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Quebec Centre for Industrial Research (CRIQ)

A key driver of Quebec industry

To foster the competitiveness of Quebec businesses, Georges Archambault, CEO of the Quebec Centre for Industrial Research (CRIQ), has hit on a winning formula: combining productivity and innovation.

- » Year founded: 1969
- » Number of employees: 248
- » Operating budget: CA\$31 million
- » Projects: 900 per year involving more than 800 companies
- » Founding member of Innoventures Canada, a nationwide group of 10 industrial research centres, and of Alcoa Innovation with Alcoa Ltd. and the Quebec Centre for Aluminum Research and Development (CQRDA)
- » Key research areas
 - Industrial equipment and productivity
 - Industrial eco-efficiency
 - Strategic information
 - Export product testing and compliance
 - Quebec Standards Bureau (BNQ)

Technology nowadays is cutting-edge and the pace of change is accelerating. Against that backdrop, CRIQ's 250 employees are helping businesses develop new technology-based products and industrial processes and implement them at the production level.

"The challenge for companies today is finding the talent they need to reach their goals. They can't afford to hire professionals to meet all of their needs, so they must find a way to access the talent they don't have. And that's where industrial research centres like CRIQ come into play!" says Mr. Archambault. CRIQ primarily works with Quebec manufacturers seeking productivity and efficiency improvements in an array of sectors.

Mr. Archambault aspires to become a partner of choice for Quebec businesses. In pursuit of that goal, he proudly employs a 165-person team of experts, including chemists, engineers, agronomists, biologists and technologists.

As part of efforts to address business productivity issues, Mr. Archambault's team proposes a range of innovative solutions, such as reviewing costly or contaminating manufacturing processes and automating plant operations in lower-productivity sectors.

For example, in partnership with an equipment manufacturer, CRIQ's experts recently developed and installed an intelligent system designed to maximize the wood used in a floorboard factory in the Chaudière-Appalaches region. Before the wood is cut, an artificial-vision system scans and identifies the wood's characteristics; the system then optimizes the cutting position in order to minimize waste. "This device could have a major impact in the floorboard sector because it boosts production speed significantly. It also increases material yield by 2% and final product value by nearly 2%," notes Mr. Archambault.

"Our efforts to foster innovation go beyond our laboratory walls," says Mr. Archambault, who strives to offer complementary business services. Quebec companies benefit from CRIQ's broad range of expertise, including highly specialized lab testing and extensive experience in the areas of standards assessments and strategic information on patents and technology, as well as in drafting voluntary standards and certification protocols via the Quebec Standards Bureau (BNQ).

Quebec products go global

Quebec companies may be competing in global markets, but products aren't simply exported willy-nilly. Businesses have to begin by asking the right questions. Which materials are prohibited in California? What certification is required in the European market, where environmental protection standards are particularly stringent? The process can be quite confusing, according to Mr. Archambault, but CRIQ's experts are there to set exporters on the right track.

For example, CRIQ has drawn up a comprehensive list of standards that an electronics manufacturer must comply with if it wishes to export to Europe, including the WEEE directive (waste electrical and electronic equipment) and RoHS (restrictions on harmful substances).

In addition to providing companies with information on standards, CRIQ has the expertise and equipment required to demonstrate product compliance. CRIQ's testing program is carried out in facilities that are accredited by the Standards Council of Canada; it is also recognized by the relevant US, Canadian and European authorities.

Dreams based on reality

Embracers of innovation must dare to think big on the path to growth. Moreover, to reap the full benefits, discoveries must be effectively implemented within the business environment. One of CRIQ's key selling points is that it provides support throughout the project cycle, from dream to delivery. "Our practical solutions are user-friendly and directly applicable in the production process. We specialize in lab and pilot-level development as well as industrial implementation," says Mr. Archambault.

With facilities in Quebec City and Montreal, the organization is positioned to support companies across the province. Throughout the development process, CRIQ's specialists remain firmly focused on on-site applicability. "Since they end up working directly at the client's factory, they have to ensure that the transfer goes smoothly!" notes Mr. Archambault.

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