

HOUSE OF COMMONS CHAMBRE DES COMMUNES CANADA

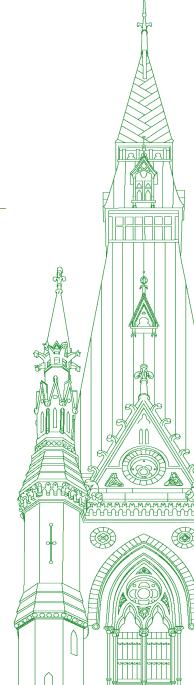
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# Standing Committee on Industry, Science and Technology

EVIDENCE

# NUMBER 021

Tuesday, March 9, 2021



Chair: Mrs. Sherry Romanado

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Tuesday, March 9, 2021

#### • (1110)

#### [Translation]

The Chair (Mrs. Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.)): Good morning, everyone.

[English]

I now call this meeting to order.

Welcome to meeting number 21 of the House of Commons Standing Committee on Industry, Science and Technology.

Today's meeting is taking place in a hybrid format, pursuant to the House order of January 25, 2021. The proceedings will be made available via the House of Commons website. The webcast will always show the person speaking rather than the entirety of the committee.

To ensure an orderly meeting, I'd like to outline a few rules to follow.

Members and witnesses may speak in the official language of their choice. Interpretation services are available for this meeting. You have the choice, at the bottom of your screen, of floor, English or French. Please select the language of your preference to receive the translation.

Before speaking, please wait until I recognize you by name. If you are on the video conference, please click on the microphone icon to unmute yourself.

I will remind you that all comments by members and witnesses should be addressed through the chair. When you are not speaking, your mike should be on mute.

With regard to the speaking list, the committee clerk and I will do our best to maintain the order of speaking for all members, whether participating virtually or in person.

As is my normal practice, I will hold up a yellow card when you have 30 seconds remaining in your intervention, and I will hold up a red card when your time for questions has expired. Please respect the time limits in order to make sure everyone has an opportunity to ask questions.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on November 5, the committee is meeting today to commence its study on the development and support of the aerospace industry.

I'd like to now welcome our guests.

#### [Translation]

From Aéro Montréal, we welcome Suzanne Benoît, President and Chief Executive Officer.

#### [English]

From the Aerospace Industries Association of Canada, we have Mike Mueller, interim president and chief executive officer. From the Alberta Aviation Council, we have Kimberley Van Vliet, director of aerospace.

#### [Translation]

From the International Association of Machinists and Aerospace Workers, we have David Chartrand, Quebec Coordinator.

#### [English]

Finally, from MDA, we have Mike Greenley, chief executive officer.

Each witness group will present for up to six minutes, followed by rounds of questions.

Before we begin the presentations, I want to reiterate to members and to witnesses to please not speak over each other. We would like to make sure that the interpreters are able to do their jobs.

That being said, we will start with Aéro Montréal.

### [Translation]

Ms. Benoît, you have the floor for six minutes.

Ms. Suzanne Benoît (President and Chief Executive Officer, Aéro Montréal): Good morning, Madam Chair, ladies and gentlemen.

I am very pleased to be appearing before you today on behalf of the members of the Quebec aerospace cluster. We are very grateful for this invitation and for the interest you have taken in our industry.

As you know, the global aerospace industry was hit hard by the current crisis. The recent report of Canada's Industry Strategy Council also cites aerospace as one of the sectors most affected by the pandemic across the country and most in need of targeted emergency measures by the federal government.

For a year now, the vast majority of the global air fleet has been grounded as a result of the sharp decline in air traffic caused by the closing of international borders. As a result, thousands of aerospace workers are now unemployed, and hundreds of Canadian businesses are struggling to survive. However, our industry is developing measures that would allow operations to resume, as many other countries have done and are still doing. Leading executives in our sector have also mobilized as never before and, last May, established the alliance for aerospace recovery to accelerate the industry's emergence from the crisis. The alliance is a strategic committee of Aéro Montréal's board of directors that, in the past few months, has helped to develop a specific action plan that is readily applicable and suited to the industry's needs.

However, the government needs to take a position on it quickly because every day counts. We have already observed a nearly 60% reduction in airlines' new aircraft requirements and do not anticipate a return to previous production levels until 2024-2025.

The global aerospace industry had hit unprecedented heights before the crisis. To meet demand, many airlines took on debt so they could continue expanding at pre-crisis growth rates, acquiring new equipment, investing in automation to increase their productivity and expanding their plants. However, their operations have since declined by as much as 50%.

Many SMEs now have cash flow problems as a result of those capital investments and of the changes made to repayment terms by nearly all decision-makers in recent months because they too are struggling to survive the crisis.

Extending the Canada emergency wage subsidy for our sector until the end of the crisis, which is anticipated in 2024, would help us retain our qualified employees and thus ease pressure on corporate cash flows.

We must block the exodus of sectoral workers to other places around the world where governments are engaged or to other industries less affected by the crisis.

Since the pre-crisis labour shortage will still be intact when the sector recovers, it is therefore vital that we retain workers within our businesses.

The few nations that have an aerospace industry support their strategic sector because they know that exports of high-tech products will create jobs and wealth. That is why they advance strong industrial policies to ensure its growth.

To address the crisis, France has invested \$26 billion in its aerospace sector, the United States \$80 billion and Germany nearly \$10 billion. Here in Canada, we are still waiting for the targeted assistance that is so slow in coming. What will Canada do to support this pillar of our economy?

Aerospace is a strategic and key industry for the economy. On its own, it generates total revenue of \$34 billion and contributes \$28 billion to Canada's GDP. It represents 235,000 direct, indirect and induced jobs, including more than 43,400 in Quebec, and consists of hundreds of SMEs and large businesses. It invests more than \$1.4 billion in research and development every year. The sector exports more than 80% of its production, which contributes to Canada's collective wealth. It is therefore essential that we invest now in order to preserve our industry and halt its decline.

In the 1980s, Canada's aerospace sector was ranked fifth largest in the world. Today, we have fallen to ninth position, and, if nothing is done, we should simply consider taking ourselves out of the running.

#### • (1115)

Canada has set very clear greenhouse gas emissions targets, and the transformation of the aerospace industry will play a crucial role in meeting those targets.

A large number of initiatives conducted by our businesses across Canada are already in development and include the design of new low-emissions engines based on hybrid, electric and hydrogen propulsion.

All these disruptive technological projects are part of a long-term strategy and require a profound transformation. Here in Canada, we are fortunate to have all the operational and technological assets and skilled talent we need to contribute to a greener recovery.

To support the aerospace industry and ensure its long-term viability, the federal government must become our strategic partner and quickly establish an integrated national aerospace strategy. That strategy, together with competitive funding, would enable Canadian businesses to compete with other countries on an equal footing.

By contributing to efforts to develop the industry, the Canadian government will help our country continue to distinguish itself and to shine on the global stage. The facts are clear: support for our industry is a profitable investment for Canada.

Madam Chair, ladies and gentlemen, thank you in advance for your support and attention.

The Chair: Thank you very much, Ms. Benoît.

[English]

Our next witness is Mr. Mueller.

You have the floor for six minutes.

Mr. Mike Mueller (Interim President and Chief Executive Officer, Aerospace Industries Association of Canada): Thank you, Madam Chair, and good afternoon everyone.

It's a real pleasure to be here on behalf of the Aerospace Industries Association of Canada. It's also great to have Ms. Benoît, from Aéro Montréal, here as we represent mutual members in Quebec. We work very closely together.

We appreciate your interest in our industry and willingness to work with us on the challenges we are facing. We know we are not alone in these challenges. Our entire aerospace ecosystem is feeling the pressure, and is eager for a partnership with government.

Madam Chair and members, we appreciate the enormity of the economic and social challenges this government and you as parliamentarians are facing because of the pandemic. Our members are part of your communities, and they are doing everything they can to ensure that 235,000 jobs generated by this sector are protected, but it has been a difficult task.

More than 60 years ago, political leadership partnered with industry to build Canada into an aerospace sector that has become a global leader. Those political and business leaders had foresight and determination. We need that same commitment now more than ever as we are grappling with the economic affects of COVID-19.

You may have seen in The Hill Times a simple advertisement, calling on the government to do something that all our international competitors have already done, that is to work with the Canadian industry to establish a long-term, nimble sector strategy.

Many of you are thinking, okay, that should be an easy thing to do, and we agree. However, we have been calling on the government to do just that for more than four years now.

Allow me to provide some background.

Our members represent over 95% of aerospace activity in Canada, covering the civil, defence and space sectors. Aerospace has been a driving contributor to Canadian prosperity for decades, responsible for the generation of nearly 235,000 jobs, and over \$28 billion annually to our nation's economy. This hasn't happened by accident. Virtually every aspect of our daily life is touched by the innovation and technology driven by our sector.

Our past political leaders knew investment would yield significant dividends, and their vision proved correct. As a result, over the course of many years, Canada became the fifth largest aerospace industry on the planet, and a true source of pride for Canadians.

However, in recent years that vision, investment and support has been slipping, and so has Canada's global positioning. This decline started before the onset of COVID-19, and now the challenges have been compounded dramatically. As a nation, we're falling further and further behind, and our industry needs support now.

The challenges mean that our skilled workforce, our considerable talent, our jobs, and the good paycheques they provide are all at risk. However, we recognize this, and we started doing the heavy lifting years ago. We laid out the basis for our needed sector strategy in our "Vision 2025" document, and we have a path to once again make Canada a leader in aerospace. It's a path designed to shore up and leverage our strengths, and a path, guided by industry, that laid out a vision for a revitalized aerospace sector that would yield significant results for our national economy.

With the release of our road map, we called on government to join us, and renew Canada's overall commitment to global aerospace leadership. We highlighted priorities and gave detailed recommendations, but to our dismay, concrete action was not taken, and still has not been taken. COVID-19 has now significantly intensified the challenges.

A renewed partnership is essential to protecting the 235,000 highly skilled, well-paying jobs generated by this industry, and located in your ridings right across the country. We can't do it alone. We need partners in Parliament from all parties if we are to overcome the challenges, and leverage the opportunities that lie ahead.

Other countries, our competitors, have realized this. I cannot state this more seriously. Our competitor countries are positioning their sectors for the future to be leaders in this highly competitive field, and the good paycheques that come with it. They are doubling down with new funding partnerships, and we require the same. They know that successful aerospace industries are built on strong, determined government-industry partnerships.

