



National Research  
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Canada

CODES CANADA

# National Model Codes Code Development System

First Nations Housing Conference  
Thunder Bay  
February 26, 2019

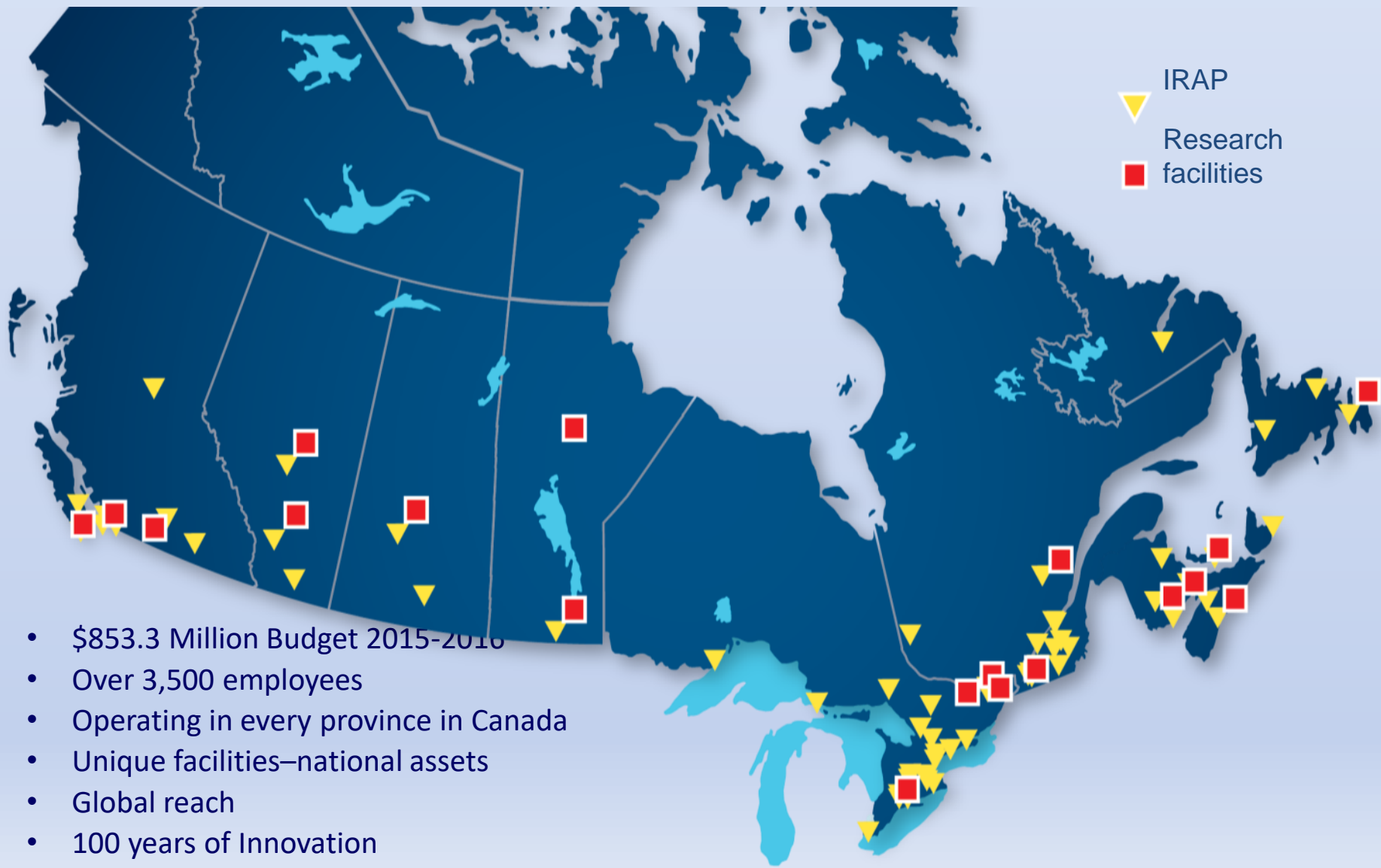


Nedjma Belrechid

# Outline

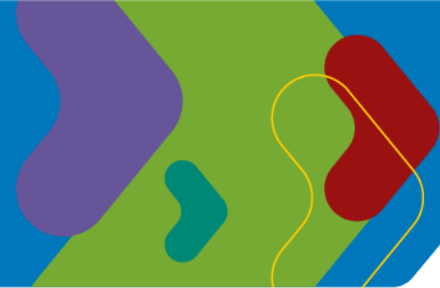
- National Model Codes
- Code development system
- Codes information products
- NBC 2020, Part 9 significant changes and future tasks





- \$853.3 Million Budget 2015-2016
- Over 3,500 employees
- Operating in every province in Canada
- Unique facilities—national assets
- Global reach
- 100 years of Innovation

