

BUYERS' GUIDE TO LOW-EMISSION PRODUCTS AND SERVICES

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Outline

- ♦ What is the goal?
- ♦ What is the driving force?
- ♦ How can consumers achieve this goal?



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Challenges

- ♦ Lack of consumer awareness. Concern arises only after they have gotten sick
- ♦ Lack of information about consumer products
- ♦ Misrepresentation in mass advertising that scented products are desirable
- ♦ Consumers assume if it is sold, it must be safe



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Challenges

- ♦ Consumers also assume a product with an environmentally friendly label is safe.
- ♦ Formaldehyde is the contaminant people know about and blame.
- ♦ Terpenes and natural wood extractives are released by pressed wood products, irrespective of the glue used.
- ♦ There is a need for architects and builders to be informed about offgassing from building materials and their impact on people.



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Are we prepared to

- ♦ List common building materials that have emissions?
- ♦ List common household products that are sources of chemical emissions?
- ♦ List common misconceptions about services?



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What consumers do not need to know

- ♦ Detailed information about the chemicals emitted
- ♦ Concentrations of chemicals or pollutant concentrations singly or from combinations of materials
- ♦ Complete toxicological information



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What consumers need to know

- Presence of chemicals that can be released
- Potential exposures (amount of material, location, conditions of usage are considerations)
- General idea that the emissions are irritants/have toxic properties
- Where to get more information about the product
- Whether the emissions are transient or not
- Avoidance/preventative measures



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Material Safety Data Sheets

- MSDS provides basic info about the product
 - Manufacturer, telephone no
 - Product names
 - Hazardous ingredients
 - Chemical properties
 - Toxicological information during application
- MSDS does not tell everything
 - Presence of perfumes
 - Trace ingredients
 - Long-term effects
 - Curing time



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Helpful to consumers

CMHC's *How to Reduce Chemical Contaminants in Your Home* is an attempt to educate consumers

Most of the things they can do on a day-to-day basis

- Smoking, pesticides, candles, carbon monoxide
- Household products

Before renovating

- Building materials

How to test



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Guide to Building Materials

CMHC's *Building Materials for the Environmentally Hypersensitive*

- Qualitative
- Experiences of environmentally hypersensitive individuals provided the lens to assess these materials
- Emission testing validates the qualitative descriptions
- To date, the information is still good.



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Construction issues

- Ducts made of panned joists of oriented strand board
- Large quantities of OSB in house
- MDF trims
- Particle board cabinetry



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Equipment

We also need to address the following

- Ozone generators
- Ultraviolet lights
- Negative ionizers
- Gaseous filtration



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Challenge: effects of variables on offgassing

- Higher temperature
- Moisture
- Oxidizing agents, e.g. [ozone](#)