Our question is, what are we waiting for here in Canada?

We are one of the few industries without a strategy for our industry. As a result, opportunities have been and will continue to be lost. We've had a global reputation for cutting-edge innovation, a skilled workforce that is the envy of the world, and a strong supply chain that's second to none.

With our export intensity at over 80%, the aerospace sector, and in particular the space sector, are a natural fit to help drive Canada's economic recovery. There are so many untapped opportunities, including in driving new, high-value jobs, innovation and leadership when it comes to green aviation, a stated priority of the government, but we need a plan and programs to capitalize on them.

As I said, our competitors are taking action. They are factoring this in, and they are implementing industry strategies and support, yet Canada is not. • (1120)

I'll close off my remarks today by asking you to consider the strategic nature of this industry. Let's ensure that Canadians can continue to take pride in their aerospace industry from coast to coast; that Canada continues its leadership in R and D and in training; and that, most importantly, we protect our skilled workers and good-paying jobs and paycheques across the country. An overwhelming number, I should mention, are small businesses.

Let's not be naive. Let's not lose our talent. Canada's main competitive advantage has been our skilled workforce, and we are losing it due to COVID-19. Let's also acknowledge that aerospace exists in a fierce, globally competitive marketplace. Once our jobs leave, they don't come back.

On behalf of our industry, we urge all of you to continue the tradition and stand by us. Grow this sector for the future and protect its legacy and its jobs.

Thank you for your time.

The Chair: Thank you very much.

Our next presenter is Madam Van Vliet.

You have the floor for six minutes.

Ms. Kimberley Van Vliet (Director of Aerospace, Alberta Aviation Council): Madam Chair, thank you very much.

Honourable members of the standing committee, thank you for letting me present today.

My name is Kimberley Van Vliet. I am the director of aviation, aerospace and logistics for Invest Alberta. I am also the founder and CEO of WāVv and ConvergX, a strategic consulting company and a global congress that focus on technology transfers across multiple industries, including the aerospace industry.

Today, I am honoured to present to you as the director of aerospace for the Alberta Aviation Council, a catalyst for industry growth and the voice of aviation interests in Alberta. You have heard that the aerospace sector is an umbrella industry. It's an engine that powers economic growth and investment we desperately need for middle-class jobs in communities across Canada to build back better.

We have a unique opportunity. There lies before us a nationbuilding opportunity on an order of magnitude of the Trans-Canada Highway. The opportunity is the creation of the Canadian centre of excellence for aerospace and aviation research and training, CCEAART, which will attract foreign direct investment to link sustainable and responsible northern development; accelerate Canada's Arctic sovereignty; and grow Canada's middle class through advanced manufacturing jobs and training for indigenous peoples, youth and women. This opportunity will also provide job transition and export development opportunities to Canadians from coast to coast to coast.

We have the perfect storm. As Arctic tanker traffic increases and global forces transcend upon the Arctic with repeated nation-state incursions into Canadian waters and airspace, the challenges facing Canada's Arctic sovereignty are increasing exponentially. We are also facing post-pandemic economic recovery challenges, with job and business losses never experienced before. Some of our hardest-hit communities are women. RBC reported that women who have lost their jobs during the pandemic will experience increased joblessness for longer than their male counterparts, and this is amplified in indigenous communities.

The economic impacts of COVID and the mounting pressures to tackle climate change are putting tremendous pressures on our industries and added pressure on Canada's aviation and aerospace industry. Yet, in adversity, there is always opportunity to develop future workforces, put Canadians back to work and develop industries with jobs of tomorrow. There are countless technologies awaiting development that have yet to be imagined, markets waiting to be explored, and Canadians who are ready to build back better.

We have the vision. The CCEAART is a set of shovel-ready, finance-ready projects in Alberta. The Alberta Aviation Council is a supporter of this initiative, which was created by many devoted people, communities and organizations.

The main campus of this centre would be an innovation hub in the Edmonton area, where companies converge to develop new aviation, aerospace and defence technologies with a focus on space and unmanned systems. The centre, a supercluster of development, would accelerate new unmanned system platforms, materials science, propulsion systems, fuels research and ground systems. Canada and Alberta, with our highly skilled and technical workforce, could lead global use of nanotechnologies, AI, and advanced computing in aerospace.

This centre would also be a nexus of aerospace and aviation education for under-represented groups and provide access to Alberta's world-leading engineering and business talent at a critical time for an area of the country that has been hardest hit by sectoral downturns and a global health pandemic. The centre's programs would help to fund and accelerate Alberta's Arctic gateway infrastructure, and would leverage Alberta's research institutions that specialize in space systems, ethical fuels, hydrogen fuels, computing science and advanced materials—materials that are critical to the global, low-carbon energy transformation.

Alberta, with its unique position, is home to the Alaska Highway, a critical jumping-off point to the United States, and to its waterways to Hudson Bay. With Edmonton being one of the world's most northern metropolises, it has the population and infrastructure needed to support northern development.

The centre would also support Canada's Arctic sovereignty programs, by linking Alberta's four military bases and the centre's massive flight corridor, to accelerate development and testing of unmanned Arctic surveillance platforms. All this means jobs for Canadians and technologies that can be exported around the world.

We have policy asks. Alberta can't do it alone. Alberta has made aviation and aerospace a strategic pillar, backed by new initiatives like the new Invest Alberta Corporation, and the newly created Strategic Aviation Advisory Council, which are intended to aid an initiative like this.

An initiative like this requires collaboration from every level of government, including Ottawa. Federally, there are policies that may inhibit the types of FDI needed to develop the centre of excellence.

#### • (1125)

The SR and ED program eliminated capital expenditures. This has adversely affected advanced manufacturing industries like the automotive and aerospace industries. An aerospace company exporting its products around the world needs capital expenditures. We would like to see these expenditures reinstated.

The industrial and technological benefits policy could be improved to better incentivize foreign direct investments into small Canadian companies.

An aerospace industry, focused, indigenous benefits program is critical.

We need policies but also funding. We need federal leadership. We need you.

In conclusion, the Alberta Aviation Council is proud to present this Canadian nation-building opportunity, the Canadian centre of excellence for aerospace and aviation research and training.

This centre would leverage Alberta's unique assets. The benefits would reach well into the north, helping to advance reconciliation by developing our northern economies and communities responsibly and collaboratively with indigenous communities. Investments today ensure Canadian leadership tomorrow will benefit across our borders and beyond, providing a sustainable and secure future across Canada. Thank you very much.

• (1130)

The Chair: Thank you very much, Madame Van Vliet.

[Translation]

Mr. Chartrand, you have the floor for six minutes.

[English]

**Mr. David Chartrand (Quebec Coordinator, International Association of Machinists and Aerospace Workers):** Thank you, first of all, to all the committee members for giving us the opportunity to present our views. We're the International Association of Machinists and Aerospace Workers. We're the leading union in the aerospace sector and air transportation industry. We represent over 55,000 members across Canada, 22, 000 of whom work in the aviation and aerospace or air transportation sectors.

We represent members of various companies such as Bombardier, Airbus, Boeing, MTU, Magellan, Arnprior Aerospace, Safran Landing Systems, Avcorp, Rolls-Royce, Siemens, L3 and Field Aviation with numerous members across Canada who work in aircraft parts manufacturing, aircraft overhaul and repair. We have workers across Canada and our members proudly complete work for commercial and military purposes. Given the crisis the aerospace industry faces now, but has also experienced over the last several years, we want to bring a two-part solution to the committee's attention.

One is targeted at a short-term solution to address challenges related to the pandemic and the other a long-term solution to build a globally competitive industry.

We also put forward a case study of a funding model that successfully supports aviation and aerospace while building a resilient and competitive industry for the future.

The importance of the aerospace sector, as Mike and Suzanne have already said, is that it's a large contributor to the Canadian economy, some \$28 billion annually. It is also export intensive as an industry as 93% of aerospace manufacturing firms were exporters, which is 44% higher than the manufacturing average. The industry is also a source of well-paid, stable, unionized jobs that support middle-class Canadians.

In the Canadian labour market, the aerospace industry employs more workers than the auto industry by a large margin, 208,000 people versus 123,000 workers or 60% more workers than the auto industry.

Yet, to date, the industry has seen little direct support as a whole. Unlike its competitors, Canada relies much more on aerospace as a source of revenue yet in comparison to its competitors it has been doing the least to support this nationally important industry. Not only does the industry generate significant value, Canada also ranks as the second most attractive country to invest in aerospace, meaning the industry also attracts businesses and foreign investment.

Aerospace manufacturing is the most intensive in research and development, which is six times higher than the manufacturing average. Research and development in the industry enable the work of several federal departments and have spillover effects on other industries and applications in everyday life.

In the short term, looking at financial aid for the industry, the challenge for many companies right now is that funding is tied to having a contract, which is a challenge given the situation in the aviation sector. Many airlines have put contracts on hold or cancelled, leaving aerospace companies in a precarious situation. Loans and grants need to be accessible to companies that support smaller business, SMEs, in the supply chain, ensuring the viability of the Canadian supply chain, which is well established. Funds must also be used for operations and bolstering production and must not be used for corporate bonuses, share buybacks or anything else that is not related to maintain production and workers on the job.

This is also an opportunity to tie loans and grants to incentives for the industry to move in the direction of green technologies, which are proving to be the future of aviation and aerospace.

The aerospace innovation plan is meant to provide a direct form of investment to the industry. Research has shown that government spending, much like in other areas of the economy, stimulates corporate spending in the industry on a ratio of 1:4. Through this fund the government could also encourage the shift to green technologies, ensuring contracts, both commercial and military, are available for Canadian companies, OEMs and SMEs.

A bank premised on EXIM, as in the United States, enables access to interest-free loans for research and development, investment in new technologies, ensuring the vitality and competitiveness of these industries. The bank would also offer tax credits and deductions for R and D, which is important given how research intensive the subsector is. EXIM's direct funding ensures working capital guarantees, export credit insurance and direct loans at competitive rates to foreign buyers who make purchases over \$10 million. Bank

financing could also be tied to employers who provide on-the-job training, skills upgrading and training for new technologies.