# NRC 100 years legacy



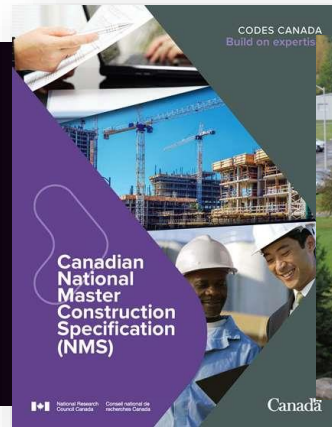
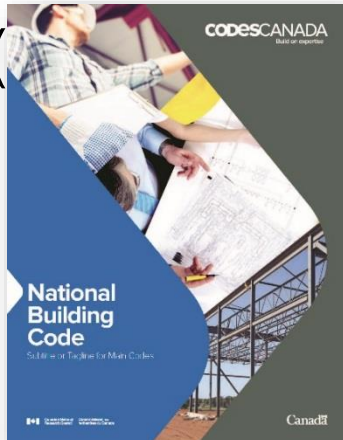
**INTERNET**



# NRC Construction – since 1947

## Building Regulations for Market Access program (BRMA)

- Canadian Construction Material Centre (CCMC)
- **Codes Canada**
- National Fire Laboratories
- Canadian National Master Construction Specification



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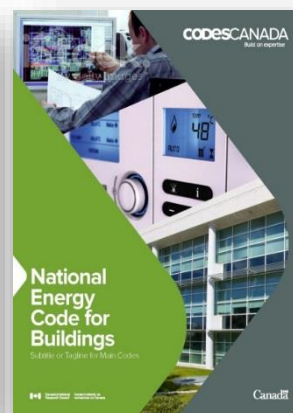
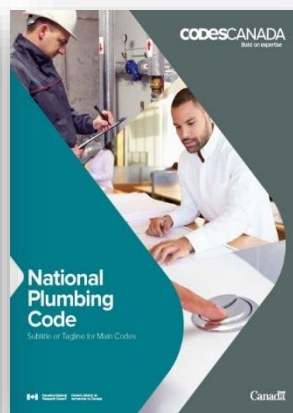
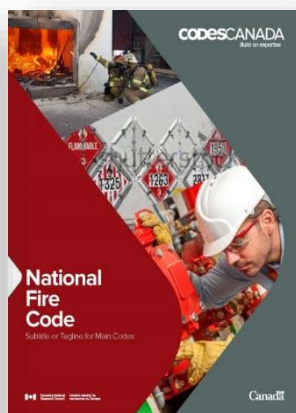
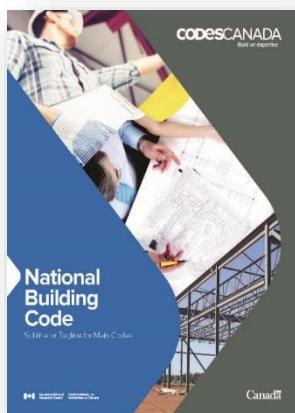


# National Model Codes



# National Model Codes

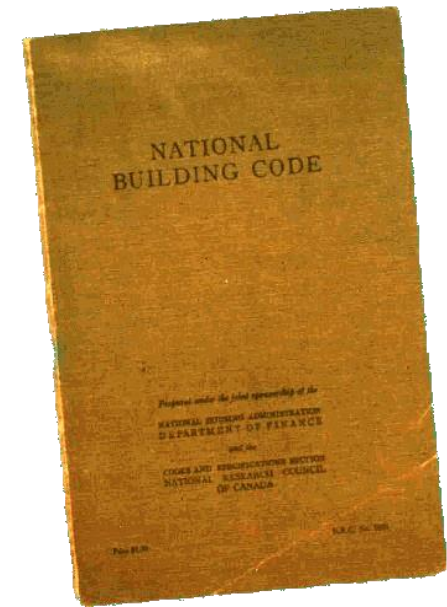
- National Building Code (NBC)
- National Fire Code (NFC)
- National Plumbing Code (NPC)
- National Farm Building Code (NFBC)
- National Energy Code for Buildings (NECB)





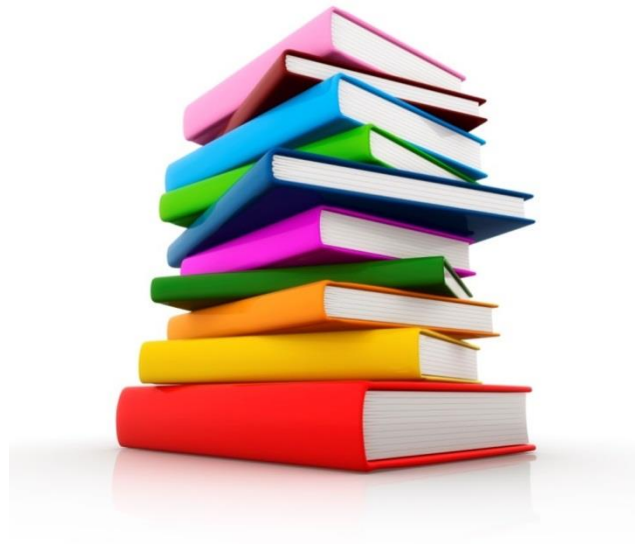
# National Model Codes

- Early 1930's - mounting pressure from architects, builders, insurers etc.
  - no national model codes
  - no provincial codes
  - multiplicity of municipal codes
- 1941 – 1st national model building code



