

IRCC GLOBAL POLICY SUMMIT: PERFORMANCE REGULATION AND REGULATORY (MARKET-BASED) ALTERNATIVES

**“TOWARDS A NEW MODEL OF PERFORMANCE:
THE ROLE OF STANDARDS AND MARKET-DRIVEN SOLUTIONS”**

- A CANADIAN PERSPECTIVE -

by Pat Keindel¹

ABSTRACT

In contemplating the future of building regulations and market-based alternatives, the Canadian experience presents both useful lessons and workable strategies. As roles and expectations of key stakeholders shift, we are seeing the emergence of objective-based codes that will clarify roles and intents, and facilitate greater innovation and efficiency. More important, these objective-based codes open the door to market-driven “performance-plus” solutions, which go beyond basic requirements of safety, health, accessibility and protection of buildings to support higher-level goals and meet changing societal expectations. With its extensive knowledge base, inclusive processes, and growing alliances with government and industry, the standards community is well-positioned to deliver on the promise of a performance-plus model with innovative solutions that address a higher layer of expectations from the buildings we build and use.

Background: Standards’ Role in Building Codes

Despite their appearance and traditional use, standards are not purely technical. They reflect social objectives. They articulate what we as a society agree are acceptable levels of risk. When referenced in law by building codes, they communicate the requirements for products and processes that we feel are justified to keep us free from hazards.

The National Building Code of Canada addresses:

- *Safety*, with respect to structure, use and resistance to unwanted entry, and risk of personal injury from fire;
- *Health requirements*, related to indoor conditions, sanitation, noise protection, protection from unacceptable vibrations and containment of hazardous substances;
- *Accessibility*, such as barrier-free path of travel and barrier-free facilities; and
- *Protection of the building* (and adjacent buildings) from fire and structural damage.

The Code references prescriptive standards that are developed by standards development organizations (SDOs) such as CSA. These references eliminate the need for detailed requirements relating to manufacturing, installation or testing procedures to be included in the codes themselves.

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The standards referenced by the Code are created by a unique development process that engages diverse stakeholders, all of whom are volunteers, who arrive, not by majority rule, but by substantial agreement, on the requirements contained therein. The advantage of this approach is that it can identify problems and pitfalls early on, resulting in standards that are more workable once published. It also avoids situations where specific stakeholders end up writing the content for their own benefit.

This standards development process, distinguished by its wide representation and consensus approach, suggests a viable delivery method for responding to emerging needs and expectations.

Shifting Roles, Emerging Needs and Expectations

Under Canada's present regulatory framework, government's role has been largely to ensure public safety by mandating adherence to the building, fire and plumbing codes that in turn reference certain standards and other prescriptive requirements. That said, governments in various Canadian jurisdictions have also gone beyond developing and enforcing the building code and used various tactics to advance public policy objectives. Examples include: financial incentives, and support for private sector initiatives such as consumer education, industry training and voluntary product certifications such as R2000.

It's fair to say that the line between the responsibilities of government (to be handled through regulation) and the free forces of the marketplace has been a source of debate.

Today, governments in Canada are stepping back from their historic command-and-control regulatory role and are turning to the SDO community for solutions that complement regulations.

For their part, consumers expect safety and basic levels of performance from the products they use. In buildings, they expect workmanship that protects them from harm or damage, and a certain level of access.

But increasingly, they are taking more responsibility for their buying decisions, demanding improvements that go beyond the requirements that a framework of prescriptive codes and regulations can accommodate. For example, consumers may be receptive to the use of the latest "green materials" in the construction of their buildings, but such advances may be beyond the scope of the building code. How will consumers be able to evaluate what they are purchasing?

Industry too is expanding its own role. Once focused solely on supplying products that meet requirements referenced in law or recommended by trade associations, many players are choosing to meet voluntary standards because they feel that doing so provides them with a competitive advantage among buyers. However, that requires that these practices (which fall outside of regulations) and their value be readily apparent to consumers.

It's not surprising that industry is looking more and more to the SDO community for voluntary standards that pre-empt the need for regulations and communicate benefits to the consumer. For

example, CSA was recently approached by hog farmers in Canada to develop an environmental management system standard suitable for voluntary use by their industry. From their point of view, such a standard could address the public policy objectives one typically finds behind regulations, without the imposition of restrictive regulations.

Other players have roles in Canada's complex building system as well, including property owners, designers, general contractors and subcontractors, to name a few. While existing codes have provided a benchmark against which innovations and construction improvements can be recognized, builders and engineers often find it difficult to get approvals, under the existing regulatory framework, on alternative approaches and equivalencies that would address emerging expectations.

Canada is also feeling pressures for change beyond its borders. In a global economy, manufacturers increasingly trade across borders and face redundant testing and compliance procedures to meet prescriptive standards in various jurisdictions.

All of these forces mean that we are entering a very different environment from where we have come. And we will need to be much more creative in meeting these shifting needs and expectations.