An aid package model like in France where funding to Air France, Airbus and major French parts suppliers through direct government investment subsidies, loans and guarantees includes funding for smaller suppliers in the supply chain and small to medium-sized businesses through a special fund jointly financed by the government, Airbus and other big manufacturers.

France's public investment bank, Bpifrance, will provide a total of around 500 million euros in loans to Airbus, Safran, Dassault Aviation, a military and commercial aircraft manufacturer, and Thales.

• (1135)

To ensure its industry's viability, France's defence and interior departments will increase orders for 600 million euros worth of Airbus aircraft.

A critical part of funding is that the plan includes a long-term vision for the industry, enhancing the country's future competitiveness by requiring companies to shift investments to low-emission aircraft powered by electricity and hydrogen. The goal is produce carbon-neutral aircraft by 2035.

When we look at long-term industrial policy development, we recommend a national policy to address the fragmentation of the industry and encourage coordination between the provincial and federal jurisdiction and between regional clusters that operate independently of each other. The policy would have to include a labour strategy to address skilled labour shortages, which have been exacerbated by the pandemic due to layoffs that mostly affect junior employees while pushing more senior workers into early retirement.

In terms of training and education, we recommend earmarked money from the federal level to provinces designated for training programs, apprenticeship and Red Seal programs.

We recommend a cluster policy, based on regional innovation systems, which would include support for academic and industrial research co-operation. On procurement, we recommend including small to mediumsized enterprises by ensuring they are able to win contracts. This would also apply to procurement for military contracts, which has been essential for aerospace and workers companies in Canada, such as MTU in British Columbia.

Thank you.

The Chair: Thank you very much, Mr. Chartrand.

I now turn the floor over to Mr. Greenley. You have the floor for six minutes.

**Mr. Mike Greenley (Chief Executive Officer, MDA):** Thank you for the opportunity to make a presentation to the committee today. As opposed to an association, I'm now speaking as a corporation, on behalf of MDA.

MDA is a homegrown story of innovation and entrepreneurship. In 1969 University of British Columbia professor Dr. John Mac-Donald and his physics grad Vern Dettwiler founded MacDonald, Dettwiler and Associates. Their goal was simple—to create an advanced technology company where talented engineering graduates could find employment in British Columbia. That humble start was the catalyst for B.C.'s technology industry, which today employs more than 100,000 people in the province.

Today MDA serves the world from our Canadian home and global offices as an international space mission partner and robotics, satellite systems and geo-intelligence pioneer with a 52-year story of firsts on and above the earth. With more than 2,000 employees across Canada, located in multiple provinces, MDA is leading the charge toward viable moon colonies, enhanced earth observation and communication in a hyper-connected world.

MDA's success is a direct result of Canada's early recognition, dating back to the dawn of the space era some 60 years ago, that it needed to harness space to achieve its national needs for telecommunications services and remote sensing of our large land mass and long coastlines. Today Canada's comparative advantage in this sector involves our country's robust space ecosystem, where the industrial and academic community collaborate to develop, build and operate complex space systems, all from within our domestic borders. Beyond manufacturing, the importance of space to Canada's national security, economic prosperity and place in the world cannot be understated. Space also has the ability to inspire the next generation to pursue science, technology, engineering and math studies in their education.

MDA plays an important role as a prime contractor for Canadian government flagship space programs and an anchor company in Canada's space innovation ecosystem, creating, developing and building solutions in Canada, exporting these solutions globally, and reinvesting in future Canadian innovation and intellectual property. Many of MDA's, and Canada's, space technologies are worldrenowned. Our Canadarm robotics technology has branded Canada on the world stage, and serves as a source of inspiration and pride for Canadians. Our RADARSAT earth observation satellite technology is a leading source of knowledge about our planet.

MDA is pursuing a number of exciting commercial initiatives, such as our plan to build a commercial earth observation satellite mission as our follow-on to RADARSAT-2, as well as advanced technology work on Telesat's recently announced low-earth orbit satellite broadband network, Telesat Lightspeed. We are also planning to leverage our work on Canadarm3, the Canadian Space Agency's third-generation robotic system for NASA's moon-orbiting space station, into commercial opportunities in the on-orbit satellite servicing and space tourism sectors.

In April 2020 a group of enthusiastic Canadian investors, led by Northern Private Capital, repatriated MDA as a stand-alone, Canadian-headquartered private company. Together we are charting a path for growth as a pure space-play company focusing on the burgeoning space economy. Countries around the world are moving swiftly and decisively to participate in the new space economy, because while space may not be a final frontier, it is the next one. The global space market is worth over \$420 billion today and is projected to surpass \$1 trillion in the next decade. In 2020, in spite of the pandemic, this sector experienced record investment.

Canada is well positioned to lead in the future if we keep our hand in. Canada and the entire space community are planning to be part of this trillion-dollar economy in a big way. In order to do this, however, we need to have the Government of Canada as a partner. In this global sector, the government's role is paramount—as an investor, owner, regulator and anchor customer.

In terms of the post-pandemic economic recovery, the government should turn this epic challenge into an opportunity to build back better, building on strengths, charting a path to a future that focuses on areas of strength and claims them for this country. Space is one such area. Every dollar invested in space by the Canadian government has a strong multiplier effect, producing roughly twice the impact. Investments in space have an immediate effect. They are rocket fuel for Canada's economic recovery. This sector is poised to play a significant role over the long term as Canada positions itself for future prosperity and a continued high quality of life.

• (1140)

For the continued success of Canada's space sector and to position Canadian companies for the rapidly expanding global space economy, we need three things. First, we need the Government of Canada to serve as an anchor customer to innovative space companies.

Second, we need continued investment in technology development and demonstration. There are a number of opportunities for Canada to do this for projects that could be active right now.

Third, we need a long-term space plan that outlines the government's planned investments in space as well as a modern regulatory framework. In these times of economic uncertainty, the space sector is a light on the horizon. With investments in space paying strong dividends now and over the long term, the sector is ready to play its part to help our country build back better.

Thank you.

The Chair: Thank you very much.

Now we will start our rounds of questions. We will start with MP Dreeshen.

You have the floor for six minutes.

Mr. Earl Dreeshen (Red Deer—Mountain View, CPC): Thank you, Madam Chair.

Thanks to all of our witnesses.

First of all, I would like to direct my first question to Ms. Van Vliet.

I would like to address the issue about the funding that has gone into regional routes and smaller airports in Alberta and some of the impacts that have taken place because of COVID-19.

First of all, can you tell me what assistance they have had so far?

Is there further assistance that is required?

• (1145)

**Ms. Kimberley Van Vliet:** Is there further assistance required? I would say, yes, there is need for further assistance.

As for what has been given, I do not have the exact numbers in front me. I would have to get back to you on that.

**Mr. Earl Dreeshen:** You had some actions that had been presented. The actions included things like insuring that all the airports regardless of the ownership model were eligible for the support programs implemented to combat COVID-19 and suspension of federal excise and carbon taxes on jet fuel and gas.

Can you elaborate on some of those types of issues?

The Alberta Aviation Council signed a letter to the Prime Minister last May where all that was outlined.

Can you expand upon that?

**Ms. Kimberley Van Vliet:** I'm sorry, I can't at the moment. I'm not up to speed on that. I apologize.

Mr. Earl Dreeshen: Okay, that's fine.

Then let me address my next question to Mr. Mueller from Aerospace Industries Association of Canada.

Your organization recently noted, "If the Government partners with our industry, recognizing the strategic importance we bring to the table—215,000 jobs, over \$25 billion in annual GDP, \$1.4 Billion in R&D—we will be in a position to help Canada overcome its massive deficit."

I wonder if you could expand on that.

What would be the best way for us to partner?

What steps does the government need to take, Mr. Mueller?

**Mr. Mike Mueller:** One of the real opportunities we see with the aerospace sector is exactly your point, Mr. Dreeshen, which is, how can we contribute to the economic recovery?

As I mentioned in my opening remarks, with over 80% of what we produce being export related, there's a real opportunity to do that.

One of the things we're really lacking is that sector-specific strategy. We have all of our international competitors around the world doubling down on innovative and high-paid industries, such as ours in the aerospace and space sector. There's a real opportunity there to help contribute to the economic recovery, but we really do need that sector-specific strategy. We're one of the only countries in the world without that.

On the space side, I would agree with Mr. Greenley, we need that long-term funded space plan in addition. The amount of money you put into the aerospace sector, you get dividends out of it. For example, on wages, we have 25% higher wages than the average manufacturing sector.

The other thing I would also mention that is very key is that in the aerospace sector we are in an absolutely fierce globally competitive marketplace. Once those work packages leave, they don't come back. As companies are looking as to where to invest overall, they are looking for that signal from government that they are there and they are supportive.

Mr. Earl Dreeshen: Thank you.

I was fortunate enough a couple of years ago to go to the Paris Air Show. I had a chance to take a look at all of the innovation and the companies that are Canadian-based, and I had a chance to talk about our space economy. Again, I was surprised that there were so many companies from western Canada that were associated with this.

Mr. Greenley, could you explain what challenges stand in the way of our space economy to help us with this economic recovery for Canada's aerospace industry?

What actions could the federal government take to accelerate the recovery of the industry?

How should the federal government transition from helping the industry survive to helping it recover?

**Mr. Mike Greenley:** As I mentioned, right now in space we have a very strong current of growth. We're seeing the space economy grow from \$380 billion to \$400 billion a year today to over a trillion dollars in the next few years.

Canada, as the third country into space back 60 years ago after the U.S.S.R. and the United States, has ended up with a strong space industrial base in the country, so we're able to take advantage of that strong growth curve.

The real things we can do to ensure that we're successful in that, as I mentioned, from a government support perspective is to ensure anchor programs. If you look at a program like Telesat's Lightspeed, providing support to that program and ensuring it's a success creates the whole supply chain of opportunity for Canadians.

Our Canadarm3 program at MDA is executing with the Canadian Space Agency to put the next generation of artificial intelligencebased robotics on lunar gateway, the new space station that will orbit the moon. That is another great example of government anchor programs that enable us and then facilitate the entire supply chain of hundreds of companies.

There are a number of additional opportunities to do that moving forward into the future. We've talked about our having a next generation earth observation satellite. We have demonstration 5G communications programs that are being conducted right now.