# National Model Codes

- 50+ Codes published since 1941
- Over 75 guides, supplements and commentaries
- Illustrated User's Guide–NBC 2015 Part 9, Housing and Small Buildings - **Published**



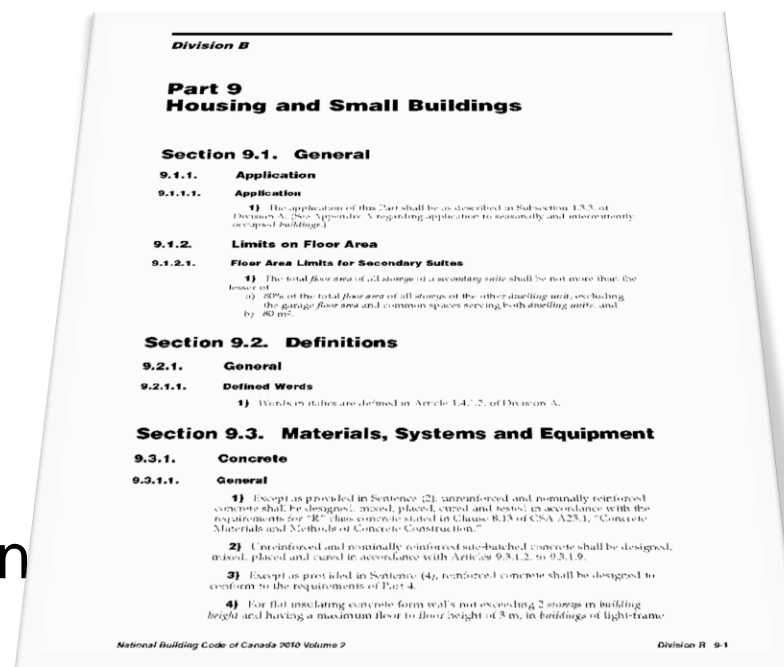
# National Model Codes

## Set minimum technical provisions

- Design and construction of new buildings and houses
- Alterations
- Change of use
- Demolition

## National market

- Consistent and harmonized requirements
- Affordable buildings, houses and infrastructures
- Alternative solutions



# National Model Codes

## Five objectives

- › Safety
- › Health
- › Accessibility
- › Fire and structural protection
- › Environment



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# Code development system



# Code development system

## Goals

- › Simplified process
- › Timely adoption
- › Greater harmony
- › Common national interest
- › Engaged stakeholders



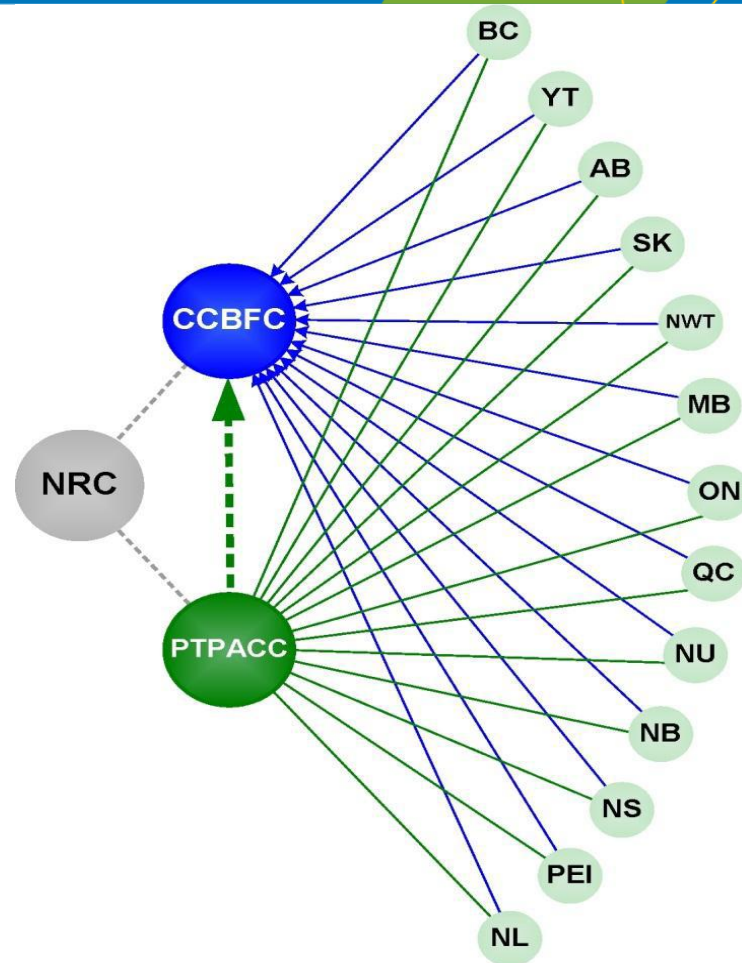
# Code development system – Collaboration

