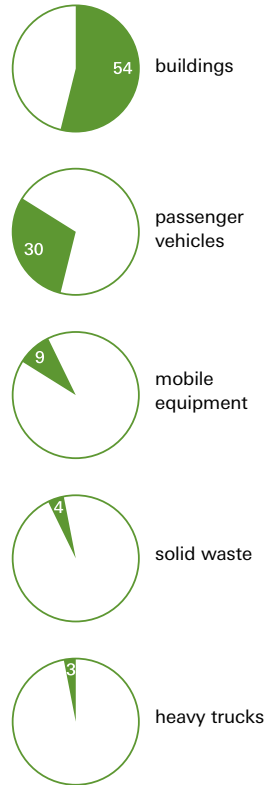


Life on this planet is in peril. The stability of the Earth’s natural cycles is jeopardized by the actions we have taken in the last century.

Where Vancouver’s greenhouse gas emissions come from (%)



Our development methods, sound as they seemed at the time, have wreaked havoc on our environment. Increased greenhouse gases (GHG), caused primarily by burning fossil fuels, threaten to heat the Earth to unprecedented levels. The world’s top scientists predict erratic weather, rising sea levels, drought and agricultural failure as a result. In short, the way in which we have used the planet for our gain may also be a means to our own destruction.

Contrary to popular belief, cars are not the worst GHG culprits. According to the City of Vancouver, buildings contribute more than 50 per cent of the city’s total GHG emissions. Most buildings, too hastily constructed, also waste valuable fresh water and have such poor indoor air quality and natural lighting that workers suffer from

mood disorders and lost productivity. In terms of waste, Industry Canada cites that about one-third of the material in Greater Vancouver’s landfill is demolition, land clearing and construction waste.

However, nothing is keeping us from changing these conditions and establishing a healthy and vibrant way of living. All the technology necessary to make the shift towards environmentally conscientious methods of building already exist.

The industry has already proven that an incredible 90 per cent diversion rate for waste on construction sites is possible. Wind and solar technology is available and already serving foreign countries very well, slicing their GHG emissions by a remarkable amount. Products and building methods have been designed and implemented to

improve indoor air quality and make day lighting a reality. Communities in which people can work, play and live within walking distances are emerging globally.

The environmental challenge we’re facing has been met with examples of astounding human innovation. Signs of a potential healthy future are emerging. It is possible to bring the building industry together to create sustainable communities that enrich lives today as well as those of future generations. Millennium Water, Vancouver’s Olympic Village, is an inspired example of a model neighbourhood striving towards sustainability. It demonstrates new and progressive design and construction standards that will help redefine the building industry over the coming decades – and contribute to a healthier world.

BUZZWORD: LEED

LEED (Leadership in Energy and Environmental Design) is a voluntary certification system for projects seeking to meet an established level of environmental performance. The Canada Green Building Council oversees the LEED certification process in Canada. A LEED project must comply with a set of criteria to meet one of four levels of certification: Certified, Silver, Gold or Platinum. The City of Vancouver is pursuing Gold designation for SEFC in a LEED for Neighbourhood Development (LEED-ND) pilot study. The LEED-ND criteria integrate the principles of smart growth, urbanism and green building into a certification system for overall neighbourhood design.

A Design Charrette is no Small Undertaking

In October 1998, the City of Vancouver Planning Department and its consultants organized a multidisciplinary design charrette to imagine what a sustainable neighbourhood might look like at SEFC. The purpose was to discover different urban design options that realized the best-practice objectives, sustainability-based principles and performance targets of the SEFC policy statement. (See page 20.) Spread over three days, the charrette involved 28 professional architects, landscape architects, engineers, developers and planner-regulators and 12 students.

Participants were asked to keep an open mind and work collectively, bringing a diversity of expertise to the dialogue. Guided by the redevelopment policies for SEFC, the group responded to the following

questions: What do we want for the site? What is important? What does the neighbourhood look and feel like? The answers were communicated verbally, in writing and through drawings, ultimately creating four different designs or vision solutions.

The primary issues explored through the charrette included land and water (fresh water, open space, soil); the built environments (public spaces, community facilities, streets/parking, buildings); building design and performance (energy, heights, site size, views); and wastes (greywater, blackwater, household and green waste).

During the three days of the charrette, participants worked and ate together as they brainstormed, sought team consensus, explored policies, and generated and tested ideas in

preparation for team presentations on the final day. An open discussion followed the team presentations. It included reflections on various ideas presented and on the opportunities and constraints provided by the policies that informed the charrette. The discussion provided valuable feedback for city staff in their ongoing policy development work.

A commitment to the guiding principles of sustainability was common in all of the designs. Differences in designs fulfilled the charrette’s goal of providing city council, staff, consultants and the larger community with various options. Recommended changes were made to certain city policies (including bylaws and regulations), plans, approaches and even to the mandates/functions of some city department/operational units.

A design charrette is no small undertaking; the successes and benefits are well worth the challenges and, when done well, can increase community learning about complex issues. For the City of Vancouver, this charrette successfully engaged a range of experts to collaborate and imagine how best to bring the vision for SEFC to life.

The strength of a charrette is that it brings together a diverse range of expertise and interests to collaborate on creating innovative design solutions that embody multiple objectives and mutual interests.