#### • (1150)

The Chair: My apologies, Mr. Greenley. We're over time on that round.

We now go to MP Lambropoulos.

You have the floor for six minutes.

[Translation]

**Ms. Emmanuella Lambropoulos (Saint-Laurent, Lib.):** Thank you very much, Madam Chair.

#### [English]

I managed to fix my speaker, so we should be good.

#### [Translation]

As all the witnesses appearing today have pointed out, the pandemic has had many devastating impacts on the aerospace industry. It is therefore essential that the government find a way to assist the industry. As many of my Quebec colleagues can see, this is a very important industry for Quebec. It creates many excellent jobs, and we should therefore support it.

I have two questions. The first concerns the pandemic more specifically. You have clearly been hit very hard during this time. If you could choose a program that we could implement to assist your industry immediately, what would it be?

What aspects of that program could assist both aerospace businesses and the manufacturing businesses supporting that industry?

Go ahead, Ms. Benoît.

Ms. Suzanne Benoît: Thank you for your question.

We talk a lot about programs, and we talk a lot about projects as well, but it's important that the federal government start off with a comprehensive strategy for the aerospace industry. As you know, we're taking a major turn toward sustainable development and a green economy, and we're ready. We've already started up projects. We're asking the government to be a strategic partner, as is done in other countries, and to devote a program to aerospace so that, for example, we can acquire expert assistance.

You've heard about France, which has announced an enormous program to launch a hydrogen-powered aircraft by 2035 and has made massive investments for that purpose. It has made a public commitment to do so. The entire planet is aware of it.

We would like the Canadian government, with all the resources and know-how there are, to create a program like that, a mobilizing and structure-building program that involves the players of Canada's aerospace industry from east to west.

We already have an idea for a hybrid, electric or hydrogen propulsion project, involving more than 50 businesses from across Canada that have made a commitment. We have submitted it to the federal government, which has not yet made any commitment. It always seems to group us together under a program called the strategic innovation fund, which includes various sectors. It doesn't seem to be interested in the specific dynamic of the aeronautics sector, whereas that's what really helps a sector achieve local and international success.

In fact, what I'd like to say is that sustainable innovation has to be accelerated by means of the strategic aerospace industry program.

Ms. Emmanuella Lambropoulos: I think I understand. Thank you very much.

I imagine you're talking about what's needed for the long term.

**Ms. Suzanne Benoît:** No, it's what's needed for the very short term. The danger we're facing is that the talent, investors, the large, small and medium-sized businesses and the tier 1 suppliers in the supply chains, among others, may leave the country.

These people have been involved in winning projects in recent years, but everything has stopped now as a result of the crisis. Air-craft aren't flying, and we're operating at 50% or 60% of our usual capacity. So there's a risk that the brains, the major talent, may go to other countries where governments are financially committed to supporting the industry. Some are even going to other industrial sectors less affected by the crisis.

So urgent action is required. Every minute counts. We would have thought the government might have acted last June, but we're in March now and absolutely nothing has been done. I can tell you that the sector has been hit, that it's eroding and that we're losing our talent on a day-to-day basis.

The situation is urgent, and we need to relaunch innovation in sustainable development in the aerospace sector.

• (1155)

Ms. Emmanuella Lambropoulos: Thank you, Ms. Benoît.

[English]

Mr. Mueller, I believe you touched on similar points in your presentation. You spoke about having a long-term plan and a strategic partnership between aerospace and the government.

If there were a more specific program based specifically on aerospace, what would you want this program to include?

Mr. Mike Mueller: I would echo what Ms. Benoît said.

The first and foremost piece that we need is the sector strategy. It is critically important that those investments be made. When companies look at where to make investments, they're looking around the world and are looking to Canada to see what funding support there is.

We can be world leaders in green aviation. We just need a willing partner in government.

I see that the time is up.

The Chair: Thank you so much.

[Translation]

Now we will go to Mr. Savard-Tremblay.

Mr. Savard-Tremblay, you have the floor for six minutes.

Mr. Simon-Pierre Savard-Tremblay (Saint-Hyacinthe— Bagot, BQ): Thank you, Madam Chair.

Good afternoon to my colleagues, and thanks to all the witnesses.

Ms. Benoît, I'd like to ask you a very simple question. You said that it's important to establish programs that target your industry but that the aerospace industry first has to be recognized as a strategic industry.

Does your industry suffer from the fact that it doesn't enjoy that status?

Ms. Suzanne Benoît: Thank you for your question.

Yes, I can tell you that we've been suffering from that for about four years. Before that, the federal government clearly recognized the aerospace industry. Aircraft have been flying for 60 to 100 years. We celebrated the industry's 100th anniversary in 2009. So it's well established here. However, I'd say we feel abandoned. Roughly four years ago, the federal government cut the programs intended for aerospace and decided to create an innovation program embracing all sectors.

We no longer enjoy the dynamic we used to have. Sectoral experts thoroughly understood our sector and could influence the terms and conditions of those programs to make our industry competitive around the world. We haven't enjoyed that support for four years now. The federal government has opted for a supercluster-based strategy.

Superclusters work well for artificial intelligence and advanced manufacturing. Our industry in fact uses those technologies. We have to integrate those disruptive technologies, those new ways of doing things. However, if the sector falls behind and is no longer as strong as it was, it'll be hard to integrate all those technologies and to apply them within the industry. My message is this: we clearly have to support superclusters, the crosscutting technologies, but we also have to keep very strong industrial sectors, which can use those technologies and make Canada more competitive around the world.

• (1200)

**Mr. Simon-Pierre Savard-Tremblay:** If my understanding is correct, the sector felt abandoned long before COVID-19?

What caused it to be abandoned?

**Ms. Suzanne Benoît:** As I said earlier, the federal government made a strategic decision and a massive investment in the supercluster-based strategy. We proposed a solution, the creation of a nationwide aerospace supercluster, but it declined our offer. It therefore chose other superclusters, and our sector has since been experiencing significant problems.

You also have to consider direct foreign investment. The aerospace sector in Quebec currently consists of an enormous number of subsidiaries of multinational and large corporations such as Airbus, Thales, CMC Électronique and STELIA Aerospace. Those businesses have headquarters in other countries around the world, whether in the United States, Europe, France in particular or elsewhere. For the past four years, companies have decided to assign global contracts to their subsidiaries based on commitments by the governments of the countries where they invest.

They assess whether the government is clearly committed to the aerospace sector, whether it provides specific aerospace programs and whether it supports the sector's talent.

The fact that Airbus is established here in Quebec and operates across Canada through its subsidiaries is really an advantage.

How likely are we to be able to show Airbus that we support the aerospace sector through specifically targeted programs? What programs could potentially convince that company to innovate in hybrid propulsion, particularly involving hydrogen. There are four major engine builders in Quebec that might be interested in those projects.

I'd like to convince the federal government to introduce projects that mobilize players and provide structure for the aviation and aerospace sector of tomorrow. This project would help companies here go green and, especially, position Canada as the best place in the world to invest in aerospace and the green economy.

**Mr. Simon-Pierre Savard-Tremblay:** I'm particularly interested in the green shift you referred to.

You mentioned that France supports its air sector, which, contrary to what people say, is different from the aerospace sector. However, it has set a fleet-greening condition.

You mentioned Airbus, which has what previously was the CSeries and is now the A220, which is one of the most eco-friendly aircraft in the world. If we go green, sales of that excellent aircraft will spike.

Ms. Suzanne Benoît: Of course.

It's the most popular aircraft now during the COVID-19 pandemic because it's really optimized for size and energy consumption, pollutes less and is more eco-friendly.

**Mr. Simon-Pierre Savard-Tremblay:** And in-flight air renewal isn't a negligible featured during a pandemic.

Ms. Suzanne Benoît: That's correct.

Mr. Simon-Pierre Savard-Tremblay: Thank you.

The Chair: Thank you very much.

[English]

Our next round of questions goes to MP Garrison.

You have the floor for six minutes.

Mr. Randall Garrison (Esquimalt—Saanich—Sooke, NDP): Thank you very much, Madam Chair.

I want to start by thanking the witnesses for being here this morning to remind us all of the importance of government assistance for a restart in the aerospace industry to make sure that we don't lose permanently manufacturing jobs or disrupt the supply chain. Madam Benoît pointed out that we might lose the expertise that will allow future development of the industry.

I also want to thank the witnesses for reminding us of the absence of a sector-specific strategy in aerospace and for reminding us that these are jobs all across the country, not just in Montreal or in the GTA but also in British Columbia, where I represent aerospace workers.

I want to turn, though, to what I see as an important factor in the future of aerospace, and that's the largest procurement by a government in aerospace history: the fighter jet procurement. The government is now evaluating the bids and looking at the industrial and technological benefit packages. I think those are important for jobs, obviously, but I think they're also important to maintain Canadian access to and participation in technological development and to our national sovereignty.

I want to start by asking Mr. Mueller about both the ability of Canadian aerospace companies to provide those technological and jobs benefits as part of the fighter package and whether the government has been really consulting—again, given the COVID crisis on the importance of this procurement for the Canadian aerospace industry.

• (1205)

**Mr. Mike Mueller:** Again, being the national industry association representing over 95% of aerospace activity in Canada, we don't usually comment on specifics when it comes to procurements that involve individual member companies and those that are going on. However, generally speaking, we have long been advocating for action to maximize defence procurement and government partnerships that drive industrial growth.

In terms of COVID-19, there is absolutely no doubt that aerospace is a strategically important sector that can play a significant role in contributing to Canada's overall economic recovery. This is a message that we've been stressing in our discussions with government, including calling for the acceleration of planned program spending in both defence and space.

Again, it goes back to the original call that I made in my opening remarks: the need for a sector-specific strategy. That would then encompass every aspect of aerospace, including civil, defence and space, to ensure that benefits to Canadians are absolutely maximized.

You're absolutely right. There are some amazing companies out in British Columbia doing some amazing things.

**Mr. Randall Garrison:** Certainly, I wasn't asking you to weigh on the side of any bidder. I do, of course, understand that there are companies, as part of your association, that are potentially part of all the bids that are there for fighter jets.

I think you've emphasized just what I want to emphasize: that if the government steps up its requirements for those industrial and technological benefits, it's very important to the future.

I know that one of the bidders has promised a lot of research and development centres, and others have promised more jobs, so I'm also not weighing in on the side of any bidder but on the importance of that work.