## Partners

- Provinces and Territories (PTPACC)
- Canadian Commission on Building and Fire Codes (CCBFC)
- National Research Council Canada (NRC)

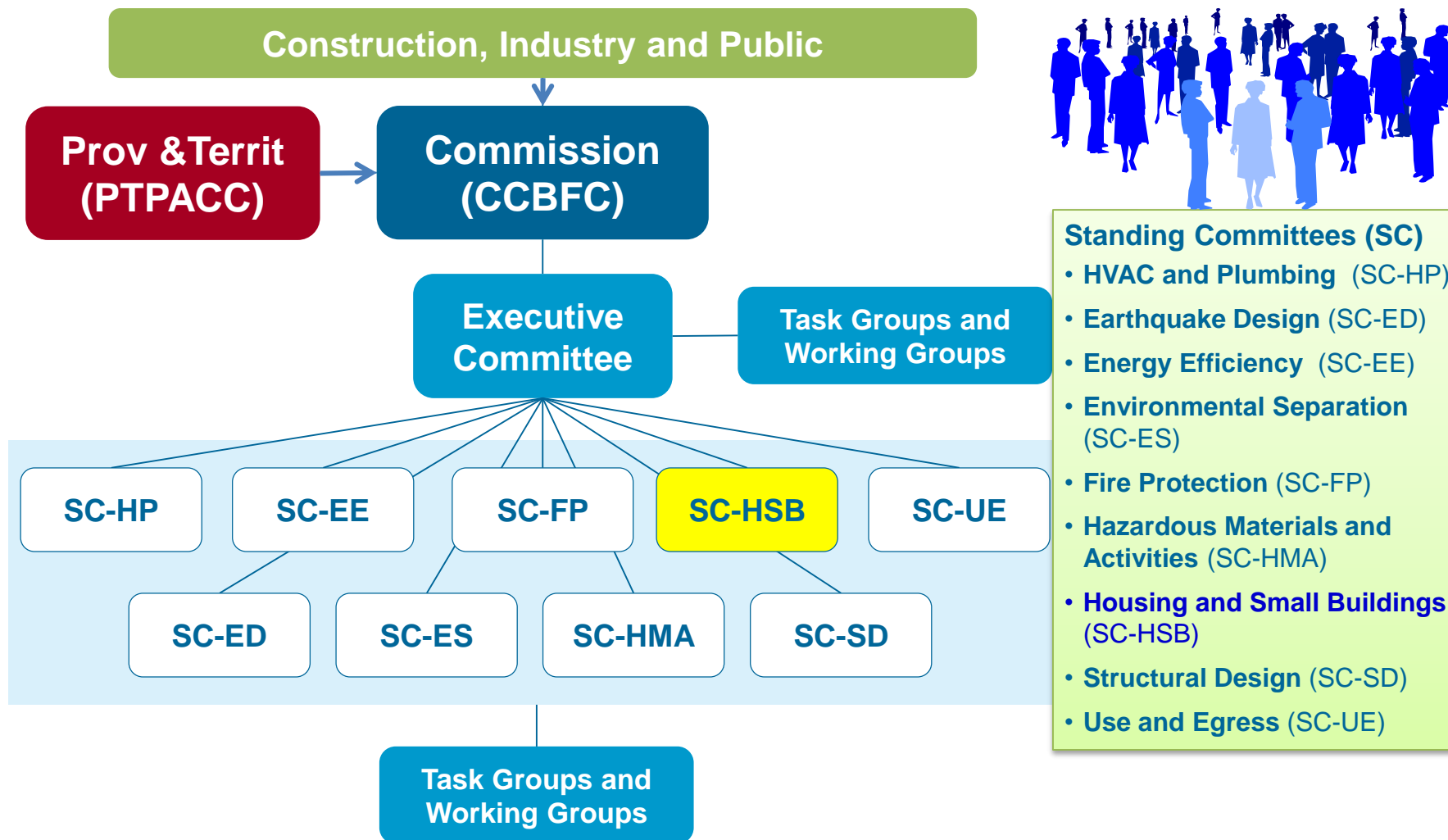
## Stakeholders

- Construction industry
- Regulators
- General public

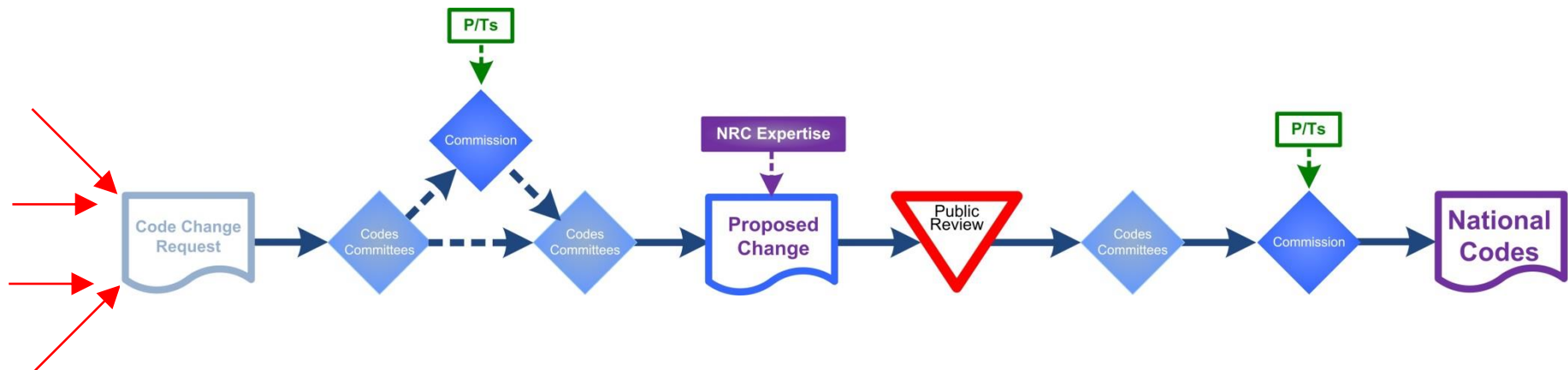




# Code development system – Collaboration



# Code development system – Collaboration



Continuous process

[www.codescanada.ca](http://www.codescanada.ca)

