Report of the Canada-France Interparliamentary Association

49th Annual Meeting

Île de France and Normandy, France

From April 1st to 8, 2023

Report

INTRODUCTION

From 1 to 8 April 2023, eight Canadian parliamentarians travelled to the Île-de-France and Normandy regions in France for the 49th Annual Meeting of the Canada–France Interparliamentary Association (the Association).

The Canadian delegation was led by Member of Parliament Marie-France Lalonde, Chair of the Association for Canada, and also comprised senators René Cormier and Leo Housakos, Member of Parliament Chris d'Entremont, Vice-Chair for the House of Commons, and members of Parliament Lena Metledge-Diab, Darrell Samson, Denis Trudel and Dominique Vien. The delegation was accompanied by Catherine Cuerrier, Association Secretary, and Alexandra Savoie, Advisor to the Association and Analyst at the Library of Parliament of Canada.

The French delegation was led by National Assembly Member Christopher Weissberg, Chair of the Association for France, and also comprised Senator Yan Chantrel, Chair of the France–Canada Friendship Group in the French Senate, and Senator Catherine Morin-Desailly. Other members and senators from France also attended some activities of the Association's 49th Annual Meeting. The French delegation was accompanied by Thierry Deilhes, Association Secretary for the National Assembly, Nicolas Simoulin, Association Secretary for the Senate, and Anne-Laure St-Dizier, Advisor at the Senate's Division de la présence française dans le monde et des études internationales.

The two themes of the Annual Meeting, which were carried over from the 48th Annual Meeting, were as follows:

- cultural diversity in the digital world; and
- the green transition and green technologies.

Other activities focused on the following topics of interest:

- French parliamentary institutions; and
- the duty of remembrance.

This report provides a summary of the working sessions, discussions and site visits that took place as part of the Annual Meeting.

OPENING OF THE 49TH ANNUAL MEETING

A. OPENING LUNCHEON

The work of the 49th Annual Meeting of the Association officially began on 3 April 2023 with a luncheon hosted by the Chair of the France-Canada Interparliamentary

Association.¹ Michel Herbillon, Chair of the France–Canada Friendship Group in the National Assembly, and Yan Chantrel, Chair of the France–Canada Friendship Group in the Senate, were also in attendance.

Mr. Weissberg said he was pleased to welcome the Canadian delegation to France and to continue discussions on the themes selected for the 49th Annual Meeting. He noted that such discussions are an effective way to deepen the ties of friendship between the two countries. He declared the 49th Annual Meeting officially open.

Ms. Lalonde said that the Canadian delegation was pleased to be invited to France and that she was looking forward to learning more about what France is doing as regards cultural diversity in the digital world and the green transition.

Mr. Herbillon also welcomed the Canadian delegation and said it was a pleasure to have them in France. He noted that the France–Canada Friendship Group in the National Assembly is one of the largest friendship groups in the National Assembly and that its membership keeps growing. He also mentioned his affection for Canada and his passion for Franco-Canadian relations.

Lastly, Mr. Chantrel welcomed the Canadian delegation and stressed that the two countries have very close ties. He also noted that the France–Canada Friendship Group in the Senate is very popular. Mr. Chantrel added that the large number of members, many of whom have family or children in Canada, shows Canada's influence. He also pointed out that France can draw inspiration from Canada's policies and highlighted the importance of keeping the French language alive.

The opening remarks were followed by informal discussions among the parliamentarians.

CULTURAL DIVERSITY IN THE DIGITAL WORLD

A. WORKING SESSION

A working session on cultural diversity in the digital world was held on 4 April 2023.

Mr. Weissberg opened the session by remarking that, for many francophone minorities, cultural diversity in the digital world is an identity issue. The cultural model is a key issue in France. As a result, he thought that the working session of the 49th Annual Meeting would provide an important opportunity to discuss the role of music and radio, including issues concerning the editorial choices of French programmers, which allow artists to be discovered, particularly online.

The working session of the 48th Annual Meeting on the theme of cultural diversity in the digital world included a presentation on Canadian and French perspectives, followed by discussions among parliamentarians. The working session of the 49th Annual Meeting consisted of a round table with representatives from Sony France, Spotify France and France's Autorité de régulation de la communication audiovisuelle et numérique (Arcom), the country's audiovisual and digital communication regulator. The speakers made

¹ Some activities took place before the opening luncheon. They are described in this report. In France, the Association is known as the France–Canada Interparliamentary Association. This report will use "Association" throughout.

opening statements, and then answered questions from, and held discussions with, parliamentarians.

1. INVITED COMPANIES AND REGULATORY BODY

(a) SONY FRANCE

Marie-Anne Robert, President and Managing Director of Sony Music Entertainment France since September 2021, is responsible for accelerating the digital transformation of Sony in France.

Ms. Robert started with some statistics about Sony France. She said that Sony France produces music and organizes concerts and tours for artists. Sony France has signed up 300 artists in ten music genres (e.g., rap, classical music, jazz, French-language pop music). She stated that genres are increasingly being mixed in France, making it harder to categorize music.

Regarding cultural diversity on digital platforms, Ms. Robert believes that consumers are not being left behind. French consumers listen to a wide variety of content, or approximately ten musical genres a year. Although rap is very popular, the two most popular genres are French songs and pop. The music market in France is mostly domestic, with French artists holding some 67% of the market.

Ms. Robert said that she is particularly concerned about mass usage. The number of paid subscribers in France equals approximately 30% of the population, compared with 60% in the United States (U.S.). She believes that all industry players (e.g., record labels, the media and public authorities) should mobilize to bring all French people on board with the streaming format.

Ms. Robert acknowledged that radio stations have to meet substantial quotas to protect the French language and culture in France. Sony France must take this factor into account when its representatives communicate with radio stations.² She gave the example of Germany and noted that, unlike France, it rarely has German songs in the top 100 songs in the country. Her discussions with managers of French radio stations indicate that fewer and fewer people complain about song quotas for radio.

Ms. Robert remarked that France is still a mixed market. Radio is the second most popular way of discovering music and artists, behind digital platforms, which stream music around the clock. However, radio stations pay only about 5% of their revenues to the industry, while platforms pay 70%. According to Ms. Robert, musicians need to have sustainable careers, not just produce pieces of music. She therefore believes it is important to support artists.

(b) SPOTIFY FRANCE

Antoine Monin, Managing Director of Spotify France and Benelux since 2018, confirmed Ms. Robert's figures. He stated that Spotify pays almost 70% of every dollar earned to

² Autorité de régulation de la communication audiovisuelle et numérique (Arcom), <u>Les quotas de chansons à la radio</u> [IN FRENCH

music rights holders, according to the terms and conditions of their contracts. These rights holders in turn pay artists, songwriters and composers. Artists therefore receive a certain amount. He echoed Ms. Robert's statement and explained that radio stations pay only 5% to 7% of their revenues to music rights holders.

Mr. Monin also stated that France is lagging behind with respect to music streaming platforms. He asserted that the platforms have made the music market much more balanced. The market used to be supply-driven: record companies would choose whether to sign up artists and the media would decide whether to play them. With the realization that piracy is everyone's enemy, the market is now friendlier to users and consumers. He believes that the market is demand-driven.

Mr. Monin spoke about the need to remain on guard about the subscription prices for music streaming platforms and to keep user intention and adoption in mind. He believes that French and francophone music is doing better now than back in the days of the compact disc. He referred to data from France's Syndicat national de l'édition phonographique (an inter-professional association that champions the interests of recorded music in France) showing that, in 2022, 17 of the top 20 albums in France were French productions – artists produced in France, singing in French.

Mr. Monin noted that some people complain that there is too much rap on music streaming platforms in France. However, in his view, this corrects a problem with the old market, where the broadcasting model kept rap down. Regarding the music genres listened to in other countries, he said that countries with more mature music streaming markets, such as Canada, the U.S. and the United Kingdom, have a better balance of genres. Mr. Monin said that in his view, users should be given options.

Mr. Monin added that, in 2021, musical diversity indicators from France's Centre national de la musique showed that 64% of streams in the country were French-language songs and that 71% of streams of new releases were for French-language songs.³

Speaking about how artists get paid, Mr. Monin explained that Spotify has created the "Loud & Clear" website to publicly share the amount of revenue listening time generates for artists, record labels and the media. He said that Spotify pays music rights holders \$6 billion to \$7 billion dollars per year.

(c) FRANCE'S AUTORITÉ DE RÉGULATION DE LA COMMUNICATION AUDIOVISUELLE ET NUMÉRIQUE

Arcom is the agency that regulates freedom of communication and ensures the financing of audiovisual creation and the protection of rights.⁴ Its remit includes online platforms, including social media and search engines.

Hervé Godechot, Chair of Arcom's radio and digital audio working group and Vice-Chair of the on demand audiovisual media and television production and distribution services working group said that radio plays a prominent role in France, making up 57% of all daily audio consumption. It remains the most listened-to format, ahead of music streaming,

_

³ France, Centre national de la musique, <u>Indicateurs de la diversité musicale : Année 2021</u>, December 2022 [IN FRENCH].

⁴ Arcom, <u>L'Arcom</u> [IN FRENCH].

which accounts for 20% of daily audio content consumption. About 48% of audio consumption occurs on the Internet.⁵ More thought should therefore be given to the role of radio in the consumption of cultural products.

Mr. Godechot explained that the radio landscape in France comprises 1,000 radio stations for 67 million people. Millions of listeners tune in daily for at least two hours. In addition, French people generally trust the radio. Like all traditional media, radio is experiencing a digital-induced technological and usage revolution. Mr. Godechot said that 80% of linear (live) radio listening is through terrestrial, that is FM, radio. Two years ago, French radio stations and radio aggregators jointly created *Radioplayer*, a web application that provides access to almost all radio stations in France, including podcasts, for free.

Mr. Godechot pointed out that radio made the same adjustments as television, which adapted over time to address new trends, with the advent of on-demand video, for example. He also pointed to the explosion of podcasts, noting that the number of monthly downloads or plays of French-language podcasts in France, approximately 150 million, makes up the vast majority of French-language podcast plays worldwide.⁶ In Mr. Godechot's view, digital has made it easy to broadcast in more than one country, and this helps culture spread. He therefore believes that the radio-digital relationship as regards content and usage in France is generally a win-win partnership.

Mr. Godechot explained that Arcom regulates all radio stations and they must adhere to certain commitments, including on diversity and gender parity. Cultural diversity is also part of these commitments. Verifications are carried out when a radio station is granted operating approval to ensure that it will enrich the radio landscape. Like Ms. Robert, he pointed out that in France, music radios are subject to a quota for playing francophone songs. They must also play new talents and new productions during peak listening hours. Digital platforms do not have similar requirements.

Mr. Godechot also referred to an Arcom study on what is available when people have the choice to listen to what they want compared with listening to streams and music on the radio.⁷ The study showed that, on the digital platforms examined, most people listen to French-language songs and French rap. However, radio station editorial choices resulted in more richness and diversity of musical genres and a greater cultural contribution from the music.⁸

Lastly, Mr. Godechot said that Arcom is following the law as it stands. Regulating streaming is not an issue now. He believes it is still too early for that. However, he acknowledged that radio stations are calling for more regulation of digital platforms.

⁵ See Médiatrie, Global Audio 2022, News release, 3 May 2022.

⁶ See Médiatrie, <u>May 2022 podcast measurements</u>, News release, 8 June 2022 [IN FRENCH]. The news release states the following: "In May, 197 million French podcasts were listened to or downloaded worldwide. In France, almost 150 million French podcasts were listened to or downloaded during the same month."

⁷ Arcom, <u>Écoute de la musique en streaming audio – Analyse et comparaison avec la radio</u>, 27 January 2022 [IN FRENCH].The platforms studied were Spotify, Deezer, Apple Music and YouTube.

⁸ Canada Research Chair in Digital Textualities <u>Éditorialisation</u>. [IN FRENCH]. This term refers to "the set of dynamics that produce and structure digital space. These dynamics are the interactions of individual and collective actions with a particular digital environment" [TRANSLATION].