I really want to ask the same question to Madam Benoît, given the importance of aerospace in the Montreal area, about the potential benefits of the procurement to the aerospace industry and the ability of Canadian industry to provide what we need for Canadian fighter jet support.

#### [Translation]

**Ms. Suzanne Benoît:** The Canadian government currently enjoys incredible purchasing power with respect to fighter aircraft as a result of these major contracts awarded to foreign corporations. As we all know, Canada unfortunately doesn't have the industrial capacity to manufacture fighter aircraft locally.

However, in view of the Canadian government's purchasing power, which is enormous, we should focus more on industrial and technological impacts and try to wring more added value from the corporations now competing for this major contract.

Here in Canada, we have extraordinary research centres, university chairs in aerospace technology and, it goes without saying, a world-class supply chain. So we have all the assets we need to work with these major foreign corporations to generate more industrial and technological impact, by either establishing a centre of excellence in aerospace-related artificial intelligence or I don't know what in aerospace 4.0 and robotics. These major corporations have this know-how and could transfer their knowledge here through these programs. INDU-21

I see major potential here. We know how to build an aircraft from A to Z. Few nations are capable of building an aircraft or have the industrial capacity to complete all the phases involved in doing so. I think it all comes down to negotiating, and the government has to establish more requirements regarding impacts for Canada.

#### [English]

Mr. Randall Garrison: Thank you, Madam Chair.

With so little time, I'll yield the floor at this time.

**The Chair:** I will say, MP Garrison, that those are very good questions. It brings us back to the last Parliament.

With that, we'll start our second round of questions.

[Translation]

Mr. Généreux, you have the floor for five minutes.

Mr. Bernard Généreux (Montmagny—L'Islet—Kamouraska—Rivière-du-Loup, CPC): Thank you, Madam Chair.

Thanks to all the witnesses.

Ms. Benoît, let me ask you a few questions.

You mentioned that you would like to see the emergency wage subsidy extended into 2024-2025. The program itself amounts to approximately \$85 billion a year over three or four years.

First, if you had to choose between getting the emergency wage subsidy for three or four years and a strategy that would provide funding representing three or four times \$85 billion, which is an enormous amount of money, would you like to see that money under a comprehensive strategy for Canada as a whole rather than as part of an extension of the emergency wage subsidy?

The federal government has also announced an economic recovery effort that will amount to approximately \$100 billion. We all want to see a national strategy and support for the aerospace industry, but no witness has discussed any figures thus far. Have you determined any specific amounts?

#### • (1210)

**Ms.** Suzanne Benoît: I'll answer your first question, Mr. Généreux. Do we prefer a wage subsidy or a financial package for a major aerospace project or program? I'll simply say the impact will be greater on our sector than on other manufacturing sectors.

Even after people have been vaccinated and start flying again, it'll take us two more years to get back to where we were before the crisis, in 2019. We have until 2024. Many other manufacturing sectors will resume operations between now and the fall—many have already done so—and the economy will recover. However, we will still lag behind for at least two years. We can't just restart the industry by snapping our fingers. It's a long process, and the cycles are very long in all areas of our sector.

I want to point out to the government that, if no funding is allocated for a structural project focusing on the aerospace industry, it will have to consider extending the wage subsidy for a few more years to prevent the aerospace sector from breaking up. If you're asking me what we would choose, I'd say you can't implement a strategy by snapping your fingers. It'll take 12 months or more to implement an integrated aerospace strategy.

We're telling the government that, in the short term, we have structural innovation projects on the table that will involve companies across Canada, from British Columbia, Quebec, Ontario and the Atlantic provinces. We have a \$1.2 billion project over 5 years based on this green shift. That project concerns hybrid propulsion, based on electric or hydrogen. No one has yet found the magic solution. Everyone's working on it, and it involves the entire Canadian supply chain. Commitments have already been made...

**Mr. Bernard Généreux:** I'm going to stop you there. You said \$1.2 billion. The budget hasn't been tabled yet, and we won't know what's in it until April. However, we expect the deficit from last year to amount to \$400 billion. We know that many other sectors are making demands. I'm thinking in particular of tourism, which is closely related to your industry. Everyone wants a lot of money.

I hear all your speeches, which are very interesting, but what actual, absolute measures can the government take? You clearly stated in your presentation that the superclusters are doing nothing for the aeronautics industry, since it wasn't selected at the outset. In spite of all that, all the money that has been spent on those superclusters across Canada hasn't generated any impacts for your industry. The government has abandoned you over the past four years. That's the message you're sending us today. The government has also abandoned you over the past year.

I don't think this \$1.2 billion over 5 years is a large figure. I think it's a reasonable amount in the circumstances. Is it really the amount you're seeking?

#### • (1215)

**Ms. Suzanne Benoît:** No. Here's a specific example of a project. The federal government invested...

The Chair: You'll have to be very quick, Mr. Généreux, because we're out of time.

**Ms. Suzanne Benoît:** The federal government invested in Ontario's automobile sector. We're telling the government that we have a project that's ready to go. We've estimated project costs over five years. It's a mobilizing, sustainable development project that will help us go green and combat climate change. We're ready. We have a national plan. It's an investment that will mobilize the industry in the short term. However, it's not the amount we're seeking in asking the government for a package...

The Chair: My apologies, Ms. Benoît.

Ms. Suzanne Benoît: Thank you.

#### [English]

The Chair: Our next round of questions goes to Mr. Ehsassi, for five minutes.

### Mr. Ali Ehsassi (Willowdale, Lib.): Thank you, Madam Chair.

I will begin with Mr. Greenley.

First of all, heartiest congratulations, Mr. Greenley. MDA has been a huge home-grown success story. I want to congratulate you on that.

You mentioned the new space economy, and how it's currently worth approximately \$450 billion, but you estimate, in the next decade, it will surpass \$1 trillion.

Is Canada well positioned, as far as that new economy is concerned? How do we commercialize on opportunities that would become available?

**Mr. Mike Greenley:** The key thing is to recognize that we have a strong space sector in Canada. The space sector is emerging and breaking out. The space sector shares a number of the supply chain participants with the aerospace sector, which means that with this rapidly taking off space economy, as we double down on success in that market, we definitely have the foundation to grow.

In terms of having key government programs in the area of earth observation, space-based communication and space exploration as we now start to return to the moon, as society now goes to inhabit the moon in 2024—ensuring Canada's participation in those anchor programs would provide the foundation for us to then further commercialize the outputs of those programs into the market. We are seeing that on Canadarm3 with immediate commercialization opportunities for on-orbit servicing and space tourism. We would also see that in the areas of earth observation and communications.

**Mr. Ali Ehsassi:** Ms. Benoît, you were explaining to us that several countries have provided some assistance to the aerospace sector. Given that our approach has been a tiered approach, I'm sure you're aware that so far, for example, Canada has supported the aerospace sector with approximately \$2 billion with the Canada emergency wage subsidy. We've always been supportive as far as R and D is concerned, and as far as IRAP investments are concerned.

You were touching on the experience of other countries. You specifically alluded to the U.S., Germany and the U.K., and the support they have provided. Given your interest in that, each one of them have very different elements to their packages.

Which one of those packages do you think did a better job in terms of the elements of their assistance?

#### [Translation]

**Ms. Suzanne Benoît:** As I mentioned earlier, it's very important to support innovation. The aeronautics sector is an innovative sector. It takes at least 10 to 15 years to design an aircraft.

#### [English]

**Mr. Ali Ehsassi:** Ms. Benoît, I'm specifically asking about the packages that were put together by each one of those three countries. Which elements did you like in each one of those packages, comparing the different approaches that were adopted?

#### [Translation]

Ms. Suzanne Benoît: That's the position those countries have adopted. As I mentioned, France, for example, has decided to de-

sign a green aircraft, a hydrogen-powered aircraft, by 2035. The funding allocated for that project is therefore incredible.

It then realized that businesses, SMEs, in the supply chain were being hit very hard, since the major aircraft manufacturers weren't delivering their aircraft because the airlines aren't taking possession...

• (1220)

#### [English]

**Mr. Ali Ehsassi:** Ms. Benoît, are you saying the French approach is the better approach for our country as well?

#### [Translation]

**Ms. Suzanne Benoît:** Yes. The United Kingdom has also introduced an enormous innovation program.

Talent is what drives the aerospace industry. It can't be lost; it must be retained. Later on, in 10 years, it won't be the morning after...

#### [English]

**Mr. Ali Ehsassi:** You haven't answered my question as to the specifics of those packages.

Ms. Suzanne Benoît: The French, the U.K. government, yes.

#### [Translation]

Those countries are making massive investments in innovation and that's what we have to do here in Canada as well.

#### [English]

**Mr. Ali Ehsassi:** So, are there no preferences among those very distinct three approaches?

#### [Translation]

**Ms. Suzanne Benoît:** I think the French model is more inclusive: it also provides for assistance to SMEs in the supply chains. Consequently, we have to ensure we have measures that help SMEs manage their cash flows, a very tough task these days, because they have no revenue, as you might expect.

The Chair: I apologize for interrupting.

#### [English]

Mr. Ehsassi, your time is up.

#### [Translation]

We will now begin the next round of questions.

Mr. Lemire, you have the floor for two and a half minutes.

Mr. Sébastien Lemire (Abitibi—Témiscamingue, BQ): Thank you, Madam Chair.

Why do you think the federal government hasn't yet provided assistance to the aerospace industry since March 2020, in other words, during COVID-19?

As we've seen, France, the United States and Great Britain have already made special assistance available.

Could we say it's due to laxism on the government's part?

**Mr. David Chartrand:** Yes, I think so, and I also think the government has long supported the aerospace industry halfheartedly. It doesn't do enough.

Aerospace in fact requires long-term investment, venture capital. However, at the risk of offending some with my comments, I would say that, since members of Parliament are elected for four-year terms, they don't necessarily see any short-term results and therefore are likely less interested in investing in this industry, which, however, does so much for Canada. For example, 93% of businesses in this sector export their products. That means new money injected into our economy. This is an extremely important industry.

Why hasn't the government taken action? You mentioned the assistance provided by France, the United Kingdom, Germany and other countries. Some of those countries have begun a second round of funding and support for their industries, whereas we're still on our first. We're discussing it, and we'll discuss it till we're blue in the face. As Ms. Benoît said earlier, we're losing talent with every passing day. Some have been laid off and others have moved on to other industries.