# Code development system – Consensus

## 2015 National Codes

- 5 Public reviews
- 373 NBC changes
- 100 NFC changes
- 27 NPC changes
- 3179 Comments



# Code development system – Consensus

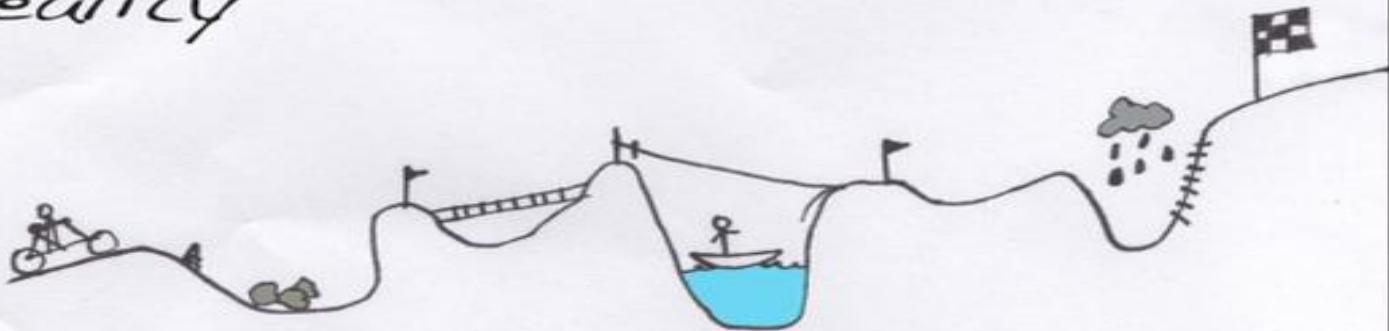


# Code development system – Consensus

*Your Plan*



*Reality*



# Code development system – Adoption

## Provinces and Territories

- › 10 Provincial governments
- › 3 Territorial governments
- › >1000 Municipal governments