2. OVERVIEW OF DISCUSSIONS BETWEEN INVITED SPEAKERS AND PARLIAMENTARIANS

Mr. Trudel sought clarification on how artists, including those who broadcast their works on Spotify, are paid. Mr. Monin replied that it can be difficult to study revenue for artists from music streaming, as it varies from artist to artist. Some artists are fully independent and recover all the money remitted, while others have contracts with record labels and therefore do not receive the full amount. He added that artists used to have only one avenue to publicize their works, but they now have several options. Ms. Robert added that artists today have much more bargaining power.

Mr. Samson spoke next to underscore the importance of French-language and local content. He noted that Canada and France have different realities and that the most popular songs are not necessarily in French. He said that both sides of the equation must be considered. On the one hand, digital platforms provide an opportunity for many to discover artists. On the other hand, governments should be able to use digital platforms as tools to promote French-language music.

Mr. Monin noted that French-language music is more popular than ever in France. Francophone artists from other countries, such as Belgium, are also finding great success in France. Young people tend to listen to a variety of music genres, which makes it easy for artists to reach international markets. He therefore believes that streaming leads to more diversity.

However, Mr. Godechot stated that cultural diversity and its spread should not be all about the music industry. He gave the example of podcasts and said that they have a huge presence on digital platforms. The scope of any regulations adopted to promote cultural diversity in the digital world should therefore be carefully considered.

Senator Cormier raised the issue of the discoverability of French-language music on digital platforms and wondered how this music can be made accessible. He also spoke about the regulator's role in cultural policy, since streaming provides great opportunities and accessibility to certain content for consumers. This access is more problematic in Canada than in France. Senator Cormier referred to Canada's Bill C-18, which seeks to balance the power between digital platforms and local media. He wondered how Canada's francophone artists can find success in Canada the same way as French artists in France.

Mr. Godechot said that discoverability restrictions should not exist. He cited the nascent gatekeeper movement that is posing a threat to discoverability by limiting access to a single platform. For example, in a car, a vehicle manufacturer can enter into an exclusive agreement for a given application to be installed in all its cars. He reiterated that he does not know how much regulators should intervene in the digital domain, but he acknowledged that they would have to sooner or later.

Mr. Monin also stated that access to creative content is a critical issue. Regarding digital platforms acting as gatekeepers, he said some of them prevent the use or installation of

⁹ <u>Bill C-18, An Act respecting online communications platforms that make news content available to persons in Canada, 44th Parliament, 1st session.</u>

another company's services or products on some devices, for example. He extolled the virtues of two new pieces of legislation recently passed by the European Union (EU): the Digital Markets Act, which establishes dos and don'ts for gatekeepers, and the Digital Services Act.¹⁰

Mr. Trudel asked about diversity of content on digital platforms and how to access this content. Mr. Monin said that, on digital platforms such as Spotify, all content is accessible in a uniform manner, and an individual's Spotify account will promote different content depending on the individual. Ms. Robert acknowledged that individuals have different experiences on digital platforms and that their experience is "tailored." She said she would like to see more algorithmic transparency from partners and digital platforms.

Ms. Vien remarked that the Canadian Radio-television and Telecommunications Commission (CRTC) requires certain percentages of Canadian content on Canadian radio, but to her knowledge, this content airs at night so that radio stations can satisfy the requirements and air other content during the day.¹¹ Mr. Godechot explained that, in France, the prime listening hours that are subject to quotas for French language music are between 6: 30 a.m. and 10: 30 p.m.¹²

B. MEETINGS AND SITE VISITS

1. ROUND TABLE ON REGIONAL ISSUES: CULTURAL DIVERSITY IN THE DIGITAL WORLD

On 6 April 2023, the delegation participated in a round table discussion on regional issues. As regards the theme of cultural diversity in the digital world, one of the panels concerned digital platforms and related issues, including discoverability and disinformation.

François Xavier Priollaud, Vice-President of the Région Normandie responsible for Europe, international affairs and promoting Normandy, took part in the discussion

(a) DIGITAL PLATFORMS AND RELATED ISSUES

Senator Morin-Desailly discussed an issue of particular concern to her: disinformation and the speeding-up of new technologies. She noted that the Internet is global and gives youth access to information; however, it also spreads conspiracy theories and challenges to science. She said that countries have a political duty to work together to establish global digital platform regulations. She referred to the Global Digital Compact proposed by the

¹⁰ European Commission, <u>The Digital Markets Act</u>: ensuring fair and open digital markets; Official Journal of the European Union, <u>REGULATION (EU) 2022/2065 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Digital Services Act); Official Journal of the European Union, <u>REGULATION (EU) 2022/1925 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act).</u></u>

¹¹ Canadian Radio-television and Telecommunications Commission, <u>French-language music and</u> Canadian content on radio.

¹² Arcom, Les quotas de chansons à la radio [IN FRENCH].

United Nations (UN), which will be agreed to at the Summit of the Future in 2024. ¹³ She pointed out that the EU is leading in this area, with its proposed Artificial Intelligence Act, the Digital Services Act and the Digital Markets Act. ¹⁴

Mr. Weissberg noted that Canada and Europe were looking into a more ethical and regulated form of artificial intelligence. In his view, people are warier of the regulations in the U.S. He brought up the fact that platforms such as Facebook enable individuals to find information in echo chambers. He also mentioned the problem of disinformation, or "fake" news. 15 Mr. Priollaud said that new social media can have a distorting effect.

However, Mr. Housakos pointed out that disinformation existed long before digital platforms. He asked who should decide what constitutes good and bad information. In his view, people need to be trusted to read, conduct research and come to a conclusion. He believes that the solution is to be more open, not less open. He acknowledged that digital platforms displacing the media is a particular challenge but noted that some foreign states use digital platforms and their algorithms to manipulate citizens of other countries.

Mr. Trudel spoke about the omnipresence of digital platforms in every person's life and the fact that they can be used for foreign interference. Although disinformation has always existed, he believes that the issue has never been more critical. Ways to counter disinformation must therefore be found.

Mr. Chantrel said that people need to understand that the media landscape has changed. Before, people were not told what was good or bad, but instead provided with the necessary information. According to Mr. Chantrel, people now have to play the role of journalist and evaluate sources, even though mass media were supposed to do this work for them. In his view, democracy means equipping people to ensure that they are not manipulated.

Senator Morin-Desailly discussed the issue of the discoverability of online content, stressing that it can be difficult to find French-language content on digital platforms. She said it is important to promote cultural industries.

On promoting cultural industries in France, Senator Chantrel said that the French government has always strongly intervened to protect French culture and that all political parties agree on the need for a cultural policy. He illustrated this fact by explaining that the French government funds the French film industry, which was under threat from Italian, Spanish and American films, but it is now doing well. The French cultural exception

¹³ United Nations, Office of the Secretary-General's Envoy on Technology, *Global Digital Compact*. The compact is expected to "outline shared principles for an open, free and secure digital future for all."
¹⁴ The European Commission proposed the <u>Artificial Intelligence Act</u> (AI) in 2021: Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence. The proposal was examined by the Council of Europe, which presented a final compromise text in December 2022. In May 2023, two parliamentary committees adopted a report with the <u>amendments proposed</u> by the European Parliament to the proposed AI legislation. The three institutions (the European Commission, Council of Europe and European Parliament) are expected to undertake interinstitutional negotiations to agree on the final text of the legislation before it is adopted.

¹⁵ France, Ministry of Culture, <u>Terminologie: comment est né le mot «infox»</u>?, 18 March 2019 [IN FRENCH].

means that part of the price of a movie ticket is reinvested in French cinema. France's fixed book price has also helped protect French literature. 16

Additionally, Mr. Chantrel discussed the fact that globally, 77% of English-speaking people have access to the Internet compared with only 50% of French-speaking people. Francophone areas have the lowest Internet access. He believes that strategies that go beyond national frameworks are needed to address competition from American and Chinese digital platforms.

Senator Morin-Desailly said that in her opinion, digital platforms are tools of control and influence whose goal has always been to generate more profit for certain businesses. She said that some antitrust measures in the U.S. and European laws that will apply to technology giants are starting to be introduced. Like Mr. Weissberg, she noted that people can be manipulated by powerful and opaque algorithms that shape ideas and may influence certain choices. She pointed out that European legislation now requires independent audits of the impacts of some of these algorithms. However, the legislation did not go as far as she would have liked. She believes that global digital platforms regulation is needed.

Mr. Trudel said that he agreed with senators Chantrel and Morin-Desailly. He added that it is important to support all cultures around the world and to find ways to reflect this diversity online. He referred to Canada's Bill C-11, An Act to amend the Broadcasting Act and to make related and consequential amendments to other Acts, which received Royal Assent on 27 April 2023.¹⁸

2. VILLA DU TEMPS RETROUVÉ

On 7 April 2023, the delegation visited the <u>Villa du Temps retrouvé</u>, a site devoted to the heritage of the Côte fleurie, the imagination of Marcel Proust and the culture of the Belle Époque. The Villa offers an immersive experience using various media systems to engage visitors in listening, reading, seeing and learning throughout all of the rooms. ¹⁹ Villa du Temps retrouvé, <u>The Concept</u>. Visitors can view animated playing cards or listen to music from the period. The Villa du Temps selects a theme each year and features works of art on loan from French museums and private collections.

The delegation was welcomed by Roma Lambert, the site's director, who gave a guided tour of the museum. Emmanuelle Le Bail, Assistant to the Mayor of Cabourg in charge of culture, also took part in the visit. Tristan Duval, Mayor of Cabourg, stopped by to welcome the delegation to the museum.

19

¹⁶ France, Ministry of Culture, <u>Book Price</u> [IN FRENCH]. The book pricing legislation was adopted in 1981 and provides for citizen equality with respect to books, which must be sold at the same price throughout the country; the maintenance of a very dense decentralized distribution network, particularly in disadvantaged areas; and support for pluralism in creation and publishing, especially for difficult works.
¹⁷ <u>Digital Services Act</u>, supra note 10. Article 37 states that providers of very large online platforms and very large online search engines shall be subject, at least once a year, to independent audits to assess compliance with their obligations set out in sections 11 to 48 of the Act.

¹⁸ Bill C-11, An Act to amend the Broadcasting Act and to make related and consequential amendments to other Acts, 44th Parliament, 1st session.

Basile Bohard, Founder and Creative Director of neodigital, a firm that creates hybrid immersive sites, including exhibits, interactive sound and light installations, travelling exhibits and entertainment venues, also accompanied the delegation on the Villa du Temps Retrouvé tour. Due to time constraints, Mr. Bohard was only able to briefly talk about his background and introduce his firm at the end of the visit.²⁰

GREEN TRANSITION AND GREEN TECHNOLOGIES

A. WORKING SESSION

A working session on the green transition and green technologies took place on 4 April 2023.

The working session for the 48th Annual Meeting on the theme of the green transition and green technologies included a presentation on Canada's and France's perspectives and was followed by a discussion among the parliamentarians. The working session for the 49th Annual Meeting consisted in a round table with representatives from French companies in the fields of renewable energy and the green transition. The speakers made opening statements and then answered questions from the parliamentarians.

Mr. Weissberg opened the working session by introducing the two speakers: Éric Scotto, President and Founder of Akuo Energy, a major player in the renewable energy sector, and Clément Fléau, President and Founder of NOIL, a company that specializes in converting diesel-powered vehicles into electric vehicles.²¹ Alexandra Sombsthay, Head of External Relations and Communications at Akuo Energy, was also in attendance.

Before giving the floor to the speakers, Mr. Weissberg pointed out that Canada and France have similar challenges to making the green transition and that the Franco-European and Canadian region is vital because our two countries share democratic and liberal values. He also referred to the recent adoption of France's ERN Act, or Loi n° 2023-175 du 10 mars 2023 relative à l'accélération de la production d'énergies renouvelables, (legislation to accelerate the production of renewable energy) and a bill on nuclear energy. He noted that France's goal is to make itself an "electric nation."

1. INVITED COMPANIES

(a) AKUO ENERGY

The Akuo Group invents and constructs new models of renewable energy production for sustainable development. The company has technological and energy expertise in solar power, wind power, energy storage and green electricity sales. It is established on five

²⁰ See Neodigital, *neodigital*. For a time, the company had a branch in Montreal.

²¹ The term "electric retrofit" is used in France.

