



In today's global economy, having innovative ideas isn't enough to ensure success. As the borders of business slowly disappear, companies increasingly need to look beyond national borders to remain competitive. But it takes a whole system working behind the scenes to support a business' ability to bring those innovative ideas and products to markets around the world. Standardization plays an integral role in this system

ompanies of all sizes now have the ability to reach customers around the world, but to do so effectively they need to understand and embrace standards. Differing regulations and standards between countries — and even within countries with multiple jurisdictions, like Canada - can cause delays and create market barriers, keeping companies from reaching their full potential.

"Standards matter. It is almost an imperative to compete regionally or internationally. If you can't meet the standards of the country in which you are selling, you just aren't going to get your product into that market," explains John Walter, CEO of the Standards Council of Canada (SCC). "Quite simply, in many cases it helps them stay in business."

#### **Bridging the gap between** potential and success

In addition to helping companies access both domestic and international markets, standards reduce costs, increase productivity, reduce risk, and help them gain the competitive edge necessary for fostering and supporting innovation. As the leader of Canada's standardization network, SCC is working with Canadian companies, large and small, to help them get the most out of standards and to bring their innovative ideas and products to Canadians, and the world. But the key to success is ensuring Canadian industry fully understands the value of international standards and how they can help boost their bottom line.



The benefits of using standards are not new. Standards were the underpinning of industrialization in Canada and they are just as critical today. However, in recent years there has been a move away from using standards developed in and for one particular country to adopting international standards that help open the doors to markets around the world.

"If you think about our catalogue of domestic standards, 15 years ago we used to have more than 5,000 standards in our catalogue. We have approximately 2,900 now and the trend is to have fewer domestic standards," says Michel Girard, vice president of SCC's Strategy Branch. "We rely more and more on regional or international standards and whether it is in sectors such as forestry or mining, or to support the export of products and ensure safety, more and more we are seeing that you need to comply with regional and international standards if vou want to succeed."

#### **Embracing standards makes** all the difference

A recent independent report commissioned by the British Standards Institution (BSI) provides the facts to back up Girard's point. The report surveyed 527 UK businesses, across seven major sectors, to determine the impact of standards. The conclusion was simple — investing in standards pays dividends for the organizations that use them. In the United Kingdom, small and medium-sized enterprises (SMEs) are 41 per cent more likely to export and large businesses are 36 per cent more likely to export if they use international standards. More than half the organizations surveyed said that technical information was made more accessible through using standards and another three-quarters said using standards had enhanced their reputation. But standards aren't just good for businesses, they are good for the national economy. The BSI report found that the use of standards accounted for 28.4 per cent of growth in the UK's GDP, a 37.4 per cent growth in its productivity and an increase of 6.1 billion pounds (approximately 12.2 billion Canadian dollars) in UK exports annually.

Today, approximately 80 per cent of the world's trade is affected by standards and countries around the world are catching on to the fact that using — and developing standards can give them a leg up. Emerging economies are already looking toward involvement in international standards development as a way to assert their influence in the global marketplace and to meet their own domestic policy goals and

objectives. And it is working. Countries like China. India and Russia are increasingly filling positions on technical committees of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). In fact, China is offering incentives and rewards for technical experts participating in standards development and is increasingly assuming secretariat or leadership roles on committees and sub committees vacated by other countries. On the other hand, the number of Canadian experts sitting on international technical committees isn't increasing - just more than 3,000 Canadians now sit on ISO and IEC committees. But it's not merely about getting more experts involved. It is about finding the *right* experts to sit on the committees that will bring the greatest benefit to Canada.

"If it doesn't change, our voice - and our needs - will not be heard," says Girard. "It should be growing but it's not."

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### **Securing a place for Canada** at the international table

"Canada is badly lagging behind most industrialized nations right now. We need to step up, to show leadership," says Girard. "In French, we would say 'Les absents ont toujours tort'. Those that are not at the table are always wrong. If you are not at the table, it is guaranteed that your views are not aoina to be reflected."

Sylvie Lafontaine, the vice president of SCC's Standards Solutions Branch agrees. She says Canada has some work to do if it wants to catch up to countries where both government and industry fully understand the value of standards countries that are quickly becoming standards "makers" rather than "followers".

"I think there are other countries that just really get it, like China and Japan," explains Lafontaine. "We are far too



complacent. We are going to be subject to other economies, to other countries. We are at risk of falling behind other economies that are building a standards and compliance system in their country that will lead the world."

