

## Innovating for the Future

### An Interview with **Éric Martel**, President and Chief Executive Officer, Hydro-Québec

**EDITORS' NOTE** *Éric Martel assumed his current post in July 2015. Prior to this appointment, Martel worked at Bombardier from 2002 to 2015. He held several senior management positions, including that of President, Bombardier Business Aircraft. He also served as President, Customer Services and Specialized and Amphibious Aircraft in addition to heading several operational activities. Before joining Bombardier, Martel worked for various high-profile international companies in the aerospace manufacturing sector, such as Pratt & Whitney and Rolls Royce, as well as for Procter & Gamble and Kraft Foods. Martel holds a bachelor's degree in electrical engineering from Université Laval.*



Éric Martel

**COMPANY BRIEF** *Hydro-Québec (hydroquebec.com) is a major supplier of electricity, relying on clean, renewable energy. Hydro-Québec generates, transmits, and distributes electricity. Its sole shareholder is the Québec government. It uses mainly renewable generating options, in particular large hydro, and supports the development of other technologies, such as wind energy and biomass. A responsible corporate citizen committed to sustainability, Hydro-Québec carries out construction projects to prepare for the future. It also conducts R&D in energy-related fields, including energy efficiency.*

#### **Will you provide an overview of Hydro-Québec and how the company has evolved?**

Our heritage is probably one of the things we're most proud of in terms of what we've built together. Hydro-Québec's origin goes back to the early 1940s when we started to nationalize a single company. In the 1960s, electricity was nationalized throughout the entire province to become one company, Hydro-Québec.

At the time, our mission was not that obvious because the country had gone toward nuclear and other choices were available. We made a collective choice to go hydro because we had a lot of potential there, and part of our DNA has always been about innovation and research and development.

We were the first in the world to construct a 735 kilovolt high-voltage transmission line. In the late 1980s, we were the first to create

a multi-terminal DC line that goes straight to Boston. It was a 1,500 kilometer transmission line, which was never done before.

Many things we're doing today are due to our climate and the long distances that we need to cover.

We've been challenged by that over the years, but innovation is part of our DNA, and we always bring new technology and research to the table.

Historically, we have made good choices. No matter what political party is in power, it has never challenged

hydro – there is a consensus around hydro-power, and everybody has always been pushing in the same direction.

If we look back, we're very happy today with the choices we have made. We have the lowest electricity rates in North America. People pay less than 8 cents CAD (about 6 cents USD) per kilowatt hour on their bill at home. In New York, it's around 30 cents.

In today's world, where renewable energy is important, we're proud that more than 99 percent of all the electricity we produce is generated from renewable sources.

The future will offer some challenges, and we're working on being ready for those, but looking at our heritage, I'm sure we'll be prepared for them.

#### **Will you discuss the challenges facing the industry?**

Whatever is going on elsewhere, we're all facing challenges to a different degree and at a different time. The first one is the decentralized production of electricity. In the past, electricity has always been supplied to our customers by utilities. Today, with new technology, customers are starting to think that they can probably reduce their electricity bill by producing some of their own electricity. This offers challenges, and it could present a dangerous spiral. We've seen it in some counties in Europe where more people produce their own electricity, which affects the volume of electricity sold by utilities. Rates are going up fast, and because the rates are going up, more people want to produce their own electricity. Some countries are facing this challenge today.

The other challenge is digitalization. There are many possibilities in this area today. At our R&D center, we're building the home of

the future, which has close to 400 sensors. We're looking at different possibilities of using software to better manage and control the load. It could be a challenge for us, but it could also be well integrated with our grid.

That is going to be an important element in the future. With the challenges we have, if things are integrated and we see every home as a small production plant for electricity, we may sell less volume, but we may also be able to reduce our spending on infrastructure because of these new local sources of available energy.

We all understand that the infrastructure of other utilities is often built like ours in Québec. We have 36,908 megawatts of capacity, but we utilize all of it for only a few hours a year. This is very expensive, and we have to pay for it. If we move the loads around and use those new sources, perhaps we won't have to spend as much.

The third challenge we're facing is the electrification of transportation. More cars and trains are using electricity, as well as big vehicles and buses. Today, we have about 900 charging stations to provide for refueling.

#### **At Hydro-Québec's size, is it challenging to maintain a culture based around innovation?**

It's a primary job of a leader and of the leaders that are part of our organization today to make sure our people and employees are aware of the importance of innovation and create the appropriate sense of urgency around it. I don't want to create urgency if there is no real urgency, but our people need to understand this. As an example, for the last 10 years, we have been delivering around 170 terawatt hours in Québec but, prior to that, we used to see growth of up to 5.4 percent annually. This posed a challenge in terms of building the necessary infrastructure, but we never had to be concerned about revenue. For the first time in our history, we now have to work on the top line.