France, LOI n° 2023-175 du 10 mars 2023 relative à l'accélération de la production d'énergies renouvelables (1) [IN FRENCH]; and National Assembly, Projet de loi relatif à l'accélération des procédures liées à la construction de nouvelles installations nucléaires à proximité de sites nucléaires existants et au fonctionnement des installations existantes [IN FRENCH]. The bill was adopted on 16 May 2023. Approximately 60 members of the National Assembly referred the bill to the Constitutional Council on 22 May 2023.

continents and more than 20 countries around the world and has more than 80 renewable energy production plants in operation and construction in several countries.²³

Mr. Scotto explained that, in 2003, he took a gamble by going to Montreal when he wanted to launch his first renewable energy company. There was virtually no market in Europe at the time, so he could not get funding. The Cascades Group, which had paper mills in France and was looking into ways to power them in the future, put its trust in him. That was how he founded his first wind energy company. Mr. Scotto sold the company and then founded Akuo Energy.

Mr. Scotto said that the idea that renewable energy is not competitive must be dismissed. For instance, he said that the 6th Synthesis Report of the Intergovernmental Panel on Climate Change (IPCC), published in March 2023, found that the unit cost of solar energy and photovoltaics had fallen 85% and that of wind energy had decreased by 55% between 2010 and 2019.²⁴ The costs of lithium-ion batteries also fell 85% over the same period.

Mr. Scotto pointed to the recent adoption of the ENR Act, noting that, for a long time, France had a monolithic energy mix, mostly nuclear. As a result, in the early 2000s it was difficult to persuade people that renewable energy would become competitive and could help balance this energy mix. He said that France has a huge renewable energy potential, including the second-largest wind power potential in Europe.

In addition to wind energy, Akuo Energy is working in photovoltaics and in agrivoltaics in particular. Mr. Scotto said that Akuo Energy developed agrienergy and agrivoltaics on Reunion Island. He explained that, in discussions with farmers on the island several years ago, the company understood that photovoltaics production should not displace agricultural production. Agrienergy and agrivoltaics therefore avoid taking up farmland (e.g., acquiring and destroying farmland to build something else). Mr. Scotto added that France can meet the solar photovoltaic goals under its 2019–2028 multi-year energy programming by covering just 0.1% of the country's agricultural land with agrivoltaic installations. The idea is not to pit renewable energy producers against farmers, but rather to have the two groups accept each other. France recently defined agrivoltaics in the ENR Act.

Turning to photovoltaics, Mr. Scotto noted that installing solar panels on all rooftops facing the right way could produce 15% of Europe's electricity. He also stated that photovoltaics

²³ Akuo Energy, Akuo Energy.

²⁴ Intergovernmental Panel on Climate Change, <u>Synthesis Report of the IPCC Sixth Assessment Report</u> (AR6), March 2023.

²⁵ Akuo Energy, <u>Agrivoltaics: combining the agricultural and energy transition</u> Agrivoltaics combines agriculture and energy production in the same space. A piece of land can therefore serve two purposes: agriculture and energy production.

²⁶ Akuo Energy, *Reunion Island*.

²⁷ France, Ministry of the Ecological and Inclusive Transition, France's energy and climate strategy, <u>Programmation pluriannuelle de l'énergie 2019-2028</u> [IN FRENCH]. The multi-year energy programming establishes priority action areas for the Government of France with respect to energy in mainland France over the next 10 years, divided into two five-year periods. France's solar photovoltaics goal is to have the capacity to produce between 35.1 gigawatts and 44.0 gigawatts by 2028.

²⁸ France, <u>LOI n° 2023-175 du 10 mars 2023 relative à l'accélération de la production d'énergies renouvelables (1)</u>, s. 11 [IN FRENCH].

have evolved considerably since 2006. For example, solar roof tiles that do not require putting solar panels on top of an existing roof are now available.

Mr. Scotto also talked about floating photovoltaics, which generate solar energy using photovoltaics installed on floats placed on quarry lakes or unused expanses of water.²⁹ This type of photovoltaics replaces solar power plants installed on land that could be used for other purposes. A study conducted by Akuo Energy showed that, in France, this type of energy has the potential to produce 10 GW of solar energy while protecting biodiversity. Birds can land on solar panels and fish can swim below. Akuo Energy's floating power plant in Piolenc is the first floating solar plant commissioned in France.³⁰

Mr. Scotto said that French parliamentarians appear to unanimously agree on the need to speed up the transition to renewable energy. The war in Ukraine has also more quickly made the French people see the importance of energy sovereignty. At present, the EU gets 22% of its energy from renewable sources, but this figure varies from one country to another. Some countries, such as Sweden, get more of their energy from renewable sources, while others, such as Poland, still use energy from coal. Countries must therefore make a huge effort to transition to renewable energy. To do so, Mr. Scotto believes that Europe must increase cross-border electricity interconnections. He gave the example of Luxembourg, which will never have the sites or areas necessary to achieve energy independence. That means interconnections and renewable energy storage capacity must be developed.

Mr. Scotto pointed out that France had missed its 2020 target for renewable energy consumption.³¹ He was hopeful that the ENR Act would be implemented, but noted that things can be difficult on the ground, where opposition from local stakeholders sometimes arises. He believes that the legal framework for renewable energy is too complex and France is behind on enforcing legislation that could accelerate the transition to renewable energy, despite the country's objective of 33% renewable final energy consumption by 2030.³² Mr. Scotto noted that, in its review of the renewable energy directive, the EU set a target of 42.5% renewable energy in total energy consumption by 2030 and encouraged some members to reach 45%.³³

Mr. Scotto spoke about the European Commission's Green Deal Industrial Plan, which has four key pillars: a predictable and simplified regulatory environment; faster access to funding; enhancing skills; and open trade for resilient supply chains.³⁴

Mr. Scotto concluded his remarks with three important points. Renewable energy is the best way to keep jobs in the country. Regulatory certainty is important, meaning that

²⁹ Akuo Energy, Floating Solar frees up space to accelerate the energy transition.

³⁰ France, Agence nationale de la cohésion des territoires, *Piolenc, pionnière de l'énergie solaire flottante* [IN FRENCH].

³¹ European Commission, <u>Renewable energy directive</u>; Ministry of the Ecological Transition, Key figures on renewable energy, <u>Objectifs 2020 et situation actuelle de la France</u>, July 2020 [IN FRENCH]. France's goal for 2020 was 23% (this figure represents the share of renewable energy in final gross energy consumption in France). The actual figure was 19.1% in 2020.

³² France, Ecological transition agency, *Énergies* [IN FRENCH].

³³ European Commission, <u>Council and Parliament reach provisional deal on renewable energy directive</u>, News release. 30 March 2023.

³⁴ European Commission, *The Green Deal Industrial Pact*.

reversing changes is not an option. In his view, the role of politicians is to lead the way and to think beyond their current term in office. Finally, more flexibility is needed to fund clean technologies and create a European sovereignty fund to start reindustrialization.

(b) NOIL

NOIL is a French company that uses French know-how to give two-wheel vehicles a new lease on life by retrofitting them into electric vehicles. The company offers electrification kits.³⁵ The "electric retrofit" consists in converting two- or three-wheel gas-powered vehicles into electric vehicles that can be charged from an ordinary electrical outlet.³⁶

Mr. Fléau told the delegation that NOIL's solution can also work in Canada. Retrofitting a combustion-powered vehicle into an electric vehicle addresses an important question: what will happen to existing vehicles in the transition to renewable energy? This is a major issue in France, where some 38 million vehicles are currently in operation.³⁷

Mr. Fléau explained that the electric retrofit solution converts polluting vehicles into clean vehicles. The production involved can be local and low-carbon. This solution can with the transition of vehicle related trades, since skilled individuals are needed to convert vehicles to electric. It also helps speed up the transition of existing vehicles.

Mr. Fléau noted that France is a pioneer in the field of electric retrofits. A decree published in the Journal officiel de la République française in 2020 provides a legal framework for retrofitting combustion engine vehicles into electric vehicles powered by battery or fuel cells. The text of the decree is comprehensive enough for the electric retrofit industry to define technical requirements that must be met to safely put retrofitted vehicles on the road. Mr. Fléau said that NOIL could not have existed without this decree. He also pointed out that the Acteurs de l'Industrie du rétrofit électrique (AIRe), representing retrofitting businesses, lobbied the government, and this resulted in the emergence and growth of this new industry.

Mr. Fléau explained that France's AIRe has approximately 15 members, encompassing all transportation sectors, from vehicles and trucks to boats. He said that retrofits are a more ethical solution than keeping a gas-powered car or selling it to purchase an electric car. They make something new out of something old.

As for the challenges of retrofits, Mr. Fléau mentioned the lack of a suitable legislative framework, despite the decree mentioned above. The members of AIRe would like to see a harmonized European legislative framework, which could be implemented in other countries. The ultimate goal is to develop a European and international market for retrofits.

³⁵ The term commonly used in France is "kit d'électrification."

³⁶ NOIL, NOIL [IN FRENCH].

³⁷ France, Ministry of Ecological Transition and Territorial Cohesion, Statistical data and studies on climate change, energy, environment, housing and transportation, <u>38,7 millions de voitures en circulation en France au 1er janvier 2022</u> [IN FRENCH]. Electric, rechargeable hybrid, natural gas and hydrogen-powered cars make up 2.3% of all vehicles in France.

³⁸ France, <u>Arrêté du 13 mars 2020 relatif aux conditions de transformation des véhicules à motorisation thermique en motorisation électrique à batterie ou à pile à combustible [IN FRENCH].</u>

2. OVERVIEW OF DISCUSSIONS BETWEEN INVITED SPEAKERS AND PARLIAMENTARIANS

(a) ELECTRIC VEHICLE CONVERSION

In response to a question from Ms. Vien concerning the number of retrofitted vehicles in France, the cost of conversion, the availability of incentive mechanisms and the regulatory framework, Mr. Fléau explained that the key element of France's regulatory framework is the ability to obtain serial certification, like any car manufacturer. That way, a vehicle can be certified once, and then many of them can be manufactured. The manufacturer is responsible for getting their electric conversion device certified.³⁹ Mr. Fléau pointed out, however, that obtaining certification in France is still complicated. He believes that retrofitting companies should receive support to obtain certification in order to successfully reach the mass market.

With respect to cost, Mr. Fléau explained that the cost of a conversion kit currently ranges from about €100 to €1,000, depending on the type of vehicle. Conversions of heavy vehicles cost more, but there is a genuine market for retrofitting these vehicles. He gave a concrete example of a new scooter costing €7,000, while retrofitting a used scooter costs about a quarter of this amount. Retrofits can therefore extend the scooter's service life.

With respect to the number of retrofitted vehicles, he said that NOIL has converted 500 vehicles so far. The company's goal is to convert 10,000 vehicles in the next five years. Mr. Fléau stated that France plans to ban gas-powered vehicles in urban centres by 2030, and this makes retrofits a practical solution.

On the issue of an incentive mechanism, Mr. Fléau explained that vehicle owners in France can receive a conversion bonus and vendors can offer them to buyers.⁴⁰

In response to a question on retrofits in Europe from Senator Cormier, Mr. Fléau explained that France is a major player in this field in Europe, with its AIRe association. He reiterated that the key issue is to work toward harmonizing regulations across the EU.

Mr. Trudel asked a question about the increase in electricity demand to power these retrofitted electric vehicles. In response, Mr. Scotto pointed to the potential of solar and wind power. He noted that Spain, Greece and Portugal have above-average solar and wind resources and are trying to speed up production of this type of energy, which can be exported to other countries.

Mr. Scotto reiterated the need for global coordination of the energy mix and called for accelerated interconnection and storage of renewable energy. He gave the example of France, which will not be able to produce green hydrogen in a competitive manner and will therefore have to import this resource. He pointed out that resources are not equally distributed across the planet and countries will therefore have to share their knowledge

³⁹ France, Ministry of Ecological Transition and Territorial Cohesion and Ministry of the Energy Transition, <u>Tout savoir sur le rétrofit</u> [IN FRENCH].

⁴⁰ France, *Mesures antipollution* [IN FRENCH].

and resources. For example, Australia, Argentina and Canada have been identified as countries that will be dominant in renewable energy.

