A Sustainable Hastings-Sunrise

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Erin Embley

Sustainability Planning for Hastings Sunrise

- Sustainability and Green Urban Design
- Why look at Sustainability - National and Regional Context, and Rational
- Current Policies and Regulations for the Hastings Strip in Hastings Sunrise
- Opportunities for more sustainable infill and future green development
- Examples of developments and renovations using sustainable practices within the Lower Mainland
- Battling the process, working within and around existing zoning and regulatory policies
- Suggestions for new green urban design in Hastings Sunrise

Sustainability and Green Urban Design

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Defining Sustainability

Global

"development that meets the needs of the
present without compromising the ability c
further generations to meet their own neec

Bruntland Commiss

Local

Sustainable development requires an integration of the ***ecological imperative*** to stay within the carrying capacity of the planet, the ***economic imperative*** to provide an adequate standard of living for all, and the ***social imperative*** to develop forms of governance that promote the values people want to live by.

Sustainable Development Research Institute, UBC

Defining Green Design

Green building design makes *incremental* improvements in the environmental performance of buildings beyond typical practice. By continually improving *individual* buildings, the collective reduction in resource use and ecological loading associated with the built environment will be considerable.

Why Look at Sustainability?

National and Regional Context, and Rational

Air Quality and Land Use

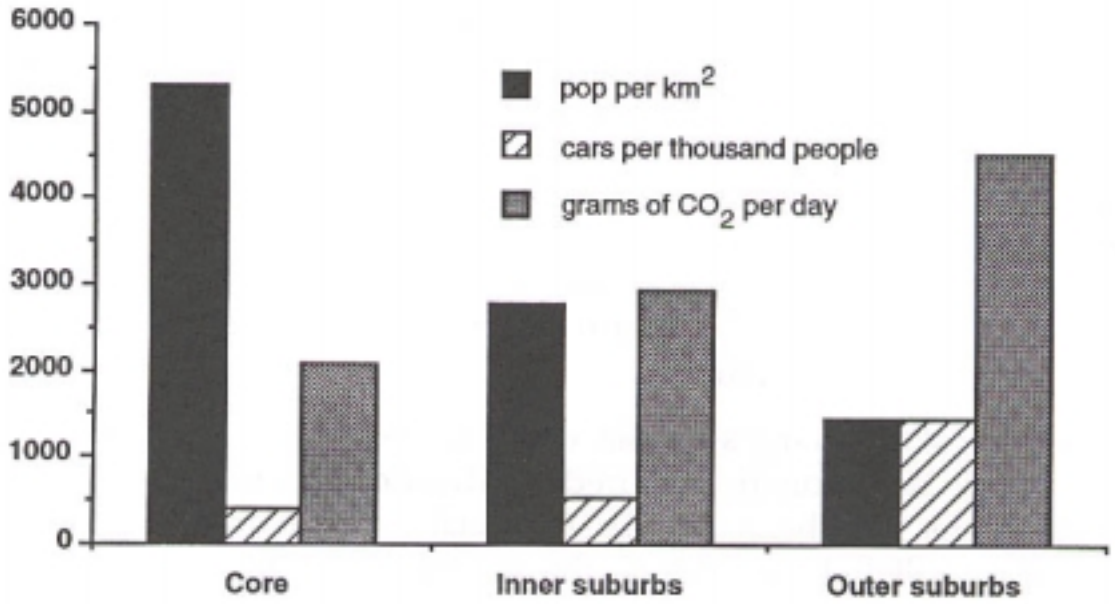

Figure 5.14 Toronto: Population, Car Ownership, Carbon Dioxide Impact.
Source: Gilbert 1991: 184

