Vancouver city planners seeing green

Rule-breaking condo developments lauded for promoting new eco-density initiative

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VANCOUVER -- Two condo complexes that officials say broke "every rule in the book" of city building and planning are being touted as the new, green face of Vancouver's eco-density project.

The buildings were part of a citywide media tour yesterday, as senior Vancouver planners introduced the city's eco-density program at ground level.

City officials were lauded for allowing builders to violate standard rules in favour of unconventional use of land for more energy-efficient and less wasteful buildings.

In an eco-dense city, planners say, citizens will live closer together on less land, drive fewer cars, consume fewer resources and produce less waste.

One example of eco-density is on West 10th Avenue, where the modern four-storey complex called ROAR_one rises over the busy shopping area much like any traditional block of condos.

But once past the building's locked glass doors on the street front, visitors enter a common courtyard with a labyrinth of walkways to 10 two-storey homes. Each home is naturally lighted by energy-saving windows on three sides, and shielded from the elements by movable metal screens designed to conserve energy.

Koo's Corner on the east side is another example of eco-density, said its developer, Robert Brown. A condo complex of six homes built in the former Koo's auto shop, Koo's Corner incorporates solar water-heating panels on the roof, reclaimed materials on the inside and a heat-recovery ventilation system.

Vancouver planning director Brent Toderian told reporters the goal of the project is to make Vancouver a model in sustainability, an urban environmental leader in North America.

"We are not a sustainable city, and we can no longer pretend that we are," said Mr. Toderian, who added that if everyone in the world lived the way people in Vancouver live, humans would require four planet Earths.

"If we continue on our current path, we will lose the [city's] livability."

Vancouver launched its eco-density program on June 17, two days before 15,000 delegates from around the world gathered in Vancouver for the United Nations World Urban Forum on sustainability.

Eco-density will be raised again on Thursday, with a speakers series and a round of public consultations beginning March 3.

Vancouver is embarking on a grand project, several city planners said. But so far eco-density is more of a concept than a set of plans. The focus of eco-density seems to be aimed at increasing population density.

Currently, just 11 per cent of the city's 113 square kilometres of land are used for multiple-unit residences, Mr. Toderian said.

Along with reducing land use, he said, the city hopes to increase affordability for lower and middle-income residents.

The term eco-density was reportedly coined by a city employee, and evokes the concept of ecological footprint invented by William Rees, a University of British Columbia environmental economist.

Dr. Rees's footprint is a tool to analyze flows of energy and matter to and from a community, and then convert that information to the volume of land, water and air required from the rest of the world to support those flows.

Over the past 25 years, ecological footprint analysis has been adopted by cities and states around the world, and is a standard used by the European Union and United Nations to measure sustainability.

Using the analysis, one average Vancouver household consumes the resources of eight hectares of the world's total land, while in less-developed countries, an average household consumes about .01 hectares.

Vancouver's eco-density project resembles in some ways the One Planet program of the World Wildlife Fund in Europe, under which sustainable cities produce zero carbon emissions, no net waste, focus on sustainable transport, use sustainable building materials and local sustainable food sources and preserve nature and wildlife.

Chris Elliott, vice-president of the WWF in Vancouver, said the fund has been talking with officials in the city about the eco-density project "but we're not there yet." He said especially because of less-than-average use of public transportation in Vancouver, the city falls short of One Planet standards.

"Vancouver likes to think of itself as a very green place. In practice, our footprint is quite great, and certainly compared to small North American cities like Portland, Ore., and many European cities, on transport and eco-density there's quite a lot to be done."

Part of the problem, Mr. Elliott said, is the sprawl in Surrey and Richmond, and less planning elsewhere in the Greater Vancouver Regional District.

"There's a limit to what the City of Vancouver can do," he said. "You have to look at the GVRD; you can't look at the city in isolation."

The resident designer of ROAR_one, city architect Oliver Lang, said the complex could be much better but is an improvement over standards, which he lauded city officials for allowing the builders to violate.

"We need more flexibility in the bylaws," said Mr. Lang, who teaches at UBC's architecture school.

All new city buildings should be required to use geothermal energy instead of electrical or gas heating systems, Mr. Lang said. But in ROAR_one, he said, installing geothermal underground pipes, which draw energy from the earth, was considered too expensive.