Ms. Vien wanted to know how the conventional automobile industry is collaborating with retrofit businesses in France. Mr. Fléau said that some manufacturers had previously contributed to studies criticizing electric vehicles, but things are changing. Manufacturers are now being encouraged to speed up the transition to electric, and some have started to tap into the experience of retrofitters.

(b) AGRIVOLTAICS

In response to a question from Senator Cormier on farmers and agrivoltaics, Mr. Scotto explained that agriculture is facing technical challenges due to climate change and extreme weather events, which are becoming more frequent. Agricultural production beneath photovoltaic shades can address some of these challenges. For instance, building cyclone-proof greenhouses ensures food security and production year round. New water collection systems invented for agrivoltaics have boosted agricultural production. Mr. Scotto reiterated that agrivoltaics must be co-developed with farmers and stressed that Akuo Energy funds agrivoltaics projects in the very long run, such as 30 years.

(c) PUBLIC BUY-IN FOR ELECTRIFICATION IN FRANCE

In response to a question from Mr. Samson on the French people's response to the country's electrification agenda, Mr. Fléau pointed out that there is immediate and significant demand for electric vehicles in France. More and more people in France are recognizing the importance of the circular economy, which is becoming a more popular approach to consumption.

In terms of public acceptability, Mr. Scotto noted that job creation in the renewable energy field has made it more acceptable. He also stated that young people are more sensitive to climate change, a factor that should help the situation.

(d) GLOBAL FIGHT AGAINST CLIMATE CHANGE

In response to a question from Mr. Trudel on global efforts to reduce greenhouse gas (GHG) emissions and the fact that, despite political will, GHG emissions keep increasing, Mr. Scotto stated that the EU is taking steps to entrench its directive on renewable energy, which would include a new target of 42.5% (or 45%) by 2030 in Europe. However, he acknowledged that it can be frustrating to see how much time has been lost by failing to take action. He pointed out that initially, renewable energy was thought to be very costly, and people did not see the potential of solutions like photovoltaics.

(e) CANADA'S REALITY

Mr. D'Entremont said that Canada and France are grappling with similar concerns about the ecological transition. He remarked that another challenge is the fact that Canada has ten provinces, which have their own regulatory systems, and it has crude oil, in the provinces of Alberta and Saskatchewan in particular. The thousands of jobs in the oil and industry cannot be changed over right away.

Nevertheless, Mr. D'Entremont noted that Canada reported that the environmental and clean technology sector employs 323,000 people, representing 1.8% of all jobs in Canada and C\$14.3 billion in exports.⁴¹ He echoed Mr. Scotto's statement about the importance of developing energy interconnections between countries and said that interconnections between Canada's provinces should be improved. He gave the example of the hydroelectric energy interconnection challenges experienced in Nova Scotia and Newfoundland.

(f) INTERNATIONAL AGREEMENTS

Senator Cormier raised the issue of trade agreements, their implementation and their impacts on the green transition underway.

Alexandra Sombsthay, Head of External Relations and Communications at Akuo Energy, gave the example of the Canada–European Union Comprehensive Economic and Trade Agreement (CETA).⁴² She pointed out that the agreement was negotiated with the European Commission, not with EU member states. She added that some opposition to CETA was expressed in France and asserted that people can wonder about the democratic deficit when a state does not directly negotiate an agreement that can affect businesses' day-to-day operations.

Mr. Weissberg noted that, because of this opposition, France has not yet ratified the agreement. However, he clarified that CETA has nonetheless been implemented in France.⁴³

B. MEETINGS AND SITE VISITS

1. PARIS 2024 OLYMPIC ATHLETES' VILLAGE

On 3 April 2023, the delegation had the privilege of visiting the Athletes' Village that is under construction for the Paris 2024 Olympic and Paralympic Games. The village is located in Saint-Ouen and Saint-Denis, in the suburb of Paris. The tour was led by Marion Le Paul, Assistant Managing Director of SOLIDEO, the organization responsible for

⁴¹ Natural Resources Canada, *Energy Fact Book 2022–2023*.

⁴² Global Affairs Canada, <u>Text of the Comprehensive Economic and Trade Agreement – Table of contents.</u>

⁴³ See <u>European Commission</u>, <u>European Commission proposes signature and conclusion of EU-Canada trade deal</u>, News release, 5 July 2016. While the European Commission (EC) originally maintained that Canada–European Union Comprehensive Economic and Trade Agreement (CETA) was within the sole jurisdiction of the EU and that EU ratification was sufficient, some EU member states, including France, disagreed. The EC proposed that CETA be signed and concluded as a "mixed" agreement. With the approval of the Council of the EU and the European Parliament, mixed agreements can be applied provisionally in the EU prior to ratification by each member state. Provisional application applies only to the CETA provisions for which the EU has exclusive jurisdiction. CETA came into force provisionally on 21 September 2017. Over 90% of the agreement was immediately implemented in the EU while awaiting full ratification at the member state level. France has not yet ratified the agreement. Canada ratified CETA in 2017.

delivering the venues and infrastructure for the games, and Aurélie Sabatier, Head of Mission for institutional relations at SOLIDEO. The organization's mandate is as follows:

Delivering the Olympic and Paralympic venues and infrastructures in accordance with deadlines, costs and plans and ensuring their transformation after Paris 2024, in order to guarantee that inhabitants, users and local areas have an ambitious, sustainable and exemplary heritage.⁴⁴

Ms. Le Paul explained that SOLIDEO was established in 2017 when the International Olympic Committee awarded Paris the Summer 2024 Olympic and Paralympic Games. SOLIDEO is a public institution responsible for 64 venues that will remain after the games. The work includes renovating existing infrastructure and building the Athletes' Village.

Ms. Le Paul indicated that SOLIDEO will be wound up at the end of its mandate. By September 2024, only 40 employees will remain to oversee the second phase of the project, which involves reversing the work to leave a sustainable legacy. The organization will cease to exist once this process is complete. Ms. Le Paul noted that SOLIDEO will receive \$1.7 billion to build the Olympic venues and infrastructure, in the form of public financing.⁴⁵

The host organization, Paris 2024, took on the goal of <u>halving the carbon footprint of the games</u>. To do this, Paris 2024 is using low-carbon structures, renewable energy and sustainable catering. Paris 2024 also intends to use 95% existing or temporary infrastructure and to build only facilities that will serve a purpose in the future.⁴⁶

Regarding the construction of the Athletes' Village, SOLIDEO wanted to put residents first and ensure that the buildings will serve them after the Olympic Games. The village will be built on 52 hectares and will include accommodations for athletes, a hospital and a bus station to enable athletes to travel to competition sites in under 30 minutes. SOLIDEO is working with local officials in Saint-Ouen and Saint-Denis.

The apartments in the Athletes' Village have been designed to be shared by two athletes during the Olympic Games. Afterward, they can be converted into social, family and student housing. About 25% of the housing will be social housing. For example, one housing unit can be converted into a two-bedroom apartment with a living room that can accommodate a family. Partitions will simply be removed after the games and reused elsewhere. The partitions are designed to be installed without drilling holes in the walls. The carpeting in the units during the games will be removed to leave the parquet flooring underneath. The 2,800 housing units for 14,000 athletes will be converted to provide housing for approximately 6,000 residents after the games.

Ms. Le Paul stated that the goal is to create a sustainable town that will withstand the climate of 2050. For example, SOLIDEO is working with meteorologists, who predict summer-long heatwaves by 2050. The buildings will be built with timber up to a height of 28 metres (approximately nine floors) and ultra-low-carbon concrete. The organization worked with firefighters to determine this height and with insurance companies to confirm that they would insure the buildings. It used a certified process. The buildings are also

⁴⁴ Société de livraison des ouvrages olympiques, Who are we?

⁴⁵ The original amount of €1.4 billion has been adjusted for inflation.

⁴⁶ Paris 2024, Halving the carbon footprint of the games.

carefully oriented in relation to the sun and to ensure that air can circulate between them. Some 2,000 trees and bushes in the centre of the Athletes' Village in a green space and park will create islands of cool air.

Transportation infrastructure will include a bike path on the Seine and the use of clean buses. Starting in 2025, a new station will be one of the key interconnection hubs for the future Grand Paris Express network. All this infrastructure will make Saint-Ouen more accessible. During the Olympic Games, vehicle traffic in the Athletes' Village will be limited, and no parking will be provided at athletes' housing units.

Ms. Le Paul said that there are 30 project authorities directing a variety of renovation and construction projects, such as the construction of a bridge linking Saint-Ouen and Saint-Denis. Ms. Le Paul explained that the Athletes' Village will be built by four different developers. Any problem in one quarter of the village will only affect that portion, not the entire village. SOLIDEO has told the developers to ensure they have the necessary workforce and equipment, such as cranes, to perform the work. So far, they have not experienced any labour or supply problems, despite the war in Ukraine. The site was shut down for only 15 days during the pandemic.

Each developer has identified a solution to reduce its carbon footprint, and each is responsible for its parcel. They have made private investments in the project because they want to showcase their expertise. The developers hire their own workforce. The names of any seconded workers (from outside France) must be provided to the Minister of Labour. The SOLIDEO worksite has had only one case of an undocumented worker, and it was reported to the authorities.

All trucks report to the same location and are then directed to the appropriate area. The site where the Athletes' Village is being built was previously an industrial area. SOLIDEO managed to ensure that 96% of materials (ceilings, lamps, etc.) will be reused. Twenty companies were relocated, but none was forcibly evicted.

Ms. Le Paul said that staying on schedule is the biggest challenge facing SOLIDEO. The organization will hand over the keys to Paris 2024 on 1 March 2024 and must therefore complete the project ahead of schedule to allow for inspections and adjustments as required. Accordingly, SOLIDEO plans to complete the project three months ahead of schedule and start inspections in September 2023. SOLIDEO must approve all construction changes, and changes that would cause months-long delays will be rejected.

In addition, Ms. Le Paul noted that SOLIDEO's work must be within a fixed budget, which cannot be increased or decreased. The vast majority of materials and other project components were supplied by French companies. Some European companies also provided materials. Moreover, 25% of the contract value is set aside for micro, small and medium-sized businesses and social and solidarity-based economic organizations (e.g., mutuals, cooperatives, associations).

As to enforcing the equivalent of a building code, Ms. Le Paul explained that planning standards in France are set by the government and local urban plans. That means both national and specific local rules apply.⁴⁷ All the timber used to build the housing comes from Europe, including 30% from France. Asked why Canadian timber was not used, Ms.

-

⁴⁷ France, Collectivités locales, <u>Les règles générales d'urbanisme</u> [AVAILABLE IN FRENCH ONLY].

Le Paul stated that the choice fell to the developer and that the decision to use European timber may have had something to do with the carbon footprint.

Ms. Le Paul spoke about the biggest innovations in the Athletes' Village. She remarked that all the water used will be recycled, and a geothermal system has been developed to supply hot and cold water to the buildings in the village. In addition, a tunnel was drilled under the Seine to bury power lines and enable the removal of six pylons currently on the site.

Concerning the impact of the new infrastructure on the mayors of the communities affected, Ms. Le Paul stated that they will have to adapt their services rapidly. For example, new schools will be opened in the joint development zone starting in 2025.⁴⁸ Saint-Ouen, which is now a fairly poor town, is expected to have a more mixed population after the Olympic Games.

After the presentation, the delegation visited the site with Ms. Sabatier. The delegation saw the location of the bus station that will be used during the Olympic Games, which will be converted into a park afterward. The delegation also viewed the housing units under construction. The delegates were told that, in a bid to feminize the names of streets, all the streets at the Athletes' Village will be named for the great women of France.

2. WORKING LUNCHEON HOSTED BY ROLAND LESCURE, MINISTER DELEGATE FOR INDUSTRY, ATTACHED TO THE MINISTER OF THE ECONOMY, FINANCE AND INDUSTRIAL AND DIGITAL SOVEREIGNTY

On 4 April 2023, Roland Lescure, Minister Delegate for Industry, attached to the Minister of the Economy, Finance and Industrial and Digital Sovereignty, hosted a luncheon for the delegation. Mr. Weissberg and Mr. Chantrel were also in attendance.