Failure to extend the emergency wage subsidy will mean more layoffs. Many people are retiring, and knowledge isn't being passed on as a result of the industry's tenuous position. Which is why funding is urgently needed.

Earlier a member discussed a choice between two options. That made me think of someone who doesn't have a lot of money and hesitates between buying medication or food for the children. These aren't choices we should have to make. This industry must be supported, and urgently so. We're wasting a lot of time and talent, and we're also foregoing potential investments by large businesses and SMEs.

**Mr. Sébastien Lemire:** In fact, you'd like to have a short-, medium- and long-term vision so we can have predictability, establish a national aerospace policy and acquire significant financial support.

How large do you think that support should be?

**Mr. David Chartrand:** I haven't done any calculations, but what Canada does should be proportionate to what other countries have done for their industries. I'll let others do the math. I think we need a policy because...

The Chair: Pardon me for interrupting, Mr. Chartrand, but your time is up.

I would ask members and witnesses to monitor their speaking time.

[English]

Mr. Garrison, you have the floor for two and a half minutes.

Mr. Randall Garrison: Thank you very much, Madam Chair.

I guess you'd be able to tell that I am my party's defence critic. I'm usually in the defence committee. I want to talk about another upcoming procurement, which is an estimated \$11 billion to replace the aging north warning system in Canada.

I'll direct my question to Mr. Greenley.

Have there been any approaches by the government to aerospace and space industries about innovative ideas on how we could replace the old radar system with something much more forward looking? Is this an opportunity for another nationwide competition of best ideas?

• (1225)

**Mr. Mike Greenley:** There has not been a lot of formal discussion yet around the replacement for the north warning. You get that in casual conversations in the background. People obviously see that coming.

There's certainly an opportunity there for ground-based technologies to sense over the north in addition to leveraging space-based technologies in combination to be able to have a solid solution. Canada would certainly have a capability in its industrial sector to deliver that. Firms like ours are in a position to lead that kind of discussion.

It's absolutely an opportunity for a program to engage the industrial base in this area.

**Mr. Randall Garrison:** So far, there have been no formal consultations at all with the industry.

Mr. Mike Greenley: Not that I've seen.

**Mr. Randall Garrison:** Here's another good idea we can pass forward through both defence and industry, for the long-term future of the aerospace industry.

Mr. Mike Greenley: Absolutely.

**Mr. Randall Garrison:** I want to return to the question of green propulsion with the same kind of question for Madame Benoît. I think she may have already answered it, but I just want to go back and ask what the government response to this idea has been.

Have there been any concrete talks going on or any acknowledgement of what a good idea this seems to be?

#### [Translation]

Ms. Suzanne Benoît: Is your question for me?

Mr. Randall Garrison: Yes.

**Ms. Suzanne Benoît:** In fact, since last September, we've been discussing it with the government, with the department of Mr. Bains at the time. It's a project that's evolving but that hasn't yet come to fruition. We're hoping for good news in the next budget.

We have nothing for the moment, although we've met with the new minister, Mr. Champagne, on the subject.

The Chair: Thank you very much.

[English]

Our next round of questions goes to MP Baldinelli.

You have the floor for five minutes.

Mr. Tony Baldinelli (Niagara Falls, CPC): Thank you, Madam Chair.

I'd like to thank the witnesses for being with us today and follow up on some of the questions that were asked.

Mr. Mueller, in terms of your comments earlier, you mentioned that your association proposed the "Vision 2025" document, and you said you have yet to hear after four years. I want to see if that's correct.

I'm looking at the document, and it talks about six priorities for prosperity. It seems that all of those initiatives still apply today: increased workforce, ensuring small and medium enterprises have access, the new technologies, green propulsion, even talking about procurement ideas.

Is that still the case, and what should the core elements of a support program be today if they've changed from the 2025 document?

**Mr. Mike Mueller:** The "Vision 2025" document is very much still relevant today, and I would say even more relevant today considering everything that's been going on.

I could go back and touch on a comment I made in my opening remarks about the commitment of past Parliaments to our industry, because I think that's instructive to your question too.

Support for the aerospace industry is absolutely long standing, such as with the 1959 defence industry productivity program, which was replaced by the technology partnerships Canada program in 1996, and then by the strategic aerospace and defence initiative in 2007. These were all aerospace-specific programs.

These were all replaced by a sector-agnostic program, the strategic innovation fund, in 2017. The real concern for the industry was when aerospace was shut out of the supercluster initiative in the past few years.

As I said before, as aerospace is a globally competitive industry and other countries are doubling down on supports, we need the government to do the same here. We need the government to send the signal that Canada supports and views its aerospace industry as strategic. That needs to come, again, through a sector strategy—I think the "Vision 2025" document lays that road map down very well—and also programming that is not sector agnostic.

Internationally, if we look at competitiveness, the number one competitive advantage we have is our skilled workforce, and 100%, that is absolutely true. We have the real danger now of losing some of that competitive advantage, and at the bottom of that scale is the signal that the government is sending. We're very much looking at the upcoming budget to send a signal that Canada views aerospace as strategic and also important.

• (1230)

**Mr. Tony Baldinelli:** Thank you. I'd like to follow up on that notion of a skilled workforce.

In your "Vision 2025" document, you talk about, "Inspire, recruit, train and hire 50,000 students from Canadian universities, colleges and vocational schools..".

I have three aerospace firms in my riding alone: Genaire, Fleet aerospace and Airbus Helicopters. When you talk to them, there's the notion of bringing in young talented people to begin that process of retention—a learning and skilled workforce—so that when people do retire and leave the sector, they're able to continue.

What is needed from that standpoint?

Mr. Chartrand can maybe offer some insights as well on that.

**Mr. Mike Mueller:** I'll start at the high level and turn it over to Mr. Chartrand.

You're absolutely correct. What's missing, from our perspective, is that long-term strategy, that industry-specific support. We have companies right now that are moving workforces around, looking to where different packages would come....

We're losing that skilled talent. You're right about ability for the older generation to download the information to the newer generation. The bottom line is that they need things to work on, and that's where we need government support.

Mr. Tony Baldinelli: Mr. Chartrand.

Mr. David Chartrand: I agree with Mike on that.

Before this pandemic, our industry had problems and we had massive labour shortages. Through this pandemic, right now what's happening is that our union has about 10,000 people on layoff, furlough or not at work currently.

I know there are several thousands of workers right now who are out of work. Many of them are recycling themselves and going into other industries, and the more senior employees, to give space to the younger ones, are retiring. By doing that, though, there's no transmission of information, knowledge, etc.

I think it's really important to support training and these employers, to keep these older workers at work to train the new generation of workers and all that. I think there's something to be said on that side.

**Mr. Tony Baldinelli:** Madam Chair, I just saw the red card, so I know that means my time is up.

The Chair: Perfect timing, MP Baldinelli.

Our next round of questions goes to MP Jowhari.

Mr. Majid Jowhari (Richmond Hill, Lib.): Thank you, Madam Chair.

Thank you to all the witnesses.

I'd like to split my time between Mr. Chartrand and Mr. Greenley.

Let me start with you, Mr. Chartrand.

In your opening remarks, you talked about research and development, green technology and the concept of an aerospace innovation fund, and then you transitioned into bringing examples of how other governments or other jurisdictions have combined all of these as success factors.

As you were going through your testimony, government programs such as the strategic innovation fund, BDC, EDC and the Government of Canada procurement strategy stood out in my mind. I looked at the AIAC's proposed recommendations, including to establish the restart strategy. Can you tell how, in a very specific way, we can support the restart strategy using existing resources in a very effective way? I am referring to mobilizing things such as SIF and BDC to give funding to small businesses, and EDC to secure insurance for sending our support internationally, and government programs.

**Mr. David Chartrand:** I don't want to get into the specifics of which program. I don't think there's any sector-specific program right now. Essentially the programs that exist are not dedicated to aerospace, to our industry. That's one thing. I think we have a lack of structure. We have a lot of things that are ad hoc, that come and go, and I think we need a strategy put in place so that the industry is supported on an ongoing basis.

I know that I don't have much time, so I want to talk about the example of Airbus. Mike and Suzanne were talking about support for the aerospace industry. You have to have a strong supply chain. You have to have somewhere where people can be trained and you're able to get manpower for these companies that decide to come and invest here. I can tell you that a couple years ago, Airbus came here, and their eyes were lit up. They wanted to invest a lot of money. They wanted to make a mini Toulouse out of Mirabel and the Montreal area. That would have brought in a lot of ripple-effect work for other smaller companies. I can tell you that for the last couple of years, or more in the last year, they've been disillusioned, and they're not thinking the same way that they were a couple of years ago. Why? Because there is a lack of a support by the government for the aerospace industry.

When these companies do their five-year plans and they're looking at where they're going to invest and where they're going to grow, they're not looking at Canada with as much interest as they did in the past, because of the laxity and because of the time it's taking to get support for our industry. I think it's imminent. It scares me-I don't know if if scares government or not-that major employers like Airbus, who made a decision to come and invest here, are going to look at their five-year plans and see that there's no support from the government and start looking at where else they can invest. I think there's a feeling of urgency and that the federal government needs to move, and it needs to move quickly, to build a sector approach, a strategy for our sector and dedicated funding through something like an EXIM bank. You were talking about EDC. They won't make loans if you don't have a contract in hand. There are programs that exist, but they're not very accessible right now, and they're not dedicated to just aerospace.

• (1235)

Mr. Majid Jowhari: You're talking about the accessibility of these programs, then.

Mr. David Chartrand: Yes.

Mr. Majid Jowhari: Okay, thank you.

Quickly, with about a minute left, I'm going to Mr. Greenley.

Mr. Greenley, you talked about the Government of Canada acting as an anchor, and you talked about three dimensions of that anchor. You also talked about investment in technology as well as a longterm space plan, and you talked about some regulatory framework in there, if I recall your comments.

Can you expand on the long-term space plan specifically with regard to what regulatory framework we can introduce?