A system that accommodates more flexibility and recognizes more than one "right way" would save resources, while improving efficiency, competitiveness and innovation. These are essential drivers behind Canada's move to objective-based codes.

Emerging Framework: Objective-based Codes

In Canada, a fundamental change is taking place with the introduction of objective-based codes, which will create greater clarity about what is regulated and what is not.

Under this model, requirements within Canada's building and fire codes are now being re-configured into a hierarchy of clearly stated objectives. Accompanying each requirement will be the identification of one or more acceptable solutions. These acceptable solutions can be either performance-based² or prescriptive. In some cases both kinds of solutions may be available.

One advantage for countries like Canada, which already has a highly developed and well-functioning building regulatory system, is that under the objective-based model, *existing codes and prescriptive requirements can continue to be used.*

But there are more significant benefits too. By clearly stating and linking objectives to their requirements, the objective-based code will bring greater clarity to the regulations' intent and where government's responsibilities begin and end.

² *Performance-based requirements articulate goals for results, without specifying exactly how to achieve those results, thereby accommodating innovation more easily.*

In the presence of objectives, alternative approaches can be successfully evaluated for their ability to serve those objectives, rather than be considered unacceptable for failing to fall into line with prescriptive requirements. This should accelerate innovation, as both industry and regulators benefit from more confident application and more consistent interpretation of the codes.

Although objective-based codes are expected to yield better information and a facility for innovation, heralding faster delivery of more effective solutions to the marketplace, they are not a panacea.

For one thing, the high-level objectives of the new objective-based code do not stray from where we find ourselves today. They are *still* focused on basic issues of safety, health, access and protection of buildings.

Some would argue that's as it should be, because regulations should provide for an adequate level of safety while leaving room for industry to go above and beyond with value-added features in a healthy competitive market.

While the new objective-based code may go far enough for regulations, *it does not address other high-level expectations that are emerging*. We need something more.

Directions for the Future: “Performance-plus”

The door is opening on a possible new model of “performance-plus” in which regulations and the prescriptive standards on which they are based address certain base requirements – while other market-driven solutions adopted by industry address a higher layer of expectations associated with the buildings we build and use.

These higher expectations relate to such features as: affordability, sustainability, durability, heightened performance, enhanced energy efficiency, diminished environmental impact, additional safety, accessibility, privacy, aesthetics and quality of life.

It's clear that society is ready to move in this direction. A 2003 study (CMHC, *The Housing Construction Industry: Challenges and Opportunities*) found that demands for affordable housing will increase in Canada, due to economic uncertainty, increasing immigration and student debt loads among younger Canadians. Canadians will be seeking a range of housing choices involving innovative design and financing options.

The same study also forecast that as the population grows, smart growth (or sustainable development) practices will become more common and expected; and that conservation and environmental protection will continue to be a critical concern, with environmental regulations serving an important role.

There are also markers that industry is prepared to move in this progressive direction too. For example, Canada's *Voluntary Challenge & Registry* is a non-profit partnership between industry

and governments across Canada that provides a means for promoting, assessing and recognizing the effectiveness of the voluntary approach in addressing climate change.

Another example is the *Affordability and Choice Today* (ACT) program, jointly managed by industry and government, to stimulate regulatory reform in Canadian municipalities, leading to greater affordability, choice and quality in housing. It provides funding for demonstration projects, streamlines approval processes and showcases successes. It was recognized in 1998 by the UN Center for Human Settlements as a ‘best practice’ for improving the living environment.

What might this performance-plus model look like in practice – and how would it complement the emerging objective-based regulatory framework?

On a *micro* level, the model provides consumers with the ability to choose their homes’ design features, materials, technologies, comfort levels, convenience, security, durability, finishes, aesthetics and extra systems. They will decide what features they want and how much they are willing to pay.

For example, under our existing prescriptive regulations, there are security requirements for doors and windows within two meters of grade level. The emerging objective-based code would set this as an acceptable solution to a key objective: preventing forced entry. But a performance-plus solution would address the overall end goal in a more complete way, perhaps addressing the building construction, operation and the training of its occupants.

On a *macro* level, performance-plus solutions would go beyond individual choice and address broader societal interests such as sufficient supply, innovation, fair business practices, protection from undue financial risks, fair access, economic growth and trade and environmental protection.

For example, regulations may require builders to provide for solid waste management by linking into a well-managed civil infrastructure that provides for treatment and environmentally safe disposal. But a developer interested in pursuing and marketing a “green” property would take a performance-plus route, adopting, for example, natural and low-tech products and systems before using resource-intensive solutions. The developer may also use highly available and renewable resources, backed up by large infrastructure only when needed (CMHC, *Healthy High-Rise*).

Delivering the Performance-plus Model: A Role for the Standards Community

Given their limitations, regulations would be inappropriate to effect the kind of change envisioned in a performance-plus model.