"There are dozens and dozens of promising technologies in Canada that never see the light of day. They are being quashed by competitors before they are deployed internationally because we were not at the table when the right international standard was designed," says Girard.

Walter points to fine bubble technology as a perfect example. Discovered several years ago by Japanese industry, this innovative technology allows for the use of up to 90 per cent less water to clean products — from floors to industrial machinery — through the injection of ultra-fine air bubbles into the water. The water also doesn't freeze so it can be used as a chemical-free deicing agent for airplanes, which has particular relevance here in Canada. But since Japan took the lead in the development of the technology and the development of the resulting international standard, Canada is being left out in the cold.

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There is no point in recreating existing standards," says SCC CEO Walter. "Where I think we do need to look is where Canadian industries have the particular expertise or advantage."

"Because they proposed the (ISO) technical committee, they were able to select the chair of the committee and the secretariat," explains Walter. "So now we have a new technology that is going to be used worldwide and Japan is going to control the initial product; Japan is going to control the standard by which it is used, and they are going to continue to be ahead of everyone else in the world."

That is the kind of lead role Walter would like see Canada taking in the future. But deciding which areas to concentrate

SCC's attention on, and its scarce resources, is the challenge.

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# Getting the standards message out to Canadian industry

SCC has been working hard to determine just where Canada's expertise lies and what industries they should be engaging to ensure long-term growth for Canada. The organization has launched several initiatives to determine which sectors could benefit the most from standards and have been working with key industries, such as the heating and plumbing, oil and gas and the electrotechnical sector to figure out how standards can better support their needs. It seems SCC's message regarding the value of standards is a welcome one.

"Every time we reach out, we hear 'where have you been?' It is just getting at that first entry that can often be challenging," says Lafontaine. "Not everyone fully understands the value and benefits of standardization. And it's our role to help them understand and implement standards, to help them save time, money, and effort, while improving their quality and reducing their risks."

"We need to work together to ask 'where are the areas in which standards could play a role to enhance their competitiveness? And how can they take part in national or international standards development to make that work?'" says Walter. "It is getting out that information. Once we get it out I think they'll say 'Great, we're on our way!"

## Helping Canada make the jump from follower to leader

Walter points to four recent National Standards of Canada developed to support the adaptation of northern infrastructure to climate change as an example of where Canada has a natural advantage and the kind of innovative standardization work he would like to see more of in the future. Developed with funding from the Canadian government, the four, soon to be

five, standards address things such as changing snow loads on roofs and the effects of permafrost degradation on existing buildings. But Walter says these new standards could have applications outside of Canada's North.

"This is where I would assume we have an expertise that I think would be valuable in Alaska, Greenland, Finland, Norway, Sweden, Russia, wherever. Where Canada could lead the way," he says.

SCC's efforts to push for harmonization are starting to pay off. Through the Canada-US Regulatory Cooperation Council the organization has been part of a pilot project to establish a common plumbing standard on both sides of the border

Canada has also started to make inroads in harmonizing standards between Canada and the United States. Because our economy is so interconnected with our U.S. neighbour's, the lack of harmonization between the two countries contributes to the existing price gap — a price gap that means Canadians pay more than Americans for the identical products. Canadian products often need to be tested for the US market and once again — or more than once, depending on provincial and territorial requirements — for the Canadian market, raising prices for Canadian consumers and reducing profits for companies.

In the plumbing and heating industry, for example, only 10 per cent of standards are currently harmonized between Canada and the United States. But SCC's efforts to push for harmonization are starting to pay off. Through the Canada-US Regulatory Cooperation Council the organization has been part of a pilot project to establish a common plumbing standard on both sides of the border. Girard says that having one standard for both countries will reduce the cost to the end consumer and the price gap between Canada and the United States, but is also a way of setting the stage for greater harmonization between our countries in all aspects of trade for all products.



But if Canada is going to remain competitive in the global economy in the years to come and maintain the quality of life Canadians now have, Walter thinks it is critical that we start doing a better job of supporting innovation. If we don't, we may find ourselves at the mercy of other countries like China and Japan that are making innovation a priority.

Girard agrees.

"We do really need to engage with the innovators in this country so we can support them and they can get access to the right forums so that international standards will help them deploy their products," he says. "It is going to require a lot of work for us to get on track. We need to put the spotlight on standards in this country if we want to succeed."

"Traditionally, Canada has been a follower, not a leader," says Walter. "Canada will step up to be a leader or Canada will be forced to use standards that are developed by and for the benefit of other countries and other regions." 2020

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