Mr. Weissberg began by introducing Mr. Lescure and explained how he came to be his designated alternate. Mr. Lescure was the member for the First Constituency of French residents abroad for a few months in the summer of 2022.⁴⁹ Mr. Weissberg took Mr. Lescure's seat in the National Assembly in July 2022 when the latter was appointed to cabinet.

Ms. Lalonde thanked Mr. Lescure for welcoming the delegation and for his contributions to Quebec and Canada.⁵⁰ Mr. Chantrel also thanked Mr. Lescure for meeting with the delegation. He acknowledged that attaining a zero-carbon economy is a key issue for France and Canada and underscored that Franco Canadian partnerships could be important in achieving this goal.

⁴⁸ France, Collectivités locales, <u>L'aménagement urbain</u> [IN FRENCH]. A joint development zone is "an area in which a public community, or a public body responsible for it, has decided to step in to develop land or have it developed, including lands acquired or to be acquired with a view to subsequently selling or transferring them to public or private users" [TRANSLATION].

⁴⁹ In France, members of the National Assembly stand for legislative elections on a joint ticket, i.e., with a designated alternate. See National Assembly, *Fiche de synthèse n°14: L'élection des députés*. [IN FRENCH].

⁵⁰ Mr. Lescure was senior vice-president and chief investment officer of Quebec's Caisse de dépôt et placement between 2009 and 2017.

Mr. Lescure spoke next and explained that France has been working on reindustrializing for the past six years, with a focus on decarbonization. He said that France is committed to developing green technologies and indicated that avenues for collaboration between Canada and France in the field of green energy surely exist.

In response to a question from Ms. Lalonde about the greatest challenges facing France as regards the green transition, Mr. Lescure said that the biggest one is decarbonizing conventional industries. He remarked that decarbonization is not yet profitable and government must be involved, including through subsidies. He referred to the "France 2030" investment plan, whose goals include decarbonizing industry faster through green hydrogen, robotics, carbon capture, etc.⁵¹

Mr. Lescure also talked about the "Zero-Carbon Industry" initiative. He explained that 50 industrial sites in France emit 60% of all its GHG emissions. One of his first mandates was therefore to negotiate a decarbonization plan with these industries. He explained that the initiative, which requires the 50 industries to submit a decarbonization roadmap by June 2023, was launched in November 2022.⁵² Mr. Lescure stressed that the initiative reconciles the economy and the environment, and that conventional industry is perceived as a very concrete driver of decarbonization. He pointed out that decarbonization also addresses the unemployment problem, because the industrial sector generally has better wages than the service sector.

Mr. Lescure also acknowledged the importance of helping small and medium-sized enterprises through the transition, including financial assistance and support for the workforce to transition to different jobs. With respect to shifting to other modes of transportation, Mr. Lescure noted that France's objective was to have all new vehicles sold be electric by 2035.

Ms. Lalonde gave Mr. Lescure a few examples of Canada's support for the green transition, including the Government of Canada's significant investment in Ontario to build an electric vehicle battery manufacturing plant.⁵³ In response to a question from Senator Housakos on the role of the banking system in the green transition, Mr. Lescure stated that France does not see much risk in this area and that his ministry is not worried about financing the transition.

In addition to the green transition and green technologies, parliamentarians also discussed other topics of interest, including inflation, the minority governments in Canada and France, challenges to institutions, telework and the disparity that frequently exists between those who can telework and those who cannot, and francophone immigration.

3. CALVADOS OFFSHORE WIND FARM OPERATIONS AND MAINTENANCE BASE

⁵¹ France, Ministry of the Economy, Finance and Industrial and Digital Sovereignty, *France 2030: un plan d'investissements pour la France*, 18 November 2022 [IN FRENCH].

⁵² France, Ministry of the Economy, Finance and Industrial and Digital Sovereignty, <u>Transition écologique:</u> <u>une planification pour accélérer la décarbonation des sites industriels</u>, 7 April 2023 [IN FRENCH].

⁵³ Innovation, Science and Economic Development Canada, <u>Government of Canada welcomes largest investment in Canada's auto industry with the first large-scale domestic EV battery manufacturing facility</u>, News release, March 23, 2023.

On 6 April 2023, the delegation toured the Calvados offshore wind farm operations and maintenance base located in Port de Caen-Ouistreham.

The Calvados offshore wind farm is the second offshore wind farm under construction in Normandy and one of the first four in France. It consists of 64 offshore wind turbines with a total capacity of 450 MW.

The wind turbines will be located more than 10 km from the Bessin coast (Courseulles-sur-mer) over a total area of 50 km². The area of seabed affected will amount to less than 1% of this total.

The wind farm will produce enough electricity to supply over 630,000 people, which is more than 90% of the population of Calvados.⁵⁴

The wind farm is being built by EDF Renewables, a French company that develops, builds and operates renewable power plants, including offshore wind farms.

The delegation was welcomed by Matthew Stoltz, Construction Manager for the Calvados offshore wind farm, Mathilde David, Project Manager and Head of Consultations for the wind farm, and Amandine Carrière, Head of Institutional Relations for offshore wind farms at EDF Renewables.⁵⁵ A few other employees and interns were also present.

Mr. Stoltz said it was a pleasure to welcome the delegation to the operations centre for all offshore operations during the construction phase of the Calvados offshore wind farm. He explained that the main project participants are EDF Renewables, EIH LLC (a subsidiary of Canada's Enbridge), and Skyborn Renewables, a German company that develops and operates wind farm projects. ⁵⁶ EDF Renewables has trained some 600 wind power experts around the world over the last decade, including 200 in France. The company was also involved in the construction of the Saint-Nazaire offshore wind farm. Construction of a third offshore wind farm in the region will begin in 2023.

Mr. Stoltz stated that the Calvados offshore wind farm comprises 64 wind turbines manufactured and assembled at the wind turbine manufacturing plant in Le Havre. The plant was built about a year ago to supply several offshore wind farms in France.⁵⁷ He added that the offshore area of Courseulles sur Mer is ideal for an offshore wind farm because it has steady winds, shallow waters and no maritime traffic. Wind turbines are installed two kilometres from shore to limit the visual impact on area residents. The project has boosted local employment and accounted for the issues of fishing, the environment and the duty of remembrance. Mr. Stoltz also said that the wind turbines are strategically placed so that fishing can continue. The goal of the project is to make the best use of the area so that different uses can coexist.

Mr. Stoltz said that the Calvados offshore wind farm's electrical substation was built by Chantiers de l'Atlantique, a leader in shipbuilding based in Nantes. The cables connecting the wind turbines were manufactured at the Prysmian plants in Gron and Montereau,

⁵⁴ Calvados offshore wind farm, *The Calvados offshore wind farm*.

⁵⁵ They are all employees of EDF Renewables.

⁵⁶ An LLC is a limited liability company.

⁵⁷ Siemens Gamesa, L'Usine éolienne de Siemens Gamesa au Havre [IN FRENCH].

France. Other project components have been supplied by French and European companies.

Next, Mr. Stoltz spoke about the construction timeline. He said that construction of the Calvados offshore wind farm components began in 2021. Manufacturing of the cables and the foundations (metal cylinders made of steel weighing almost 800 tonnes that will be installed through vibratory driving) is almost complete. The wind turbine control room is now complete. The wind turbines will be installed between 2023 and 2025.⁵⁸

Mr. Stoltz said that the Réseau de Transport d'Électricité français (RTE), France's transmission system operator, installed two undersea electrical cables in April 2022. The cables will connect the wind turbines to the offshore electrical substation and transfer power from the substation to land. The electrical substation was installed offshore in 2023. It will transform the current and step up its voltage. The foundations for the wind turbines will also be installed offshore in 2023. The foundations (steel monopiles buried in the seabed) will support the transition pieces, which will stand 25 metres above sea level and support the turbines.⁵⁹Ibid.

Lastly, Mr. Stoltz said that the wind turbines and cables between the turbines are expected to be installed in late 2024. The masts, nacelle and the blades for each wind turbine will be installed in March and April 2025 at a rate of one turbine a day. The blades are recyclable. The Calvados offshore wind farm is expected to enter service in 2025.

Ms. David explained that the Calvados offshore wind farm originated in 2011, when the call for tenders was issued. Public consultations took place in 2013, and the people of Normandy were invited to participate. The consultations enabled EDF Renewables to take the views of Normandy residents into account so that residents could be involved in building the wind farm.

For example, Ms. David noted that the project recognizes the duty of remembrance, given that the wind farm is located offshore from the D-Day landings beaches. Reconciling the energy transition and the duty of remembrance was important. This issue was considered while the project was being developed, resulting in the decision to name each wind turbine for a ship that took part in the Battle of Normandy. During the 25 years that the Calvados offshore wind farm operates, each turbine will have a plaque, and an on-site exhibit will be created so that people can learn the history of the ships and interesting stories about them. The wind farm will also provide financial support for the publication of a book on the landings beaches, co-edited by the Conservatoire du Littoral and the D-Day Museum in Arromanches.

Ms. David also explained that the Calvados offshore wind farm contributes to a number of information events and presentations for the public. It holds public meetings at each stage of the project. For instance, when the electrical substation was installed in March

⁵⁸ Calvados offshore wind farm, Offshore work, <u>Calendrier de construction</u> [IN FRENCH].

⁶⁰ Calvados offshore wind farm, News, *L'histoire au cœur du parc: 64 navires mis à l'honneur*, 12 April 2023 [IN FRENCH]. The Calvados offshore wind farm named each of the 64 wind turbines after a ship that took part in Operation Overlord during the landings and Battle of Normandy, including six Canadian ships: HMCS Prince David (troop carrier), HMCS Huron (destroyer), HMCS Regina (corvette), HMCS Algonquin (destroyer), HMCS Athabascan (destroyer) and HMCS Sioux (destroyer).

2023, representatives from the wind farm were on hand to walk residents through the operation. The wind farm also participates in festivals, creating an opportunity to talk with the thousands of people passing from one site to the other and helping build team spirit.

Responding to Mr. Samson's question about opposition to the project, Ms. David acknowledged that there was some opposition to the visual impact the wind turbines would have, issues related to the duty of remembrance and the potential impact on fishers. She confirmed that working with fishers was challenging, which explains why the wind farm was located with coexistence with fishers in mind. For instance, wind turbines were not installed in scallop beds. Measures taken will ensure fishing can continue once the turbines are in operation. Mr. Stoltz added that scallops are abundant in 2023, meaning that work on the offshore wind turbines does not appear to have affected the species.

Ms. David added that fishers are notified whenever offshore operations take place, and they are included in discussions to determine how the work will be carried out. She said that relations with fishers have improved and that they now have special relationships with some of them, who allow them aboard their boats to gain a better understanding of their work and concerns. Mr. Stoltz added that a compensation process applies when operations at sea affect fishing.

Mr. Stoltz also talked about fears that the Calvados offshore wind farm would affect the region's real estate. He said that sales agreements now include renderings of the wind turbines so that everything is transparent. So far, offshore wind turbines have not caused a fall in real estate prices. In fact, offshore wind farms spur ecotourism and industrial tourism. Ms. Carrière gave the example of the Saint-Nazaire offshore wind farm in the Loire-Atlantique department, which now offers sightseeing visits that take the general public offshore to see the wind turbines; these tours are very popular and are booked well ahead.

Mr. Stolz also mentioned that the energy crisis caused by the war in Ukraine has changed people's attitude to the project, and some have asked why it cannot be fast-tracked.

Ms. Vien wanted to know whether the Calvados offshore wind farm is accountable to a regulatory agency and whether the project is subject to consultation or environmental assessment mechanisms as well as a process for compensation or payments to municipalities.

With respect to the offshore wind farm regulatory agencies, Ms. Carrière said that the Direction régionale de l'Environnement de l'Aménagement et du Logement de la Normandie and the Direction Interrégionale de la Mer Méditerranée are involved. The government also monitors the Calvados offshore wind farm based on the permits issued and the farm's commitment to implement certain measures.⁶¹

Ms. Carrière explained that consultations were carried out by the Commission nationale du débat public, an independent body in France that guarantees the right to information about and public participation in the development of public policy projects with an

⁶¹ France, Ministry of the Energy Transition, Offshore wind turbines in France, <u>Cadre réglementaire</u> 2023 [IN FRENCH].

environmental impact. The commission organizes public discussions to ensure the public is consulted.