**Mr. Mike Greenley:** In a long-term space plan, we would look at a full space economy and ensure that Canada was fuelling that economy. The elements include earth observation, space-based communication, new markets such as on-orbit servicing, space-based assembly, space manufacturing and, in about 10 years, space-based mining. All of these things are building up now, so having anchor programs in these areas will ensure the continued evolution of the economy towards economic growth. These areas would require adjustments to regulation to ensure that, from operational control centres in Canada, we could operate spacecraft to service satellites or assemble things in space to enable those things. That's an example.

Mr. Majid Jowhari: Thank you.

The Chair: We will now start our third round of questions.

#### [Translation]

Mr. Généreux, you have five minutes.

#### Mr. Bernard Généreux: Thank you, Madam Chair.

#### [English]

Mr. Greenley, you talked about a 3B strategy, "build back better". Can you explain exactly what, in your mind, you are looking for, and in terms of money as well?

**Mr. Mike Greenley:** Specifically, there are anchor programs that people could invest with now. If you take something such as MDA's next generation interceptor observation satellite, where the customer will become a buyer of that, there could be pre-buy of that capability like happened on RADARSAT-2. There is a notion of the next generation space-based communications to support 5G networks from space. We can conduct a \$300-million to \$500-million program to be able to conduct a next generation demonstration of Canada's space technologies and get back into the telecommunications sector using our industrial base.

Telesat LEO has been provided some support by the Canadian government, but additional support would certainly be welcomed into the Telesat Lightspeed program, which enables a large Canadian supply chain.

I think we can put together a space package of programs including things like that as part of building back better.

Mr. Bernard Généreux: Okay.

Do I understand correctly that you were public and you became a private business?

Mr. Mike Greenley: Yes, that's true.

**Mr. Bernard Généreux:** In regard to the infrastructure, we're talking a lot with other mandates on the committee about the Internet and everything related to satellite and low-earth orbit.

How advanced are you in the world in regard to those technologies?

**Mr. Mike Greenley:** We are very advanced in the world in those technologies. MDA has been on four different low-earth orbit communications constellations so far and is talking to many other companies around the world to leverage our technology and advanced manufacturing capability for high-volume, low-earth orbit satellite manufacturing capability. That engages a large supply chain in Quebec and across Canada for us to do that. We're very well positioned in that market.

#### • (1240)

Mr. Bernard Généreux: Thank you.

#### [Translation]

Mr. Chartrand, I was wondering whether you were anglophone or francophone. You speak both languages so well I'm not sure which one's your mother tongue.

Incidentally, I congratulate you on your knowledge of the industry and its workers. Some major changes have occurred with Bombardier and others. Many people in the general population have criticized the government for subsidizing Bombardier, and others, for the CSeries, which became Airbus.

How do you view the public's perception of the government's contribution to the very long-term strategies for the aeronautics industry?

**Mr. David Chartrand:** I think a very long-term strategy would help avoid the situations we've experienced in the past, as in the case of Bombardier.

Having a long-term strategy that supports the industry in a structured way would help avoid systematically throwing away money that's not earmarked for anything in particular every time a crisis occurs simply because the house is on fire and absolutely has to be put out immediately.

The French have a very positive view of Airbus. It's one of the businesses that are highly regarded because industry financing has become a culture for them. They stand behind their industry because they know it employs thousands of people and they support it on a regular basis. We, on the other hand, unfortunately tend to believe that we have to throw money at it unconditionally because we're in the middle of a crisis.

**Mr. Bernard Généreux:** We don't have a long-term strategy; that's what I'm hearing.

**Mr. David Chartrand:** Exactly. It's a monumental error that creates a negative public perception.

That perception will continue to be negative as long as we operate this way, even though the industry provides work for 200,000 employees.

Mr. Bernard Généreux: That's impressive.

Ms. Benoît, can you briefly name some countries whose strategy is to fund wage subsidies over several years as a result of the pandemic?

Can you tell us whether any countries are doing that?

Ms. Suzanne Benoît: I know that France has measures, but I wouldn't be able to discuss wage strategies or wage subsidies as such.

What I pay more attention to are the innovation measures and the way governments support clean technologies.

**Mr. Bernard Généreux:** As Mr. Chartrand just said, we tend to invest a lot of money, and that's what the government has done over the past year to support industries in general. What you're asking is that we continue to provide that support in the same way. I'm sincerely somewhat surprised at your idea of covering wages for three or four years.

Please explain that proposal to me.

**Ms. Suzanne Benoît:** We simply need to consider the fact that it will take the aerospace manufacturing industry two more years to emerge from the crisis. It's either the wage subsidy or other types of assistance. We have to consider this. That support helps.

The Chair: Thank you very much.

#### [English]

Our next round of questions goes to MP Jaczek.

You have the floor for five minutes.

**Ms. Helena Jaczek (Markham—Stouffville, Lib.):** Thank you very much, Madam Chair.

First of all, I'd like to thank all the witnesses for their testimony. Obviously, we hear your frustration and your anxiety about your industry. I'm on the transport committee as well, so we have been studying the whole aspect of the impacts of COVID-19 on your industry. You've alluded to the fact that you had some issues even prior to the pandemic.

Monsieur Chartrand, when you came to the transport committee back in January—your association did—there was a question about how the Canada emergency wage subsidy had been used to maintain employment. I believe there was some question as to whether all employers were taking full advantage of that program. Could you elaborate? **Mr. David Chartrand:** They are not. I have to be honest. A lot of the small and medium-sized businesses are using it. Some of the major ones, like Air Canada, are not, or they're partially using it. There haven't been obligations put on the employers to use it to keep people employed and at work. I believe that was what the CEWS was for, initially. It was to make sure that we kept people employed and at work.

Why? Knowing that it will take a long time to recover in that industry, as Madame Benoît has said, many of these employers, such as Air Canada, have decided that since there were people who were going to be on furlough for a year to two years, they simply didn't want to pay the difference. They were getting a wage subsidy for 75%. They didn't want to pay the additional 25% or the benefits, which are attached to collective bargaining agreements.

It is extremely important that we continue the program and not lose our talent and that we make sure people stay and work in the small and medium-sized enterprises, and maybe that there is a merging of two different programs, but the wage subsidy is important, and it has helped. I can't say that it hasn't. I think it should be maintained, but there needs to be more sector-specific aid to the employers to make sure they can support their people at work and have new projects for people to work on, like Suzanne was saying for green energy. If we don't support the employers, we're going to lose that talent, and then employers won't be interested in investing here in Canada.

#### • (1245)

**Ms. Helena Jaczek:** Certainly, during the transport committee, we've learned that the federal government has supported the industry writ large to the tune of some \$2 billion when it comes to CEWS and when it comes to support for airports, regional routes and so on.

You've talked about a national labour strategy and even potentially the opportunity for repatriation of skilled employees and so on. Have you costed out what such a labour strategy would look like? You've talked about apprenticeships, etc. Have you any dollar figures that you've come up with?

**Mr. David Chartrand:** No. I don't have that information. I didn't cost it out. I'm sorry about that.

**Ms. Helena Jaczek:** Would anyone in your association have done such an analysis? It could be very useful for us.

Mr. David Chartrand: I will look into that and I'll get back to you.

**Ms. Helena Jaczek:** If we could have it sent to us, that would be great.

Mr. David Chartrand: Absolutely.

**Ms. Helena Jaczek:** Madame Benoît, you've made it clear that the supercluster strategy of our government has somehow not benefited the aerospace industry. Could you elaborate on what you would see as improvements to that strategy?

#### [Translation]

**Ms. Suzanne Benoît:** The strategy provides real value for more basic research. We're talking about tiers 1, 2 and 3. We invest enormous amounts in research, but we aren't applying that research in certain sectors.

Given our aerospace experience, we did propose that the government establish an innovation supercluster to go hand in hand with technological development more akin to commercialization. That would have helped to create jobs and to mobilize the research centres and students doing internships as part of those projects. The entire ecosystem would thus have been mobilized.

In fact, the government representatives simply told us that the aerospace sector was so well organized it had all the necessary elements in its ecosystem and didn't need a supercluster. That's the answer we were given, and we've lost ground since then.

The Chair: Thank you very much.

Mr. Lemire, you have the floor for two and a half minutes.

Mr. Sébastien Lemire: Thank you, Madam Chair.

My question is for Mr. Chartrand from the IAMAW.

Today, we've talked a lot about how important it is to send a strong signal that the government should acknowledge the industry, its international competitiveness and the need for it to feel supported.

Tell me about the types of jobs that are available in aeronautics right now, particularly in the manufacturing and maintenance sectors, and about the need for training, mentoring and knowledge transfer.

**Mr. David Chartrand:** As Ms. Benoît said, we're currently able to build an aircraft from A to Z, both here and elsewhere in Canada. So we have mechanics who maintain the aircraft and build engines, assembly line workers who assemble the aircraft and people who work on the avionic suites you see inside the aircraft. We also have engineers in the offices.

So jobs in the aeronautics field are highly varied. These are middle-class people, and they represent a lot of taxes that are paid to the government to fund our social programs and so on.

Our challenge is the labour shortage. There weren't enough people in school before the pandemic. Most training has now stopped, and plant employees are being laid off. As I explained earlier, many people with more seniority are retiring. Consequently, there's a lack of knowledge transfer within businesses.

The academic training of a licensed mechanic may take up to four years. Consequently, there'll be a void if our training programs and talent aren't supported since many people will be retiring and there won't be enough people to do the work. Some major customers and other businesses won't want to invest here any more if we can't demonstrate that the industry is being supported, that we will continue to train people and that we will meet future demand from employers.

• (1250)

Mr. Sébastien Lemire: One quick question. You may answer yes or no.

Do you think your industry has a major impact on SMEs, particularly in the context of a green recovery?

**Mr. David Chartrand:** Yes, absolutely. France has attached conditions to the funding they've invested to assist major businesses, which are now required to support the supply chain and small and medium-size enterprises.

If there are no small and medium enterprises in the supply chain, as there are now, other businesses won't come and set up here either. We absolutely have to...

The Chair: Thank you very much.

Pardon me, but time is up.

[English]

The next round of questions goes to MP Garrison.

You have the floor for two and a half minutes.

Mr. Randall Garrison: Thank you very much, Madam Chair.

I want to return to the question of a lack of sector-specific strategy because we have a similar problem in tourism, which is very important in my riding where tourism is about to lose another summer strategy.