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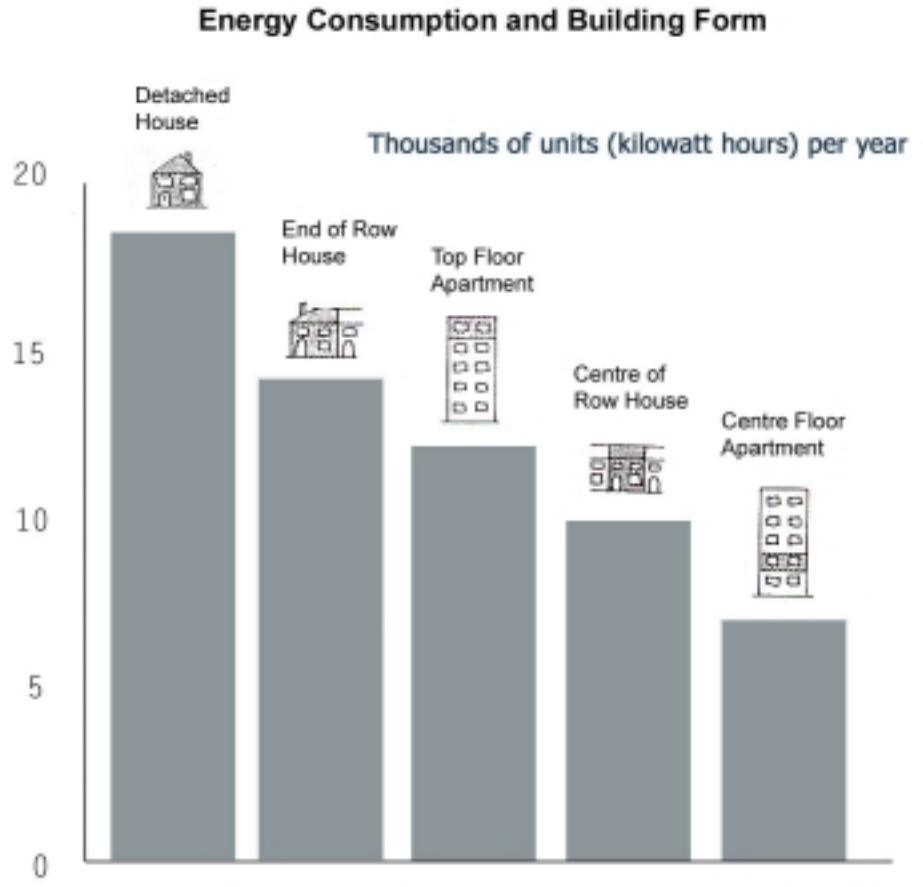
Energy Consumption



All the houses and apartments in the diagram are the same size and have the same proportion of window to outside wall

