

**CMHC INTERNATIONAL TRAINING TEAM**




**Building materials:  
How to tell 'green' from 'greenwash'**

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**Introduction**

- What this presentation will cover
  - Who is CMHC International
  - What makes a building product 'green'
  - How to tell whether claims are 'green' or 'greenwash'
  - Main organizations from North America involved in this area

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**Who is CMHC International?**


- Canada Mortgage and Housing Corporation (CMHC)
  - Canada's national housing agency
  - Leader in residential building research
  - Shares Canada's housing experience and expertise through CMHC International Training Team




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**CMHC International**

- CMHC in the UAE
  - Encouraging commercial partnerships between Canadian companies and UAE
    - both building products and design services
    - special interest in solutions that improve energy efficiency and reduce environmental impacts



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**Green design requires...**

**Proper Mindset**  
(way of thinking)

+

**Better Process**  
(integrated design)

+

**Right Tools**  
(voluntary rating systems, certification programs, software, etc.)


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**Green Products**  
(products with reduced environmental impacts)

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**Green product life cycle analysis**

- Considers environmental impacts at all stages
  - Manufacturing (including resource extraction & recycled content)
  - Transportation
  - On-site construction
  - Maintenance, repair and replacement
  - Operating energy
  - Demolition and disposal

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### What makes a product 'green'

- Made with salvaged, recycled or agricultural waste (e.g. Ottawa Fibre fiberglass insulation that uses 65% recycled glass)



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### What makes a product 'green'

- Conserves natural resources (e.g. Triton Underwater Logging of submerged old growth forests)



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### What makes a product 'green'

- Avoids toxic or other emissions (e.g. Icymene foamed-in-place insulation that uses water-based blowing agent that doesn't deplete the ozone layer)



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### What makes a product 'green'

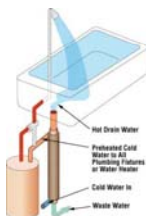
- Reduces environmental impacts during construction, demolition or renovation (e.g. Greenland Corporation's biodegradable, vegetable oil-based release agent for concrete forms)



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### What makes a building product 'green'

- Saves energy or water (e.g. RenewABILITY's Power-Pipe drainwater heat recovery)



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### What makes a product 'green'

- Contributes to a safe, healthy indoor environment (e.g. Dow's former WoodStalk™ fiberboard panels that used straw particles and formaldehyde-free binder)



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## Certification basics

- Relationship of standards and certification programs
  - ▶ Standard
    - set of criteria against which a product can be judged
  - ▶ Certification
    - says that a product meets those criteria

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## Certification basics

- Standards and certification reduce temptation to commit "The Six Sins of Greenwashing™"



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## Definitions

- What is 'greenwashing'?
  - ▶ The unjustified appropriation of environmental virtue by a company, an industry, a government, a politician or even a non-government organization to:
    - create a pro-environment image;
    - sell a product or a policy; or
    - rehabilitate their standing with the public and decision makers after being embroiled in controversy.

*or*

  - ▶ False or misleading green marketing claims

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## Certification basics

- "The Six Sins of Greenwashing"
  1. Sin of the hidden trade-off
    - suggesting a product is 'green' based on a single or narrow set of attributes without attention to other often more important environmental issues (e.g. products that promote energy efficiency but neglect to disclose that they contain toxic materials)

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## Certification basics

- "The Six Sins of Greenwashing"
  2. Sin of vagueness
    - claims that are so poorly defined or broad that its real meaning is likely to be misunderstood (e.g. claiming "recycled content" without quantifying it)

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## Certification basics

- "The Six Sins of Greenwashing"
  3. Sin of irrelevance
    - claims that may be truthful but are unimportant and unhelpful (e.g. claiming "CFC-free" despite the fact that chlorofluorocarbons have been banned for nearly 30 years)

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## Certification basics

- "The Six Sins of Greenwashing"
  4. Sin of the lesser of two evils
    - claims that may be true within a product category but risk distracting consumers from greater environmental impacts (e.g. flooring made from "rapidly renewing bamboo" which is harvested from plantations created by clear-cutting tropical forests)

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## Certification basics

- "The Six Sins of Greenwashing"
  5. Sin of no proof
    - claims that cannot be substantiated (e.g. radiant barrier insulations that make energy saving claims that have not been proven by proper research)

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## Certification basics

- "The Six Sins of Greenwashing"
  6. Sin of fibbing
    - claims that are simply false (e.g. claiming that a product is made from certified wood but lacks chain-of-custody proof)

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## Certification basics

- Three levels of certification for green products
  - ▶ First party
    - self-declared, claims not independently tested or verified
    - most common
  - ▶ Second party
    - standard set by trade association and claim verified by association or outside consulting firm
    - more credible than first party but potential for conflict of interest
  - ▶ Third party
    - independent party tests products and awards certification
    - most robust, especially when certifier is approved by SCC, ANSI, etc.

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## Certification basics

- Groups of green product certification programs
  1. Forestry
  2. Indoor air quality
  3. Energy and water efficiency
  4. Multiple attributes

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## Certification basics

- Forestry
  - ▶ Forest Stewardship Council (FSC)
  - ▶ Sustainable Forestry Initiative (SFI)
  - ▶ Canadian Standards Association (CSA)



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## Certification basics

- Indoor Air Quality
  - ▶ Greenguard
  - ▶ Green Label and Green Label Plus
  - ▶ FloorScore
  - ▶ Indoor Advantage and Indoor Advantage Gold



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## Certification basics

- Energy and water efficiency
  - ▶ Energy Star
  - ▶ CEE/ARI Verified Directory
  - ▶ WaterSense



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## Certification basics

- Multiple attribute
  - ▶ EcoLogo (Environmental Choice)
  - ▶ Green Seal
  - ▶ Sustainable Choice and Environmentally Preferable Products
  - ▶ Cradle to Cradle (C2C)
  - ▶ SMaRT Consensus Sustainable Product Standards



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## Some final thoughts...

- Remember limitations of green building products
  1. For most buildings, environmental impacts of their operation dwarf manufacturing impacts of the products they consume
  2. Not all green building products certification programs are equally reliable
  3. Certified products may be harder to find than generic products
  4. Can sometimes be difficult to tell 'green' from 'greenwashing'

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## Questions?



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