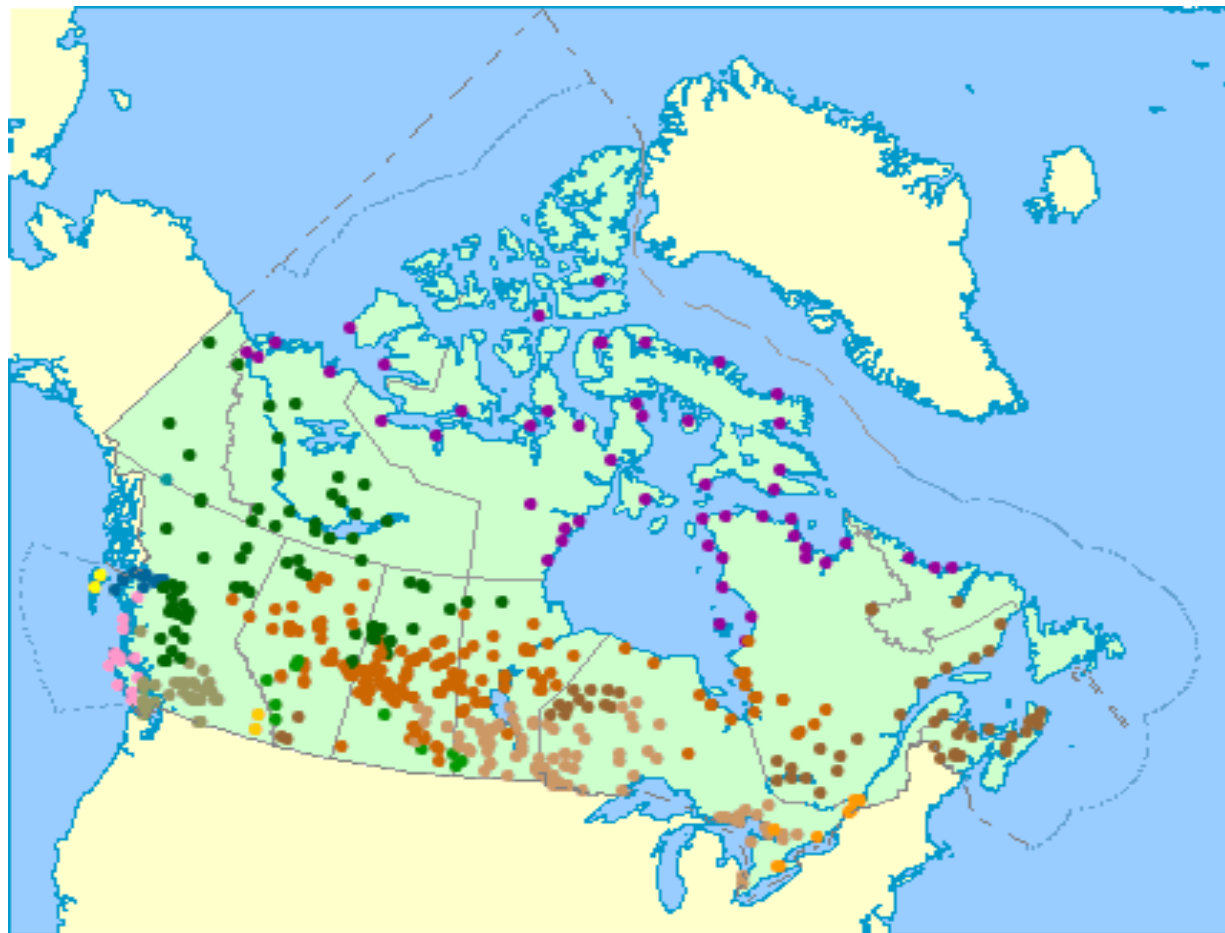
## Adoption and enforcement

- › Enact building and fire regulations
- › Inspect and enforce the Code
- › Interpret Code requirements
- › Initiate training programs
- › License trades and professions
- › Provide policy guidance



# Code development system – Adoption

- 10 First Nations and Inuktitut
- 630 First Nations Governments or Bands
- Ontario
  - 133 First Nations
  - 16 Tribal Councils



mapFNLanguagesAtlasofCan.gif

# Code development system – Get involved!

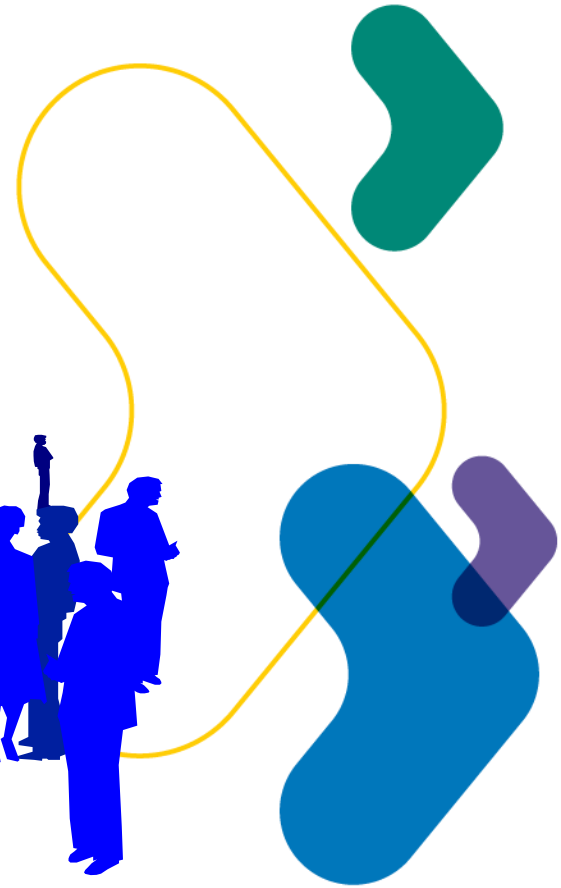
- Volunteer for a standing committee, a task group
- Submit a code change request (CCR)
- Submit public review comments on proposed changes (PCF)
- Attend a meeting as an observer





