we don't know when the translation will be completed.

I have another point to raise, Chair.

During the February 2nd meeting, I had questions that some witnesses were unable to answer because of time constraints or because they did not have the answer. I therefore asked them to provide the Committee with a written response. Four weeks later, I still have not received the answers to my questions.

I would like the Clerk to tell us how to proceed. Some of the witnesses sent us written answers, but others have not.

My questions were directed to government officials. I don't know if they have to follow a particular process, or if they have a specific deadline to meet.

Perhaps the Clerk could enlighten us?

The Clerk: Generally speaking, after witnesses have appeared, they are reminded to provide the information requested by the Committee or one of its members. Committee members may also ask me to follow up with certain witnesses.

As for the deadline, if the Committee decides it's important to set one, it can do so through a motion.

Mr. Maxime Blanchette-Joncas: Very well.

I will be more specific, Chair.

The question I asked on February 2nd was directed to the MInister of Innovation, Science and Industry, who was accompanied by representatives of the three funding agencies and by Canada Research Chairs.

Also on February 2nd, I asked the Chief Science Advisor a question.

I saw that we received a written response from her office—I wish she had written the response herself. However, I have not yet received a written response to my question.

I think it would be a good idea to set a reasonable time frame for a written response. That would allow committee members to do their work. In my opinion, four weeks is a reasonable period to respond to a simple question.

Thank you.

● (1255)

[*English*]

The Vice-Chair (Mr. Corey Tochor): Outside of calling the witness back to the committee to have additional questions posed to the minister, I think it would be appropriate—to the clerk and analysts—if we asked the Liberal members to talk to their colleague about providing written responses. I guess if written responses are not provided to those questions, there will be a motion from the committee to have the minister reappear.

I suspect that this is not going to go away just from today, but I encourage us to have those conversations to encourage those responses. I'm assuming that at the next opportunity we have for committee business this will be raised as a question for the committee—a motion to entertain having the witness come back to clarify his or her responses.

Barring that, seeing no other business, our next meeting is scheduled for this Thursday, March 9. The notice will be published soon.

Is there agreement to adjourn this meeting?

Some hon. members: Agreed.

The Vice-Chair (Mr. Corey Tochor): Seeing agreement, we now stand adjourned until Thursday, March 9.