For me, a link between these two is one that's been emphasized by my colleague, Taylor Bachrach, who's the member for Skeena-Bulkley Valley in northern British Columbia, and that's the potential loss of small regional airlines. If these airlines are lost, they're unlikely to come back. That has big economic implications for regional economies. It has big health care implications in terms of access to services when people need to travel.

Mr. Chartrand, quite often people think about the pilots and flight attendants, but a lot of other people are involved in small regional airlines in back-of-office functions, in maintenance and supply and all those areas. Can you talk a bit about the consequences of the loss of regional airlines?

**Mr. David Chartrand:** The airport is a community. We can't forget that. We talk about the pilots and the people on the aircraft serving passengers and things like that, but there's everything that goes on around it. There are small communities within the airports. There are baggage handlers, customer service agents and representatives, concession stands inside the airports, screeners who check security for people getting on to airplanes and all that.

There's a multitude of jobs we don't talk about. We talk about the mechanics, we talk about the people who make the airplane fly, but there's all the bustle and the hustle around those communities. Regional routes are going to be very important because if large carriers decide not to serve regional routes, like what's happening right now, the prices are going to be out of control. When it goes to certain private industries, to be able to travel from point A to point B is going to cost a fortune within Canada. It's really important to support regional routes.

Mr. Randall Garrison: Thank you very much, Madam Chair.

The Chair: Our next round of questions goes to the Conservative Party. Oh, MP Baldinelli, I believe you're up. You can have five minutes.

#### Mr. Tony Baldinelli: Thank you, Madam Chair.

I just want to follow up on some of the questions that dealt with the procurement issue. I think my colleague, Mr. Garrison, raised it. It relates to how the sector goes about making its planning processes and how it needs certainty moving forward, yet we have a procurement process in Canada that is long in delay and short in results. How—from an association in the aerospace sector—to improve the procurement process and, in fact, enlarge it to include more than small and medium-sized enterprises is something that I think is vital. I'm just wondering if people have some comments on that.

• (1255)

Mr. David Chartrand: I might have a comment on that.

Mr. Tony Baldinelli: Sure. Go ahead, Mr. Chartrand.

**Mr. David Chartrand:** When we talk about an aerospace strategy, the reason we want a strategy like that is to also include a procurement strategy inside of that so that we have the benefit. Let's just take the example of the fighter jet. That fighter jet was supposed to be replaced over 20 years ago. We've made that plane last—and I represent the members at L3 who do the repair and overhaul of that aircraft—and we were supposed to replace that plane over 20 years ago. It's long overdue and, as you said, it's a very long process.

Economic industrial benefits are really important. We have to have a strategy where there is some Canadian content so that there's predictability and we're able to support small and medium-sized businesses.

I don't understand why the United States can do it, China can do it, France can do it—they can all put in a certain content for their country—making sure that the small and medium-sized businesses stay supported and have some work. We have leverage. We're not going to build an airplane, a fighter jet, A to Z, but we have leverage with this negotiation where there are parts for those airplanes that we can build, and we can build them for the whole fleet of airplanes, whether it be a Lockheed Martin, a Boeing or any other company. We have resources, and we are able to do that.

I think that, government-wise, we need to negotiate smarter. We need to make sure that we have the maximum benefits possible for Canada here. That goes through a procurement strategy, and it would go inside of an aerospace strategy, also, for Canada. We don't just have the fighter jets to buy. We've purchased helicopters. We have refuelling planes right now that they're looking to replace, the old Boeing model. We have the A220, which is a plane that could do that—I'm plugging Airbus right now.

Mr. Tony Baldinelli: Thank you for your comments, Mr. Chartrand. I'm just wondering about others. I think your key word is "predictability". How does a firm make its plans going forward if it can't tell if the government's going to be able to make a decision in one year, two years, three years, and subsequently five years? We're still on the fighter aircraft procurement—

Mr. David Chartrand: Twenty years.

**Mr. Tony Baldinelli:** Twenty years. Well, if I remember, I think the procurement process for the CF-18s began in 1979 with Joe Clark, and then Pierre Elliott Trudeau, who started that process, and we're still flying those jets. It goes back that far.

From that standpoint again—maybe, Mr. Mueller, from your end—the whole aspect from "Vision 2025".... You talk about procurement as being one of the sectors of priority. Could you expand on that maybe?

**Mr. Mike Mueller:** Maybe just in the context of COVID-19 we see a real opportunity to use defence procurement, space procurement, as a real driver to help lead Canada out of the economic malaise that we find ourselves in with respect to COVID-19. With respect to COVID, there's a real opportunity there on the defence procurement space, the procurement side, with respect to that longer-term predictability. I would agree with that. How do we remove the politics out of it? How do we make sure that it's predictable?

I think, just going back to how we started this conversation, that again is very key to a sector-specific strategy for the industry, and it's something that we've been calling on the government for for the past four years. We really need to see a signal with respect to that, because a lot of the issues and a lot of the challenges and opportunities that have been raised on this call would be addressed through such a strategy.

Mr. Tony Baldinelli: Thank you.

Again, going back to your "Vision 2025" document, you addressed the whole issue of innovation. We've talked about green technologies and so on. What more can the government do to foster that kind of environment, so that the research and development can take place here, so that those jobs can then be created in Canada to create those green technologies?

**Mr. Mike Mueller:** You're absolutely right. At the end of the day, it's about the jobs that are here.

When people talk about the Canadian aerospace industry, you think of planes, helicopters and satellites, but it's not that. It's the people behind it and it's the high skill and high wages that we have here.

I would agree; we need that sector strategy to be in place to ensure that we retain those good paycheques that are across the country in every single region from Victoria to Newfoundland and into the north.

If there is one item or one idea I could impress upon the committee, it is the need for that sector-specific strategy that encompasses everything.

Mr. Tony Baldinelli: Thank you.

The Chair: Our last round of questions goes to MP Erskine-Smith.

You have the floor for five minutes.

• (1300)

Mr. Nathaniel Erskine-Smith (Beaches—East York, Lib.): Thanks very much.

I want to pick up on your comments, Mr. Mueller, as they relate to the sector-specific strategy.

Do you see, because of the decline in R and D, that a sector-specific strategy would, as a top-line issue, have the federal government supporting R and D efforts?

**Mr. Mike Mueller:** I would definitely hope that R and D would be a part of a sector-specific strategy, and it absolutely has to be.

Again, just going back to that historic timeline that I talked about earlier with respect to the long-standing support for aerospace, starting from the defence industry productivity program all the way down to SADI, it's that sector-agnostic approach that's being taken now, which is very concerning to the industry.

When you have countries around the world having a strategy in place and executing against that strategy, and a big portion of those strategies is sector-specific programs, I just can't for the life of me figure out why we wouldn't want to double down on that approach when everyone else is doing it.

**Mr. Nathaniel Erskine-Smith:** When we look at the history of federal support in the sector, it hasn't always been kind to the public purse in some respects, and I take Bombardier as an example. Their shareholdings.... We have Bombardier, one of the wealthiest families in the country, and federal governments have, time after time, supported the company.

How do we ensure that the taxpayer and the public purse are respected and protected as we support the aerospace sector going forward?

**Mr. Mike Mueller:** Again, I think it's through that overarching strategy. We just keep coming back to that.

If you have the strategy in place, you can ensure that there are competitive advantages retained, which include our skilled workforce. Again, the past policy efforts of governments of all stripes have been to support the aerospace industry through strategic programs, and that would include the previous SADI. That's the approach that governments in the past used and what other countries are doing now.

Again, it's strange to me that we wouldn't double down on that approach, have a sector-specific program in place guided by a sector-specific strategy that would address the myriad of issues, challenges and opportunities that have been raised here.

**Mr. Nathaniel Erskine-Smith:** Whether it's a reform to shareholdings of certain companies being a condition of federal support, or perhaps when you look at the German support for the air sector specifically where they were taking an equity stake as part of their bailout, do you see that being a significant part of the public conversation going forward? **Mr. Mike Mueller:** I think you have to look at the whole ecosystem. You have support for airlines, which is very important for us because, at the end of the day, they are the ones that purchase the planes that we build, and we repair the planes that they fly.

That's also right down to that sector-specific funding that's absolutely needed. Why? To keep the good-paying jobs and the skills here, and that's very much our focus in everything. We would agree with Dave and Suzanne in that respect.

Mr. Nathaniel Erskine-Smith: Thanks very much.

Chair, if you'd like a couple of minutes of the remaining five minutes, they're all yours.

The Chair: Thank you very much.

I know there are two minutes remaining in that spot, and I welcome a chance to ask a question in committee.

I want to follow up on something that my colleague MP Garrison brought up.

Mr. Mueller, perhaps you could talk a little bit about this.

With respect to "Strong, Secure, Engaged", in the defence policy that was brought in a few years back, in 2017, I believe, there is dedicated, costed-out funding for the strategic fighter program. You mentioned a little bit about that.

Can you talk about the opportunities that it's going to bring Canada in terms of our economic recovery? When we talk about the north warning system, I know we need to have that conversation about replacing it and the fighter jet program. These are opportunities for Canada to invest heavily, and we've made the commitment to do so but also to create good-paying jobs and in-service support for many years to come, because we have a habit of keeping our assets in defence for a long time. If you can you elaborate a little bit about that, it would be great. Thanks.

**Mr. Mike Mueller:** Absolutely, and again I'm not going to comment on a specific procurement and different companies bidding there, but I would agree.

We've been advocating for action to again maximize defence procurement and government partnerships to drive industrial growth. There are definitely opportunities there and, as I said before, in terms of COVID-19, there is no doubt that aerospace is a strategically important sector playing a significant role and contributing to Canada's overall economic recovery.

Again, that's the message we've been giving to government and to you, as parliamentarians, calling for the acceleration of planned program spending in defence and space to ensure that we can contribute to that economic recovery. As I said before, 80% of what we produce is exported, and there is a real opportunity there.

The Chair: Thank you very much.

That is our time for today.

#### [Translation]

I want to thank you for your testimony. It will be of enormous help to us. We are very grateful to you for taking the time to appear before our committee and for sharing your knowledge and wisdom in this matter with us.

• (1305)

[English]

I'd like to thank our excellent translators, and IT crew for getting the echo to stop at the beginning of the meeting. To our clerk and analysts, thank you for everything you're doing.

The meeting is adjourned.

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