# Takeaways

- › Minimum requirements
- › Broad consensus-based process
- › Hundreds of + volunteer experts
- › Broad geographical representation
- › Balanced matrices between  
Regulatory, industry, general interest



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# Codes information products

## Illustrated User's Guide Part 9 Housing & Small Buildings – NBC 2015

- Understand and apply the provisions in Part 9
- A companion document
- Informational
- No legal status
- Not intended for formal adoption



Publication Sales, M-20  
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If you did not purchase this publication directly from NRC,  
please contact the publisher to find out how to return  
your copy of any reviews and orders to the 2015 codes.

# Codes information products

- **Free** NECB
- **Free** NBC 2015 Section 9.36. – Energy efficiency for housing and small buildings
- 2015 Codes Seminars available on-demand, filmed video recordings
- Housing Research Summary





**Free** online access to all the **national codes** will be available as of

**April 2019**

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# 2020 Part 9 National Building Code

- Protection of windows
- Interconnected smoke alarms
- Home-type care occupancy



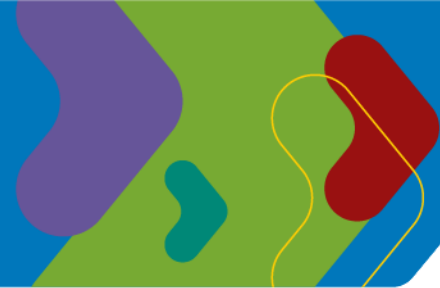
# Protection of windows

- Openable windows in dwelling units need protection





# Interconnected smoke alarms

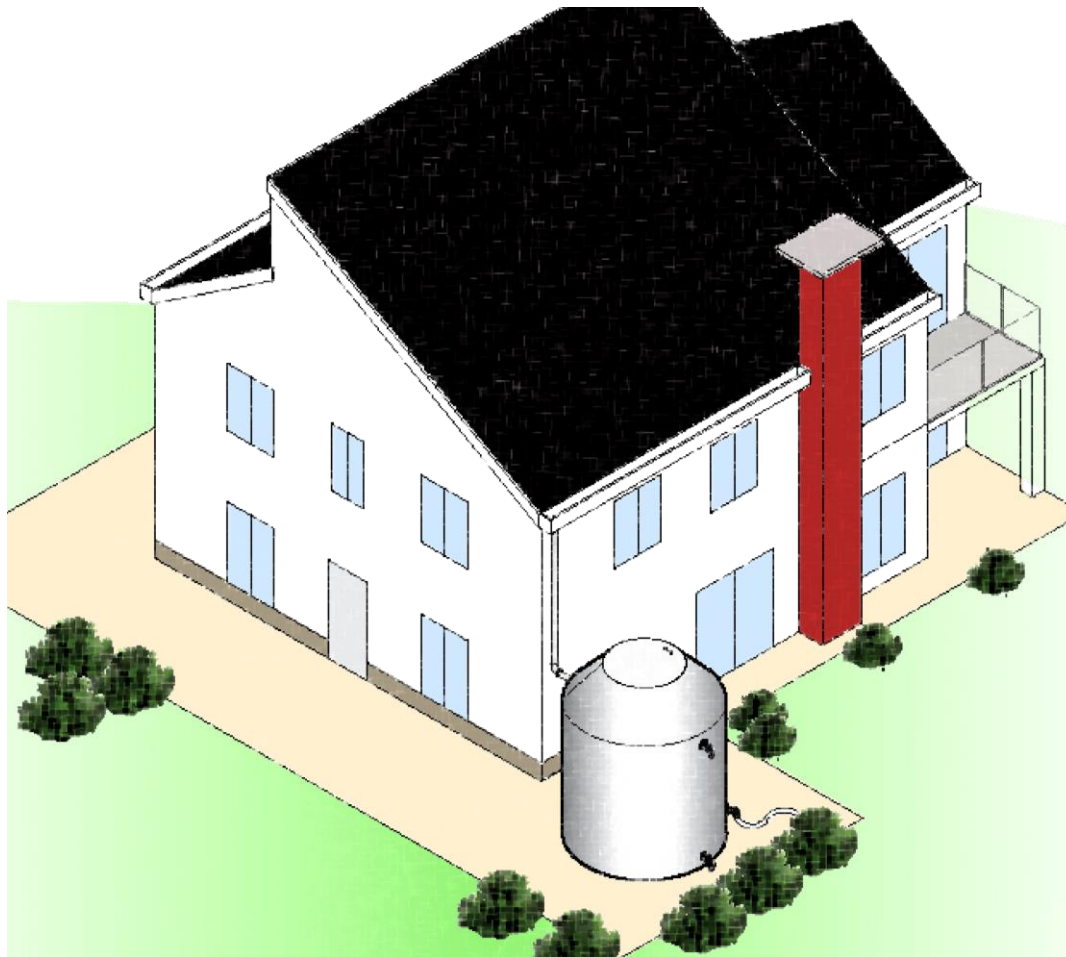


# Home-type care occupancy

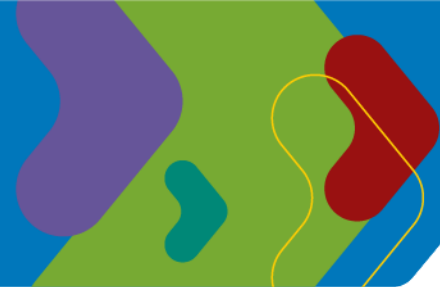
- Affordable accommodations for people who need care



# Rainwater harvesting



# Fire safety in houses



# Grab bars in bathtubs and showers

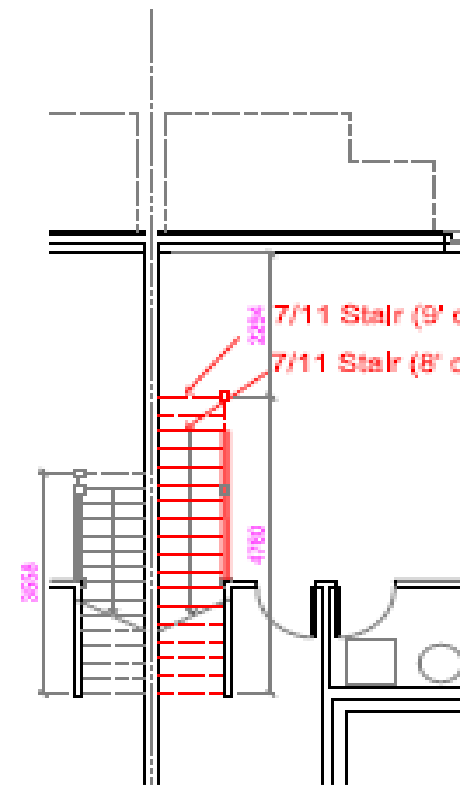


# Basements

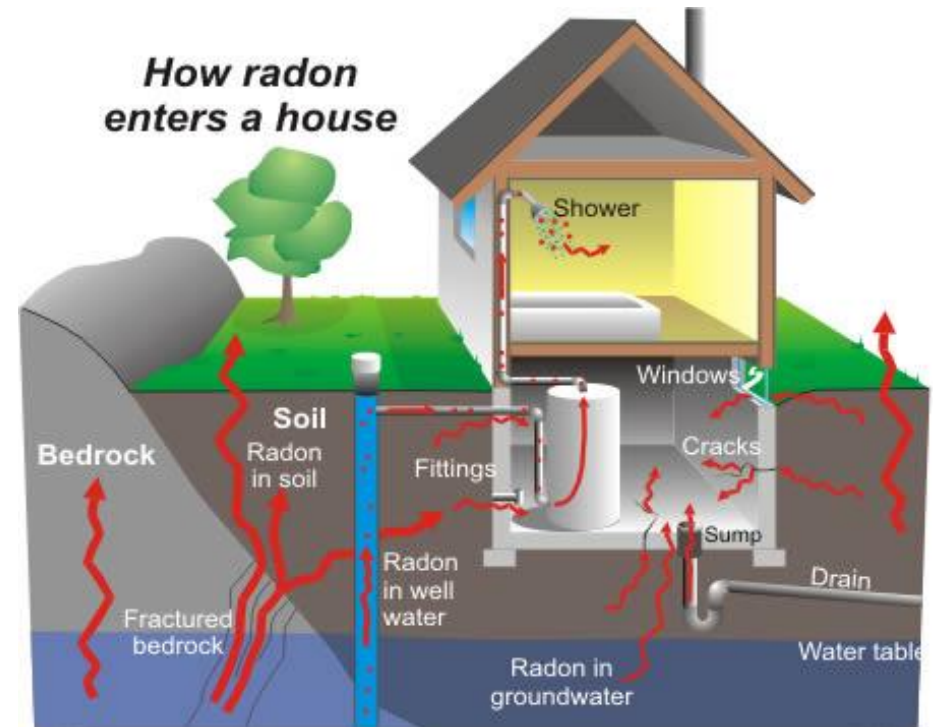


# Stairs, ramps, handrails and guards

## ➤ Step dimensions in dwelling units



# Radon and soil gas mitigation





# CCBFC sets future direction of codes:

- › Alteration & renovation of existing buildings and houses
- › Accessibility, visitability and egressibility including for houses
- › Fire safety in houses
- › Better noise protection for buildings
- › Climate change adaptation, mitigation, resilience and sustainability

**Thank You**