Source: G.L.C. Reproduced in Edwards 1991

Household Water Use

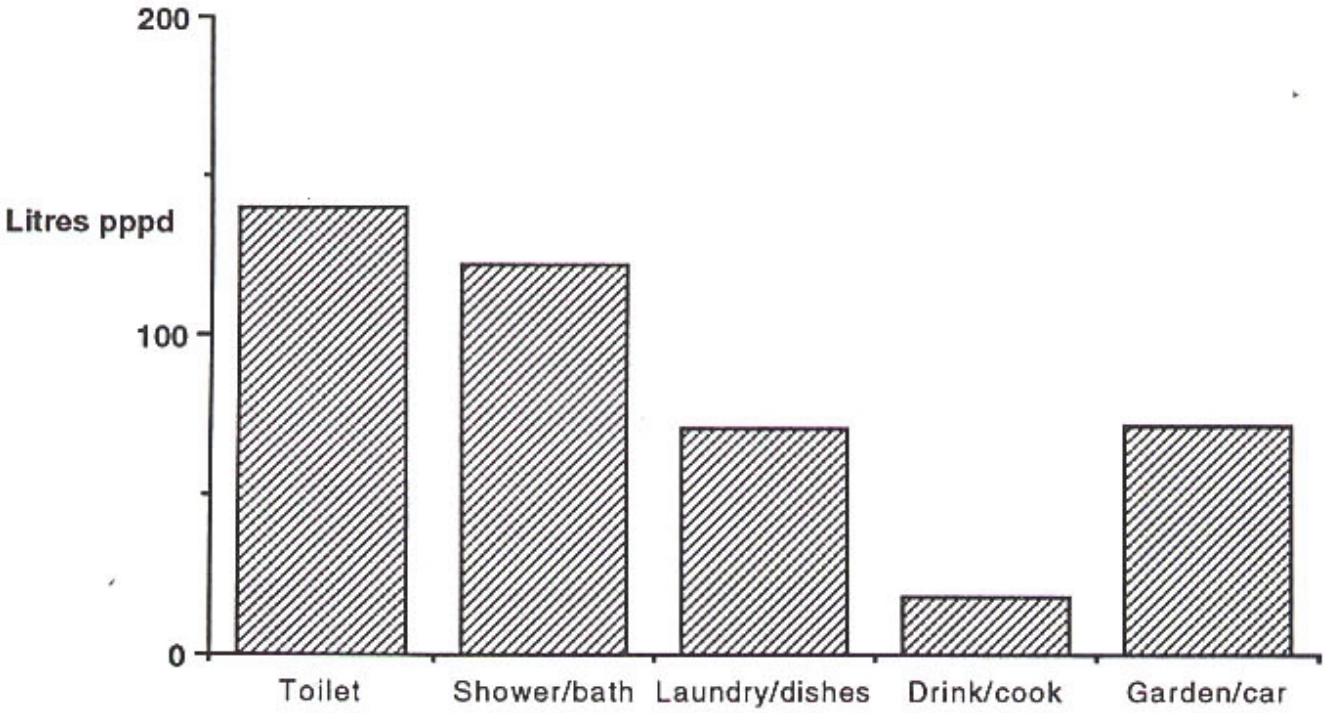
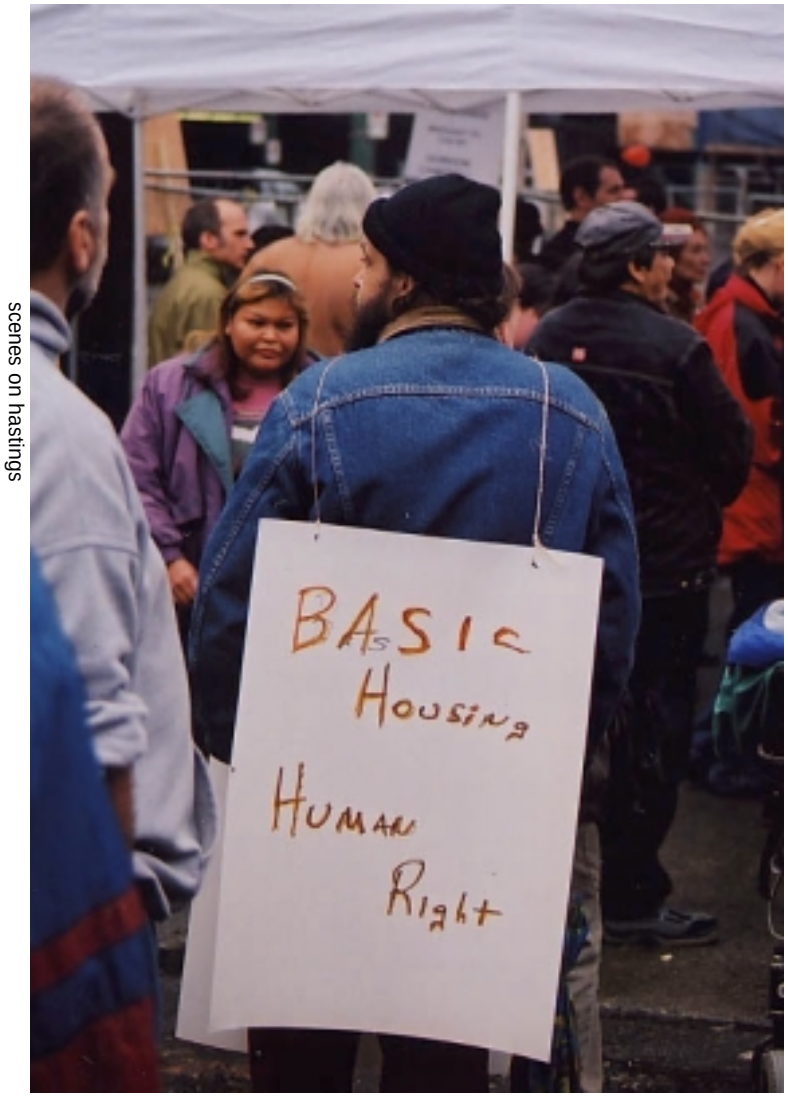


Figure 6.2 Personal Water Use in Canada. *Source*: Environment Canada 1990: 5



scenes on hastings

Housing Affordability

In Canada 4.5 million people are in 'core need'

Rents are rising in every one of Canada's 26 metro areas faster than inflation

Housing Policy

The federal government cut all new social housing in 1993, Provincial and federal governments cut 480.5 million from 1993 to 2000