Instead, flexible standards solutions and accompanying certification and verification programs may emerge as a preferred mechanism for delivering on performance-plus expectations.

Why? Because the standards community can leverage its extensive knowledge base, its inclusive processes, and its growing alliances with government and industry to develop new solutions and services that capture the requirements of performance-plus.

These would not be traditional standards in the prescriptive sense, but innovative solutions – such as guidance based documents, management systems and consultative processes – that would help business and industry bring about performance-plus.

As delineated by the Canadian Home Builders' Association (*Alternatives to Regulation*), the benefits of the standards community's approach are substantial, resulting in:

- greater speed, responsiveness and flexibility than regulations
- the capacity for suggesting, explaining, justifying and elaborating
- minimal government costs
- the capacity for producing national standards whereby interchangeability increases competitiveness and productivity
- reduction in buyers' information costs to compare products
- the ability to tap into the knowledge resources of thousands of private sector, academic and consumer volunteers, building awareness and support among different stakeholder groups.

Is the standards community prepared to take on the role of performance-plus solution provider?

As a Canadian SDO, CSA is already moving in this direction. Here are a few examples of the innovative work CSA is doing, far beyond prescriptive, technical standards. In the following examples, the requirements set out by the standards may be referenced in a regulatory framework, but many of the requirements go above and beyond regulations to provide added value to industry and consumers.

Example: Health care

The Government of Canada identified a need for comprehensive standards for the safety of blood and blood components intended for transfusion, and for the safety of cells, tissues and organs intended for transplantation and assisted reproduction. CSA partnered with Health Canada to publish Canada's first-ever management system standards for transplantation and assisted reproduction. A standard for blood and blood components is also underway, with publication expected in Spring 2004.

Some of the requirements within these standards will become part of Health Canada's regulatory framework, providing a basic level of safety. Beyond these essentials, however, the standards contain additional requirements for facilities, personnel, equipment, and security that together create a comprehensive model for facilities to follow – above and beyond what is required by regulation. By providing a consistent national framework, the standards will lead to protective measures for health care professionals, enable better research, help identify more donors, and benefit the health of Canadians. The use of these standards supports the government of Canada's intent to use a more standards-based approach to regulatory reform.

Example: Service for persons with disabilities

In cooperation with the Ontario provincial government, CSA developed and published a landmark standard that provides guidance to the service sector in establishing policies, practices and programs for effectively and sensitively serving customers with disabilities.

This standard goes above and beyond existing regulations related to accessibility. It considers not just the physical environment but operational processes and human interactions, laying out a management system that will ensure the customer experience of people with disabilities is equivalent to that of other customers.

In this way, it complements the non-discrimination clauses of the Canadian Charter of Rights and the Ontario Human Rights Code. And it is a non-legislative initiative that supports the Ontario Disabilities Act, which places requirements on certain service providers to develop plans to make their buildings, programs and services more accessible to persons with disabilities.

It also helps businesses maximize their customer base and enhance their corporate reputation, which in turn can attract skilled workers, differentiate the organization in the marketplace, win acceptance for its products and services, encourage higher valuation from financial markets and sustain the organization during times of crisis.

Example: Sustainable Forest Management

On the environmental front, CSA published a Sustainable Forest Management (SFM) standard that became a national standard of Canada. Since then, CSA has introduced a Chain of Custody program to encourage responsible buying decisions around forest products. Chain of Custody refers to the tracking of a forest product back through all phases of ownership, processing and transportation prior to it reaching the consumer. Products that can be tracked this way (and verified through an independent third-party audit) to a forest registered to the SFM standard, qualify to carry a special mark that tells buyers the product comes from a sustainably managed forest.

This standard and its related Chain of Custody program go above and beyond environmental regulations, tapping into the consumer's desire to voluntarily support sustainable practices through their purchasing decisions.

Conclusions

As these examples from CSA demonstrate, SDOs have the capacity to deliver on the higher level expectations that are now emerging. They can and are addressing concerns relating to environmental impact, energy efficiency, human dignity and rights, and quality of life. Performance-plus is both a natural extension of the SDO role, and a complementary support for regulations. Compatible with objective-based codes, the performance-plus framework of the future simply takes the objectives one step further.

To be successful, however, the performance-plus model requires a standards development process that is fair and open to all stakeholders' interests. It would be essential to guard against self-interest during the development of these standard solutions. And there would need to be funding mechanisms so that consumers and small enterprises, stretched for time and money, are not shut out from the process.

The model also requires a system of monitoring and demonstrating compliance that is effective and meaningful to consumers.

There will always be those within industry that want to distinguish themselves by providing added value, by going above and beyond regulatory requirements. As an SDO that welcomes the challenges presented by changing needs and expectations, CSA invites those segments of the building industry seeking performance-plus to join with us in making this new framework of innovative standards solutions a reality. The opportunities are both exciting and limitless.

Sources

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