As for environmental audits, Ms. David said that that when the project commenced, a catalogue of all the species in the area of the Calvados offshore wind farm was reviewed to determine the potential impact and find ways of reducing or mitigating the impact. Measures to monitor marine mammals before, during and after construction are in place. Scientific monitoring must be carried out regularly.

Finally, regarding compensation or payments, Ms. David explained that a concession of public maritime domain was granted to install the offshore wind turbines. For every megawatt installed, an amount must be paid to the government. The projected tax breakdown will be as follows:

- 50% to affected municipalities where the installations are visible (these amounts will be distributed based on criteria such as the municipality's distance from the wind turbines);
- 35% to the national and regional committee for marine fisheries and fish farming (these amounts will be distributed to fishers);
- 10% to the Office français de la biodiversité; and
- 5% to maritime search and rescue organizations. 63

The government will receive approximately €19,000 per megawatt installed annually. The future total will be approximately €4.25 million per year to be distributed to municipalities once the Calvados offshore wind farm is in service. The wind farm will generate 450 megawatts of wind energy.⁶⁴ Mr. Stoltz confirmed that the total investment in the wind farm is an estimated \$2 billion.

In response to a question from Senator Cormier about the lifespan of the Calvados offshore wind farm, Mr. Stoltz confirmed that it is expected to last 25 years. Corrosion may occur after this period and technical integrity may not be guaranteed. Optimal performance is therefore guaranteed for 25 years. The wind farm site is a public domain concession, so the government owns it. The project therefore has a 30 year term, including two years of construction, 25 years of operation and two years to decommission and restore the sea to its natural state. Ms. David noted, however, that the authorization to operate can be extended.

After the presentation, the delegation toured the Calvados offshore wind farm operations and maintenance base and continued discussions with the EDF Renewables representatives. The delegation visited the locker rooms used by technicians before they go to sea, the storage room and the room where all wind farm activities are coordinated. Wind farm operations can be monitored from this room at all times in part thanks to a fibre optic cable that connects the wind turbines to land. Monitoring helps with the management of concurrent activities (e.g., with fishing boats) and to ensure worker safety.

⁶² Calvados offshore wind farm, <u>Suivi environnemental</u> [IN FRENCH].

⁶⁴ France, <u>Code général des impôts</u>, s. 1519B [IN FRENCH]. In 2023, the annual tax rate is €19,405 per megawatt installed. This amount is adjusted annually as the forecast rate, with reference to the year's budget bill and changes in household consumer prices, excluding tobacco, for the same year.

The visit to the operations and maintenance base ended with a luncheon, during which the parliamentarians continued their discussions with the team responsible for building the Calvados offshore wind farm.

4. PRESENTATION OF HYDROGEN-POWERED BUS BY TRANSDEV AND RÉGION NORMANDIE

On 6 April 2023, the delegation learned more about the Nomad Car Hydrogene, a project to retrofit a diesel-powered bus into a hydrogen-powered electric bus (the diesel engine will be replaced by an electric engine powered by a fuel cell that converts hydrogen into electricity) initiated by Transdev Normandie and Région Normandie.⁶⁵

Hubert DeJean de la Bâtie, Vice-President of Région Normandie, explained that the bus is the first in the world to be converted to green hydrogen. He stated that, although no single source of renewable energy can replace fossil fuels, hydrogen would help store energy. Transdev partnered with Région Normandie to convert a bus and install an electric engine powered by green hydrogen. The bus is currently undergoing testing, and the results are promising. However, Mr. DeJean de la Bâtie noted that the certification process for the bus is lengthy and that some people still use the argument that hydrogen is dangerous, so resistance to this type of project remains an issue.

Amandine Allard, Manager of Client Services at Transdev Normandie, gave a presentation on the TransDev and Région Normandie electric bus for the delegation. She explained that the bus is 11 years old and that retrofitting it would give it a service life of 20 years to 25 years. All the combustion components on the bus were replaced with a hybrid hydrogen-electric system with fuel cells. Hydrogen in the fuel cells powers the electric engine, which emits only water vapour. The bus will serve the Rouen-Évreux route, and Évreux has a hydrogen charging station.

Ms. Allard explained that it takes currently 45 minutes to charge the electric bus, but the process would be faster with a larger station. She explained that 36 kilograms of green hydrogen can power the bus for 500 kilometres, which is a longer range than an electric bus. The hydrogen-powered electric bus should be able to complete its scheduled route for a whole day. However, she noted that research and development costs to develop the bus are very high, at an estimated €1 million. She also mentioned the required certification process and the costs associated with each attempt to certify.

In response to a question from Ms. Lalonde concerning opportunities to achieve economies of scale with retrofitted buses, Ms. Allard explained that, once the first bus is certified, the next buses should be less expensive to produce, at approximately €350,000 per bus. Ms. Lalonde then mentioned that Canada has launched a Zero Emission Transit Fund.⁶⁶

Mr. Trudel asked about opportunities to apply this technology to other types of vehicles, and Ms. Allard responded that this is possible. Certifying a prototype in France can be

⁶⁵ Transdev, Transdev Normandie [IN FRENCH]; and Transdev, Nomad Car Hydrogen H2.

⁶⁶ Government of Canada, <u>Zero Emission Transit Fund</u>. The fund's objective is to support public transit and school bus operators' electrification plans, support the purchase of 5,000 zero-emission buses and build supporting infrastructure, including charging infrastructure and facility upgrades.

done for one brand, one bus or one type of bus.⁶⁷ The delegation was able to see the electric bus up close and board it after the presentation.

5. ROUND TABLE ON REGIONAL ISSUES: GREEN TRANSITION AND GREEN TECHNOLOGIES

On 6 April 2023, the delegation participated in a round table discussion on regional issues in Normandy. In line with the theme of the green transition and green technologies, one of the round table panels was on the impact of climate change on the region and the potential of renewable energy sources.

Hubert DeJean de la Bâtie, Vice-President of Région Normandie and Chair of the board of the Conservatoire du littoral, an organization dedicated to coastal preservation in France, and Stéphane Costa, Chair of the Intergovernmental Panel on Climate Change Normandy (IPCC Normandy), participated in the panel discussion.⁶⁸

Ms. Morin-Desailly, a member of the delegation, Senator for Seine-Maritime and a regional councillor for Région Normandie, opened the round table session by remarking that Normandy is an appropriate site for discussions on energy transition policy and ways to address the climate challenge. Ms. Lalonde thanked Mr. Hubert DeJean de la Bâtie for welcoming the delegation to Région Normandie's head office on behalf of Hervé Morin, President of Région Normandie. She also underlined the value of parliamentary diplomacy and thanked Ms. Morin-Desailly for helping plan the Normandy portion of the 49th Annual Meeting.

Mr. Weissberg also thanked the hosts for their welcome. He reflected on the activities related to the theme of the green transition and green technologies that the delegation participated in prior to the round table. He said that it was fascinating to learn more about tangible ways to make the transition through speakers from Akuo Energy and NOIL and by touring the Calvados offshore wind farm. Senator Chantrel also thanked the hosts for their welcome and Senator Morin-Dessailly for being an excellent ambassador for her region.

Lastly, Mr. Hubert DeJean de la Bâtie welcomed the delegation and said that Hervé Morin, President of Région Normandie, sends his regards to the delegation. He introduced Mr. Costa, who then made a presentation to the delegation.

(a) STÉPHANE COSTA, CHAIR OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE NORMANDY

Mr. Costa explained that IPCC Normandy was created at the request of the president of Région Normandy to establish a panel of scientists to report on what we know about the state of climate change in the region, with a focus on the following nine topics:

Climate change and inclement weather;

⁶⁷ France, Arrêté du 13 mars 2020; and France, Ministry of Ecological Transition and Territorial Cohesion and Ministry of the Energy Transition, <u>Homologation des véhicules</u> [IN FRENCH].

⁶⁸ Région Normandie, *Intergovernmental Panel on Climate Change – Normandy* [IN FRENCH]. Mr. Costa is a geography professor at the University of Caen in Normandy.

- Water: availability, quality and natural hazards;
- · Land and marine biodiversity;
- Soils, agronomy and agriculture;
- · Air quality;
- Coastal systems, natural hazards and ecosystem restoration;
- Emerging public health hazards and regional issues in Normandy;
- · Fishing and shellfish farming; and
- Urban, semi-urban and rural areas, mobility, and planning.

Mr. Costa added that IPCC Normandy had partnered with Région Normandie and organized 40 public meetings with 500 elected officials and all economic stakeholders to assess the current situation and future risks.

Mr. Costa explained that the Normandy coastline is one of its most important features. All French coastlines, including the Normandy coastlines, experience violent weather that could worsen because of climate change. He noted that the Normandy coastline is approximately 600 kilometres long and has every kind of shore. This makes the Normandy coast an attractive location for people, who move closer to the shore. According to Mr. Costa, climate change will exacerbate coastal erosion, even as people want homes that are practically on the water.

Mr. Costa explained that erosion results in receding cliffs, beaches and dunes, which threaten urbanization. The entire coastline is eroding. To illustrate the risk of building on a clifftop or walking at the base of the cliff, Mr. Costa gave the example of a recent landslide involving thousands of cubic metres of cliff required some Normandy residents to evacuate.

Mr. Costa also said that marine and inland flooding are also a risk, noting that the Normandy coastline is also affected by atmospheric flows in the region. He pointed out that the English Channel is shallow, meaning that it tends to experience certain types of weather events. He believes that large storms, heavy rains, urban runoff and other events that are catalysts for water-related problems could occur in the near future.

Mr. Costa went on to say that temperatures increased 1.5 degrees between 1970 and 2020. The IPCC has modelled GHG emissions scenarios for 2100. Under the most optimistic scenario, Normandy will have 40 days of heatwaves in 2100. The least optimistic scenario puts this number at 90 days. Urbanization is making the situation worse. Mr. Costa added that the challenge today is convincing people they can no longer live near the coastline. Elected officials may have trouble convincing some people that they have to move. This can be a complex issue from a political, economic and social standpoint.

Mr. Costa noted that to help elected officials understand the issue and think about what the coastline of the future could be, IPCC Normandy conducted a research project that included developing a virtual reality tool at the University of Caen's Centre interdisciplinaire de réalité virtuelle (CIREVE). CIREVE's Programme de Réalité virtuelle et villes côtières (REVE COT) uses virtual reality to simulate coastal flooding. It re-enacts

a 1990 storm but adds five metres to the seas to show elected officials what would happen if the same storm struck today. He explained that the project uses very detailed software. The program is seeking funding from Région Normandie to continue the project in order to improve its computing capacity. Currently, four months of computing generates one minute and thirty seconds of video.⁶⁹

Mr. Costa said that the REVE COT program also aims to study brain activity in people watching the video to see whether they fully understand the video or if it is counterproductive. Mr. Costa said that, after watching the simulation, elected officials are more likely to discuss the coastline of tomorrow. He stated that 70% of people are much more worried the impact of climate change today than in the past.

(b) OVERVIEW OF DISCUSSIONS BETWEEN LOCAL ELECTED OFFICIALS, PARLIAMENTARIANS AND SPEAKERS

Mr. Trudel said that, because climate change is a global issue, the response should be devised not only at the regional level but also at the national level. He gave the example of Canada's carbon pricing system, but noted that the UN has reported that the carbon tax should be approximately \$200 per tonne of carbon dioxide by 2030 to be effective.⁷⁰

Mr. Trudel asked Mr. Costa whether some of the policies already implemented in France are working. In response, Mr. Costa said that France has started to take a range of measures to combat climate change, but that these measures are somewhat late. He noted that a lot is happening at the regional level. He believes that extensive communication and knowledge acquisition is required if these measures are to succeed. According to Mr. Costa, although adaptation measures must be taken, emphasis should remain on GHS reductions. Governments need to anticipate what will happen, not wait for nature to decide. This requires significant financial investment and the resettlement of some communities, among other actions. Without such actions, Mr. Costa believes that endless repairs will be necessary.