Today, it's a different environment, so communication is important in change management. We have to communicate to our people exactly what is happening and make sure they understand that new technology can either be an enemy or a good thing.

We have been making sure that our people fully understand. We have close to 20,000 employees, and we're a big company, but our people are happy to see that having to go after volume is a challenge they've never faced before, but it's also an opportunity that can be met by exporting



*Hydro-Québec's René-Lévesque power station on the Côte-Nord*

electricity and bringing more load to Québec by attracting other businesses, which is something we're working on.

We have never done that before. I put together a group that is on the road to find data centers to bring here because they're high-volume consumers and would be a good business for us. It's a win-win for other companies to come to

Québec to install their data centers because our rates are low. Ours is renewable energy, and it's cooler here to begin with so it's easier to cool down the servers in their buildings.

We're aggressive and our employees are very motivated by that right now.

**When it comes to attracting talent, is there an adequate understanding among young people about the critical role this industry plays?**

In general, it hasn't been a challenge for us to recruit. However, we're going to have many people retiring within the next five years. We're talking about 900 people retiring a year. We have put our programs together, and we're consistently present in the universities. People are looking at us as a leader right now in bringing about innovation and new technology. On TV, there has been a great deal of talk about our innovation, our presence in electrification, and the fact that we have a joint venture in China to produce electric motors. It's important that people know what is going on. We have recently put a lot of effort into communicating to people outside of Hydro-Québec that we're not just a big gorilla that has been sitting here as a utility with plans to continue to do what we have done for the past 40 years into the next 40. The world is changing, and it's difficult to make sure that people understand that because they know we still make good profit. We're very profitable and don't have any financial challenges. However, we're trying to picture the future and get people to understand that the world today has changed. It's a different environment than we used to deal with, so we have to be prepared.

The young people who are graduating right now as engineers see an opportunity here, and we're well perceived by the population as innovators and creators of new solutions.

**How important was it for you to emphasize your background in customer service as you assumed this**

**role, and are you able to put metrics in place to make sure you're achieving the desired goals?**

Every day, my team and I look at metrics measuring how many calls we got and how many we are answering on the first call. There are many things such as this that we measure. One of the first things I told the team when I came on board was, although we are a monopoly, it's a privilege that people are giving us. Since we have that privilege, we should be the best in customer service. We can't have the attitude that people have no choice but to work with us. Our attitude should be that we need to be best at support, and we've been taking that very seriously.

Our call center was only open from 9 AM to 5 PM on weekdays. Now we're open from 8 AM until 8:30 PM every weeknight and from 9 AM to 5 PM on weekends as well. Customers are happier with that, and our employees are very proud of it. They feel they're getting better at customer service. A recent survey shows a steady trend from quarter to quarter in terms of improving our customer service, and our customers are recognizing that.

**How difficult is it to maintain your edge and enforce the mentality of continuous improvement?**

Change has to be explained and people have to understand why it's taking place. We like to call it the "case for change." For example, I meet with my team every day at 11:30 AM. That creates a sense of urgency to some extent because, at those meetings, we're talking about important issues such as health and safety, customer service, productivity, and financials. It's like a drill.

My team is now starting to do the same thing with their people and, eventually, this will happen all across the organization every day, from the working level employees to my team. We're going to be seeing each other every day,

communicating about our progress on those points we have discussed.

This creates a sense of urgency because it has velocity. The information goes up and down within 24 hours. If there is urgency, everyone will know that in 24 hours, some progress needs to have happened.

We have been creating that environment

for the past year and a half, and people are responding very well. They are happy that we are taking care of our customers, and they want to be proud of working here. They want us to be seen not as an old utility but as people that can move fast and innovate, and it's all connected.

**How important is Hydro-Québec's commitment to corporate responsibility?**

It's an important role for us. There is a lot of regional cooperation so we work closely with Canada's indigenous First Nations groups. We reach out and make sure we explain what we're doing. Listening is also very important.

We recently issued a report on sustainability that I reviewed with the board. That report has won a prize every year because we're always talking about different angles of sustainable development and how we deal with the community and ensure the presence of women on the management team.

Last year, we also gave \$17.6 million in donations and sponsorships to nearly 650 organizations in different sectors. This is part of our DNA.

**When you look back to July 2015 when you assumed this role, did you know that it would be the right fit?**

I'm an electrical engineer, and I worked for 25 years with different companies that are known around the world. The mission here appeared to me to be to adjust customer service and focus on growth. I felt I could help with what I had learned before and loved doing.

I needed to make sure that everyone, especially the government, was ready for those changes, and I get a lot of support. I never believed the employees would resist even though I was told I could not move this big boat. However, that is happening now because we're engaging the people and they're embracing what we're doing. There is enthusiasm moving forward. I come in here every day very motivated. ●