Facts from National Housing & Homelessness Network

National

Regional

Local

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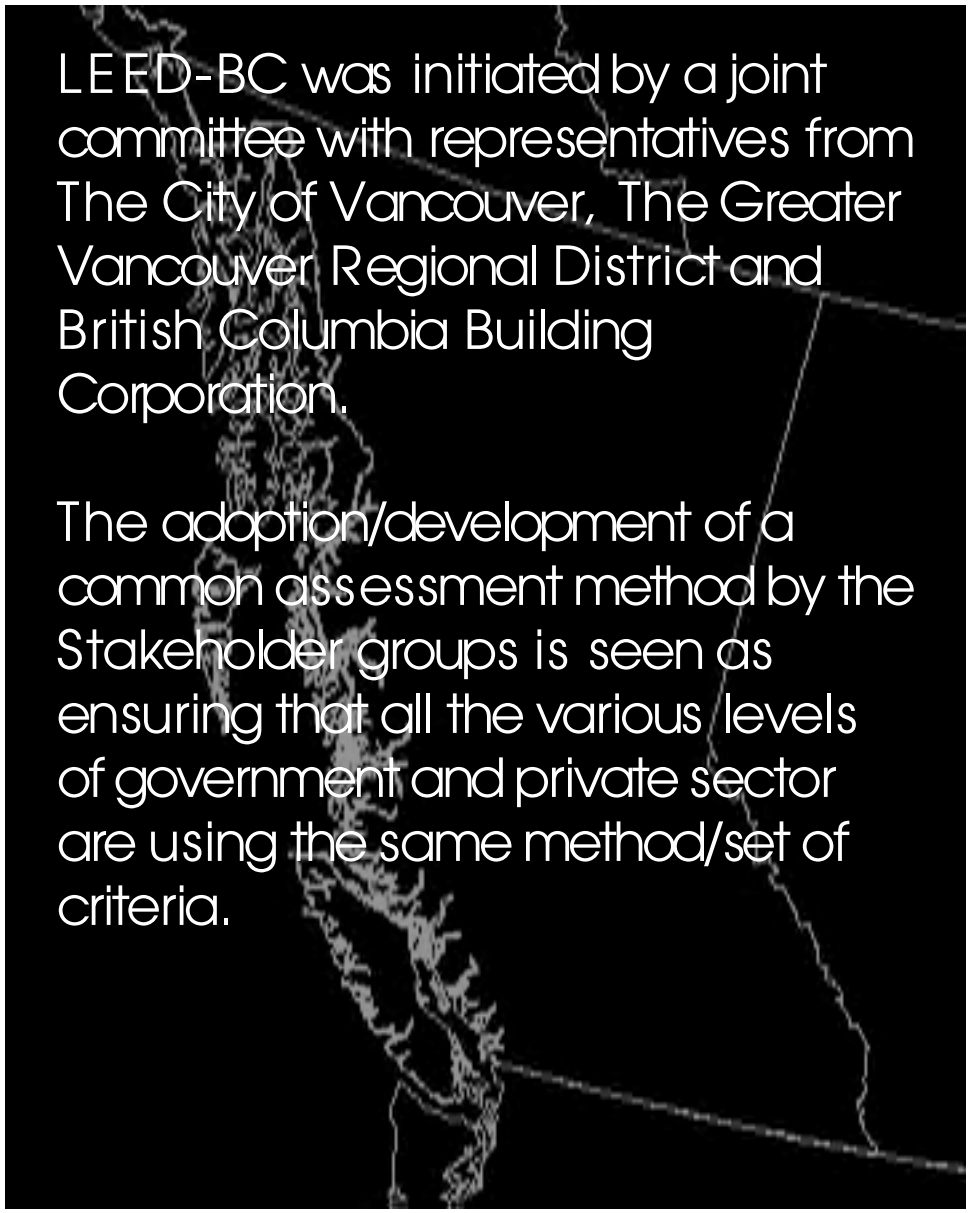
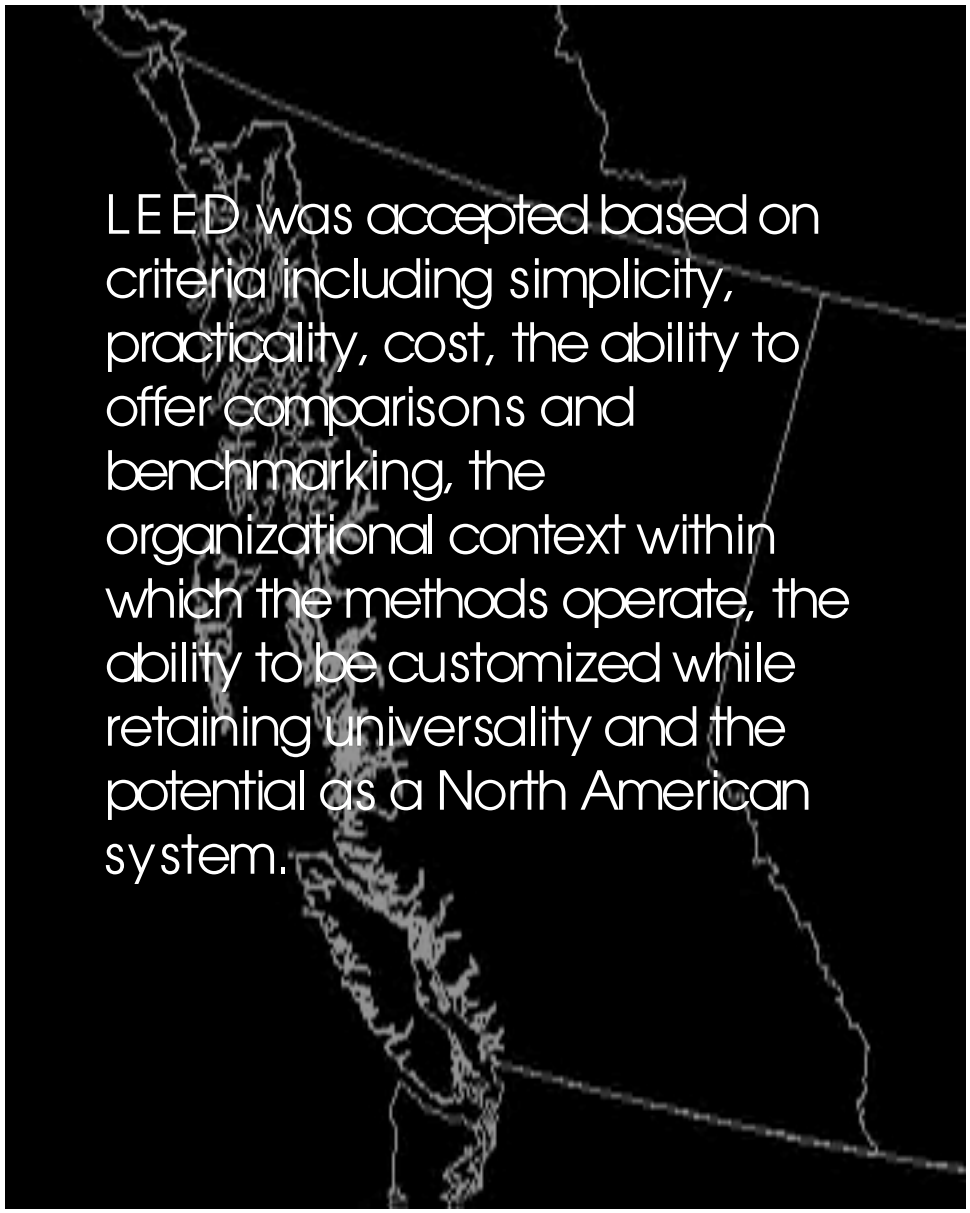
1987
• Canada and 138 other countries signed the Montreal Protocol on Ozone Depleting Substances, which established a timetable for the reduction and elimination of specific ozone depleting substances.


1992
•Canada and 150 other countries signed the Climate Change Convention, requiring developed countries to report on their actions with the aim of reducing emissions of greenhouse gases to 1990 levels by 2000 (currently ~13% higher)
• Canada signed the United Nations Convention on Biological Diversity, meant to guide the actions of governments and citizens to protect Canada's biodiversity and meet the commitments under the convention.


1997
•Canada and more than 160 other countries met in Kyoto, Japan, and agreed to targets to reduce GHG emissions. The agreement that set out those targets, and the options available to countries to achieve them, is known as the Kyoto Protocol.


LEED-BC was initiated by a joint committee with representatives from The City of Vancouver, The Greater Vancouver Regional District and British Columbia Building Corporation.
The adoption/development of a common assessment method by the Stakeholder groups is seen as ensuring that all the various levels of government and private sector are using the same method/set of criteria.


LEED was accepted based on criteria including simplicity, practicality, cost, the ability to offer comparisons and benchmarking, the organizational context within which the methods operate, the ability to be customized while retaining universality and the potential as a North American system.

The credits are organized in the six principal LEED-2 categories:

- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation and Design