Senator Cormier wondered whether research on shoreline erosion is being done in France and whether any technologies or strategies to protect shorelines and cliffs have been developed. Mr. Costa replied that technologies to protect shorelines and cliffs exist, but they are often counterproductive over the medium and long term. He gave the example of a community that went into debt in the 1970s to protect its cliffs, yet, despite these efforts, the areas protected are now cracking. Nevertheless, he said that management tools are available, but they must be coupled with clear statements and actions.

Mr. DeJean de la Bâtie pointed out that coastal erosion and flooding, that is, temporary flooding of a coastal area by the sea in extreme weather conditions, is linked to rising sea levels. He added that people need to be shown the climate risks in a given area. Properties can be relocated, but this is not always possible. He also reported that some

⁶⁹ Centre interdisciplinaire de réalité virtuelle, Letg-Caen-Geophen projects, <u>REVE COT</u> [IN FRENCH].

⁷⁰ Canada Revenue Agency, *Fuel Charge Rates*. The carbon pollution charge is set to rise from \$65 per tonne of carbon dioxide in 2023 to \$170 per tonne by 2030.

mayors of coastal communities must identify at-risk homes and ask the owners to prepare to deal with adverse weather.

Mr. DeJean de la Bâtie also noted that political will is needed to successfully implement solutions and measures to adapt to climate change. Some mayors may decide to take more measures than others. He believes that elected officials must be able to explain the need for these changes to people. He noted that regional restructuring requires funding, so the issue is also an economic one. Land development can be linked to economic development. For instance, if a French community makes money from a campground, losing this economic activity could have a devastating impact. In short, according to Mr. DeJean de la Bâtie, it important to adapt regions now.

On national policy, Mr. DeJean de la Bâtie explained that France has observatories virtually across the country and that the government has a comprehensive policy. For example, the French government is trying to curb the creation of human-made landscapes, such as when land is used by the government to build a warehouse or parking.⁷¹ This building process makes the land impermeable, increasing runoff and preventing aquifers from recharging.

Mr. DeJean de la Bâtie also spoke about the region's energy transition. Normandy has always had access to sources of energy, such as electric energy and hydrogen. However, he pointed out that no single source of energy can replace fossil fuels. He believes that a mix of energy sources is needed. Some people in France believe that this means nuclear energy.

Thermal power plants have been shut down in Normandy, but the region has invested in offshore wind farms, including the Calvados offshore wind farm. Normandy is also taking an interest in hydrokinetic power, which can be described as the use of undersea turbines to harness tidal energy. Mr. DeJean de la Bâtie explained that three hydrokinetic turbines can generate the equivalent of approximately 75 onshore or offshore wind turbines. He also said that, to the best of his knowledge, only three areas in the world are suitable for hydrokinetic energy: the tip of Normandy, Scotland and the Bay of Fundy in Canada.

Ms. Lalonde explained that Canada's energy system varies from one province to another. The type of energy generated in each province varies. Mr. DeJean De la Bâtie confirmed that France has a nationalized electricity system. He said that he has a lot of hope for green hydrogen and offshore wind farms, which pose fewer problems than onshore wind farms.

6. EROSION OF CLIFFS OF ÉTRETAT

On 8 April 2023, the delegation was able to see up close the effects of erosion on the cliffs of Étretat. These cliffs have experienced accelerated erosion in recent years. According to Professor Costa, who participated in the round table on regional issues,

⁷¹ France, Ministry of Ecological Transition and Territorial Cohesion and Ministry of the Energy Transition, <u>Artificialisation des sols</u>, 21 December 2022 [IN FRENCH].

global warming and rising sea levels will accentuate the force of the waves at the base of the cliffs and increase the risk of collapse.⁷²

The delegation was accompanied by Mr. Dejean de la Bâtie and by André Baillard, Mayor of Étretat. Mr. Baillard welcomed the delegation to the Étretat town hall and gave a short history of the town. The delegation then went up to the Notre-Dame-de-la-Garde chapel to see the erosion of the cliffs. Mr. Baillard spoke about the challenges of balancing tourism development in the region and protecting the coastline. For example, erosion of the cliffs means that the coastal road will eventually have to be moved back, and this will encroach on an existing golf course.

ACTIVITIES RELATING TO OTHER TOPICS OF INTEREST

A. ACTIVITIES RELATING TO FRENCH PARLIAMENTARY INSTITUTIONS

1. VISIT TO PALACE OF VERSAILLES

On 2 April 2023, the delegation visited the Palace of Versailles, the former seat of the French government.⁷³ During the visit, the delegation toured the Congress Chamber, which is closed to visitors. The chamber can seat 1,000 people and is used by members of the French National Assembly and Senate when they meet under one roof. Today, it is used to adopt constitutional amendments or hear an address from the President of the Republic.⁷⁴ It can also be used to authorize the accession of a state to the European Union.⁷⁵ The chamber is rarely used and was last used in 2018.

2. VISIT TO PALAIS BOURBON, HÔTEL DE LASSAY AND QUESTIONS FOR THE GOVERNMENT

On 3 April 2023, the delegation visited the Palais Bourbon, home of the National Assembly, and the National Assembly library, where the delegation saw rare books. These rarities included a book documenting Samuel de Champlain's journeys, a book on the voyage of Joseph Bernard Chabert, who created a detailed map of Acadia, and a book on the missionary journeys of Gabriel Sagard and his meeting with the "Huron people" in the 17th century. This community is now known as the Huron–Wendat Nation. The delegation also visited the Hôtel de Lassay, the residence of the President of the National Assembly of France.

On 4 April 2023, the delegation attended the questions for the government period at the National Assembly and was acknowledged in the chamber by the President of the National Assembly, Yaël-Braun Pivet, the first woman in history to hold the position. The

⁷² Florence Dartois, <u>Les falaises d'Etretat, un patrimoine géologique en péril</u>, Institut national de l'audiovisuel, 5 January 2022 [IN FRENCH].

⁷³ Palace of Versailles, The Palace. <u>The Palace</u> of Versailles, which dates back to the 17th century, was successively a hunting lodge, a seat of power and, beginning in the 19th century, a museum. It was the residence of the King of France from 1682 until the French Revolution in 1789.

⁷⁴ Palace of Versailles, *The Congress Chamber*.

⁷⁵ France, National Assembly, *Fiche de synthèse n°5 : Le Congrès du Parlement* [IN FRENCH].

⁷⁶ Nation Huronne-Wendat, *Nation Huronne-Wendat* [IN FRENCH].

⁷⁷ France, National Assembly, <u>Histoire du Palais Bourbon et de l'hôtel de Lassay</u> [IN FRENCH].

government question period was implemented in France's National Assembly in 1974. Since the introduction of a single parliamentary session in 1995, two one-hour sessions have been devoted to questions for the government each week, even during debate on the budget. Questions for the government are not tabled, and no prior notice or publication is required.⁷⁸

3. VISIT TO PALAIS DU LUXEMBOURG AND QUESTIONS FOR THE GOVERNMENT

On 5 April 2023, the delegation visited the Palais du Luxembourg, the home of the French Senate, and attended the questions for the government period. The delegation was acknowledged in the chamber by the Vice-President of the Senate, Pascale Gruny. The government question period enables each political group in the Senate to question a member of the government on a pressing issue and receive an answer during the sitting. It takes place every Wednesday when the National Assembly is sitting.⁷⁹

B. ACTIVITIES RELATING TO DUTY OF REMEMBRANCE

1. ROUND TABLE ON REGIONAL ISSUES: NORMANDY FOR PEACE INITIATIVE

As part of the round table on regional issues, François Xavier Priollaud, Vice-President of Région Normandie responsible for Europe, international affairs and promoting Normandy, gave a presentation on the Normandy for Peace (NFP) initiative to the delegation.

(a) OVERVIEW OF THE INITIATIVE

Mr. Priollaud told the delegation about the origins of the NFP initiative, which Région Normandie launched in 2017. The initiative includes annual events in Normandy and around the world to promote the universal values of peace and freedom, as well as the World Peace Forum. The forum provides an opportunity for reflection and discussion on global tensions and peace building. The year-long work of Normandy for Peace has four major themes:

- the campus theme, which puts youth and research at the heart of Normandy for Peace (initiatives for youth, school pupils, students and researchers);
- the resources theme, which supports the production and sharing of multimedia resources on peace, freedom, human rights and democracy (websites, video series, documentaries on geopolitics, etc.);
- the dialogue theme, which promotes the creation of spaces for dialogue at the World Peace Forum and makes Normandy a forum for exchanges of ideas throughout the year; and
- the culture and science theme, which highlights cultural, scientific and heritage initiatives that raise awareness about the values of peace and freedom.

⁷⁸ France, National Assembly, <u>Questions au Gouvernement</u> IN FRENCH]

⁷⁹ France, Senate, <u>Les questions d'actualité au Gouvernement</u> [IN FRENCH].

Mr. Priollaud referred to the Normandy Index, which falls under the NFP resources theme. The Normandy Index is a study that has been published every year since 2019. It addresses nine of the 11 threats that are the main current challenges to peace and security, including terrorism, hybrid threats, economic crises, climate change, energy insecurity, violent conflicts, cybersecurity, disinformation, fragile states, trans-border crimes and weapons of mass destruction. The Normandy Index provides a comparison across time to see whether a country is more or less vulnerable to conflicts. The Normandy Initiative is also aimed at creating partnerships, including with businesses.

Mr. Priollaud said that the first World Peace Forum took place in 2018. The forum provides a portrait of the state of the world over a two-day period. Leaders from around the world attend and hold discussions on international issues. The event program includes audiovisual content, works of art, film screenings and book discussions. Young people also attend the forum. He noted that the 2019 World Peace Forum resulted in the publication of a manifesto telling future generations how to build a better world. The next World Peace Forum will take place in September 2023 with some 10,000 attendees from 50 countries.

According to Mr. Priollaud, lasting peace requires peace among people and has a cultural component. For example, he said that Normandy would like the D-Day landings beaches to be added to the World Heritage List of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

(b) OVERVIEW OF DISCUSSIONS BETWEEN LOCAL ELECTED OFFICIALS AND PARLIAMENTARIANS

Ms. Lalonde said that she attended the World Peace Forum as a Canadian parliamentarian in 2020 and described her experience.

Senator Housakos expressed concerns about some authoritarian countries and asserted that there has been a perceptible loss of public trust in diplomacy and global institutions.

Mr. Trudel hailed the NFP initiative. However, he wondered how, in the current geopolitical environment, where several countries are experiencing war and climate change challenges, they can be assisted. Mr. Priollaud acknowledged that the NFP initiative would not end conflict. However, he believes that the environment in which the World Peace Forum is held can foster discussion and pave the way for discussing ongoing conflicts differently.

Mr. Priollaud and Mr. Weissberg also spoke about the importance of teaching youth history. Mr. Weissberg argued that it is important to raise awareness among young people and ensure they have a sufficient level of knowledge about the great world conflicts in history. Besides youth, all citizens must have shared reference points. Mr. Priollaud said that it is important to reach out to people and find different ways of educating them, be it a video game on peace, art galleries on peace or the metaverse.

⁸⁰ European Parliament, <u>Mapping threats to peace and democracy worldwide: Normandy Index 2022</u>, Study, September 9, 2022.

2. VISIT TO CAEN MEMORIAL

On 6 April 2023, the delegation visited the <u>Caen Memorial</u>, a museum devoted to the history of the 20th century, including the Second World War and the D-Day landings in 1944, as well as the Battle of Normandy.⁸¹

Kléber Arhoul, Director of the Caen Memorial, welcomed the delegation at the entrance. He informed the delegation that the memorial is a site of reflection that helps people understand how men and women experience war and build peace. It examines society at war, not war itself. Mr. Arhoul added that, since the Memorial also aims to transmit the culture of peace to the next generation, it is constantly evolving. He also underscored the friendship, historical, political and cultural ties between Canada and France. He reported that the memorial sees many Canadian tourists, but that more could visit.

Natalie Porte, Vice-Chair of Tourism Attractions for Région Normandie, also briefly welcomed the delegation. The tour of the Caen Memorial was led by Isabelle Bournier, Director of Cultural, Scientific and Educational Development.

3. VISIT TO BÉNY-SUR-MER CANADIAN WAR CEMETERY

On 7 April 2023, the delegation visited the Bény-sur-Mer Canadian War Cemetery, a military cemetery near Reviers, France.⁸² Canadians who died during the Normandy landings and the first stages of the subsequent military campaign were laid to rest here.

Hubert Delalande, Mayor of Bény-sur-Mer, and Daniel Guérin, Mayor of Reviers, accompanied the delegation during the visit.

4. VISIT TO JUNO BEACH CENTRE

On 7 April 2023, the delegation visited the Juno Beach Centre, the only Canadian museum on a beach where the D-Day landings took place. It is described as follows:

The Juno Beach Centre is Canada's Second World War museum and cultural centre located in Normandy, France. The Centre pays homage to the 45,000 Canadians who lost their lives during the War, of which 5,500 were killed during the Battle of Normandy and 381 on D-Day. Opened in 2003 by veterans and volunteers with a vision to create a permanent memorial to all Canadians who served during the Second World War, the Centre's mandate is to preserve this legacy for future generations through education and remembrance.⁸³

The delegation visited the Juno Beach Centre in the company of Nathalie Worthington, Director, and watched a short film entitled "They Walk With You." Ms. Worthington pointed out that the facility is called a "centre" and not a museum; this is important because it makes people cross the boundary from emotion to reflection. She noted that the centre is a useful teaching tool for students since it links the past and the present. She also stressed the importance of preserving the site.

⁸¹ Caen Memorial, *The museum*.

⁸² Government of Canada, <u>Bény-sur-Mer Canadian War Cemetery</u>.

⁸³ Juno Beach Centre, Welcome to The Juno Beach Centre.

Afterwards, the delegation toured the German bunkers located on the beach in front of the Juno Beach Centre.

OTHER ACTIVITIES

A. LUNCHEON AND RECEPTIONS

1. RECEPTION HOSTED BY THE HONOURABLE STÉPHANE DION, CANADA'S AMBASSADOR TO FRANCE AND SPECIAL ENVOY TO THE EUROPEAN UNION AND EUROPE

On 4 April 2023, the delegation attended a reception at the official residence of Stéphane Dion, Ambassador of Canada to France. A number of French parliamentarians of different political affiliations were also present.

Mr. Dion said this was the first Canadian parliamentary delegation to visit the Embassy of Canada in France since the start of the pandemic, so he was pleased to welcome them. He underscored the two themes of the 49th Annual Meeting, remarking that they are important issues.

On environmental issues, Mr. Dion pointed to the cost of forest fires and the loss of biodiversity and reminded the parliamentarians in attendance of the need to find different production techniques and ensure ethical sourcing. He said that Canada and France have a lot to offer in this area.

Regarding cultural diversity, Mr. Dion said that biodiversity is a fact and that inclusion is a choice. He also stressed the importance of safeguarding the integrity of immigration systems and reiterated that Canada and France need to work together. In his view, the friendship between Canadian and French parliamentarians is one of the foundations of the friendship between the two peoples.

Ms. Lalonde spoke on behalf of the Canadian delegation and thanked the Ambassador for his welcome. She also officially congratulated Mr. Dion on behalf of the Association for his appointment as Ambassador in the summer of 2022. She provided an overview of the various activities scheduled for the Association's 49th Annual Meeting.

Mr. Weissberg spoke on behalf of the French half of the Association and said that whenever French parliamentarians meet their Canadian friends, they realize that they face similar challenges, such as the current minority government in France. He also stated that, unlike other countries, Canada and France share a common perspective on the importance of cultural diversity. Like the Ambassador, he spoke about how collaboration between the two countries is crucial and the benefits of the ties that parliamentarians forge among themselves while participating in the Association's activities.

Informal discussions between the Ambassador and parliamentarians ensued.

2. LUNCHEON HOSTED BY YAN CHANTREL, CHAIR OF THE FRANCE-CANADA FRIENDSHIP GROUP IN THE FRENCH SENATE

On 5 April 2023, the delegation was invited to a luncheon hosted by Yan Chantrel, Chair of the France–Canada Friendship Group in the French Senate. Senators from various parties were also in attendance.

Mr. Chantrel shared the themes of the 49th Annual Meeting with all the participants and provided an overview of some of the activities scheduled. He also pointed out that Canada and France have shared values, including a commitment to individual freedoms and common interests. Mr. Chantrel noted that, like Canada, France has a minority government. Parliamentarians can therefore discuss the similarities of the political situations in Canada and France.

Ms. Lalonde thanked Mr. Chantrel for the warm welcome from the French Senate. She said she was happy to continue the work the Association began during the 48th Annual Meeting and stressed the importance of coming to France to do so. She also acknowledged the strong ties between Canada and France and underscored the value of parliamentary diplomacy.

Informal discussions between the parliamentarians ensued.

3. RECEPTION AND DINNER AT ABBAYE AUX DAMES IN CAEN

On 6 April 2023, the delegation attended a reception and dinner at the Abbaye aux Dames. Xavier François Priollaud, Vice-President of Région Normandie and Natalie Porte, Vice-President of Tourism and Attractions for Région Normandie, joined the delegation for the event. Philippe Gosselin, Member of the National Assembly for the Manche, Normandy, joined the delegation and other guests for dinner.

A number of people spoke during the dinner. Ms. Morin-Desailly outlined some of the initiatives taken by Normandy's tourism agency, which was established in 2017. The first one is the network of Normandy ambassadors, a group of locals who are committed to raising Normandy's profile around the world. The second initiative is the Normandy brand that some 700 businesses and associations have agreed to use to raise the region's profile. Ms. Morin-Desailly remarked that tourism in Normandy, including remembrance tourism, accounts for 6% of the region's gross domestic product. She concluded by thanking her colleagues for choosing to visit Normandy, and her region – Seine-Maritime – in particular, during the 49th Annual Meeting.

Ms. Lalonde thanked Ms. Morin-Desailly for welcoming the delegation to Seine-Maritime and noted that the Senator's dedication to her region is evident. Ms. Lalonde reflected on that morning's visits to the Canadian military cemetery and Juno Beach Centre, noting that they were extremely emotional for the parliamentarians. She said the visits reminded them that Canadians mobilized to help another country and continent. She said that both Canada and France believe in democracy and that Normandy is the ancestral home for several of the Canadian delegates. She said the visit to the region was inspiring.

Mr. Weissberg noted that next year will mark the 80th anniversary of D-Day and that it is likely to be the last commemoration that Second World War veterans will be able to attend. He underscored the importance of bringing Canadian students and parliamentarians to Normandy to tour the sites the delegation visited.

Mr. Chantrel also thanked Ms. Morin-Desailly for welcoming the delegation to Normandy. As a young parliamentarian, he stressed the importance of conveying the message that Canadians helped liberate France. He said that the discussions during the round table on regional issues and cultural diversity in the digital world revealed that digital tools can weaken democracy.

Mr. François-Xavier Priollaud said that it was a pleasure to welcome the delegation to Normandy. On the theme of the green transition and green technologies, he pointed to the IPCC Normandy and the issues affecting the region's coastline. He also noted that climate change has affected Normandy. For example, Normandy used to be too cold for wine production, but now it is possible. He underscored the importance of translating the ties of friendship between Canada and France into tangible projects, such as the Normandy for Peace initiative. He also spoke about the importance of teaching students what Canadians did for Normandy.

Ms. Porte explained that, as Vice-President of Tourism and Attractions for Région Normandie, she deals with issues of sustainable and responsible tourism. Regarding sustainable tourism, Ms. Porte noted, for instance, that a discount for people visiting the Juno Beach Centre by bus or train shows that Normandy values sustainable tourism. She underscored the importance of the Juno Beach Centre, which was created because a group of Canadians wanted to preserve history.

Ms. Lalonde and Mr. Weissberg were awarded the official medal of Normandy as a token of appreciation. Canadian parliamentarians with Normandy roots were also awarded medals.

4. INAUGURATION OF PÔLE CULTUREL D'HONFLEUR

On 7 April 2023, the delegation was invited to a ceremony to officially open the Pôle culturel d'Honfleur in Normandy. The <u>Lieutenance d'Honfleur</u> is a historic monument that recently underwent several renovations. It served as accommodations for the king's lieutenant in the 17th century. It reopened to the public in April 2023 after the renovations. It is now an architecture and heritage interpretation centre.

After the ceremony, Ms. Lalonde had the opportunity to speak briefly with Hervé Morin, President of Région Normandie.

B. VISITS TO CULTURAL SITES AND MONUMENTS

1. MUSÉE D'ORSAY

On 4 April 2023, the delegation made a short visit to the Musée d'Orsay, the venue of the working session on cultural diversity in the digital world.

The Musée d'Orsay is a multidisciplinary museum located in a former Paris railway station. It holds the richest collection of impressionist and post-impressionist paintings in the world. The museum holds some 150,000 works of art in all.⁸⁴

⁸⁴ Établissement public des musées d'Orsay et de l'Orangerie, Musée d'Orsay [IN FRENCH].

2. MUSÉE DU LUXEMBOURG

The Musée du Luxembourg was the first public museum of ancient art, opening in 1750. Since 2000, the French Senate has overseen its management.⁸⁵ The delegation attended a new exhibition dedicated to Léon Monet, Claude Monet's brother.

3. EIFFEL TOWER

On 5 April 2023, the delegation visited the Eiffel Tower. Members of the delegation were able to visit the tower's machine room, accompanied by a representative of the management company.

4. ABBAYE AUX DAMES IN CAEN

On 6 April 2023, the delegation visited the Abbaye aux Dames, which has been home to Région Normandie (the regional council) since 2016. The round table on regional issues was held there. The historic site was founded by William the Conqueror and his wife, Mathilda of Flanders, around 1060.⁸⁶

CLOSING OF THE 49TH ANNUAL MEETING

A luncheon to mark the conclusion of the 49th Annual Meeting took place at the Aître Saint-Maclou in Rouen. The delegation held a final round of discussions over a meal, after observing the erosion of the cliffs of Étretat. The delegation toured part of Rouen in the afternoon, with some delegates visiting the archives of the Seine-Maritime department.

CONCLUSION

The 49th Annual Meeting of the Association was a tremendous success. The working sessions enabled Canadian and French parliamentarians to discuss selected themes with knowledgeable stakeholders in France and to continue expanding their knowledge of the challenges of cultural diversity in a digital world and the green transition. Meetings with local elected officials and other French stakeholders in fields related to the selected themes, as well as site visits, informed the delegates' discussions and reflections during their stay in France.

The delegation also visited several French parliamentary institutions and undertook activities related to the duty of remembrance in Normandy. Visits to the Bény-sur-Mer Canadian War Cemetery, the Caen Memorial and the Juno Beach Centre reminded delegates of the importance of the ties of friendship between Canada and France and the sacrifice of the Canadian soldiers who lost their lives on the shores of Normandy during the Second World War.

 ⁸⁵ Management has been delegated to the <u>Réunion des musées nationaux – Grand Palais</u> [IN FRENCH].
 86 Région Normandie, Touring the Abbaye aux Dames, <u>Information sur l'Abbaye aux Dames</u> [IN FRENCH].

In short, the 49th Annual Meeting confirmed once more that the two countries can benefit from their strong relationship. By working together, they can share knowledge about their respective countries, exchange best practices and make progress on common issues.

The Association's 50th Annual Meeting is expected to take place in Canada in 2024.

Respectfully submitted,

Marie-France Lalonde, MP Chair, Canada-France Interparliamentary Association

Travel Costs

ASSOCIATION Canada-France Inter-Parliamentary Association

ACTIVITY 49th Annual Meeting

DESTINATION Île de France and Normandy, France

DATES April 1 to 8, 2023

DELEGATION

SENATE René Cormier

Leo Housakos

Marie-France Lalonde

Chris d'Entremont

HOUSE OF COMMONS Lena Metledge-Diab

Darrell Samson Denis Trudel Dominique Vien

STAFF Catherine Cuerrier

Alexandra Savoie

TRANSPORTATION \$ 44,947.85

ACCOMMODATION \$ 19,301.17

HOSPITALITY \$ 0.00

PER DIEMS \$ 10,199.83

OFFICIAL GIFTS \$ 0.00

MISCELLANEOUS \$ 556.75

TOTAL \$ 75,005.60