

POSTED ON 28/03/07

CLIMATE FOR CHANGE

How urban sprawl goes against the green

Province's dream of slashing emissions rests with where newcomers choose to live

DEBORAH JONES

SPECIAL TO THE GLOBE AND MAIL

VANCOUVER -- Within a quarter century, more than one million newcomers are expected to settle on B.C.'s south coast between Pemberton and Hope. How and where they live will make or break the B.C. government's new plan to tackle global warming.

Will people flock to Vancouver's West End or Yaletown, Metrotown in Burnaby or downtown New Westminister? Utopian regional plans call for population growth in high-density, highly urban centres -- neighbourhoods where people would live in compact, energy-efficient homes, walk to nearby workplaces and shops, and easily get access to public transit.

Or will the people sprawl through Surrey, north along the Sea-to-Sky corridor and eastward in the Fraser Valley? Will they live in big energy-guzzling homes on suburban streets lacking public transit, and drive autos to distant workplaces, schools and grocery stores?

Premier Gordon Campbell has declared a provincial goal of slashing greenhouse-gas emissions to 10 per cent below 1990 levels by 2020. But that green dream relies heavily on how people live on the Mainland's south coast, where, say experts, massive changes are needed to regional infrastructure.

The recommended changes are so huge it would be easy to succumb to a sense of futility. "What is politically feasible is ecologically irrelevant, and what is ecologically necessary is politically impossible," said William Rees, an environmental economist at the University of B.C. and the inventor of the ecological footprint, a tool used worldwide to measure human impact on the environment.

Politics and personal choices are driven largely by economics -- and the structure of all economic incentives now will increase rather than decrease B.C.'s greenhouse-gas emissions, several experts told The Globe and Mail.

Without major smokestack industries, greenhouse gases are generated mostly from transportation and household energy use, with consumption of goods a distant third. And while polls repeatedly suggest that people now rank climate change as the most important public-policy issue, they also suggest that very few are willing to change their lives to stop it.

Globe British Columbia

TODAY
MUDSLIDES BATTER
AILING STANLEY PARK
IN VANCOUVER. S3



SPORTS
ROY HALLADAY LIKES
WHAT HE SEES AT THE
BLUE JAYS' CAMP. S4

THE GLOBE AND MAIL • CANADA'S NATIONAL NEWSPAPER • GLOBEANDMAIL.COM • WEDNESDAY, MARCH 28, 2007

How green are Greater Vancouver neighbourhoods?



West End — Central area, mostly high density housing

2,100 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **252,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **38%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION



Kitsilano — Central area, mix of housing

2,300 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **229,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **70%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION



South Granville — Inner suburb, mix of housing

3,600 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **118,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **14%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION



South Vancouver — Inner suburb, mostly detached housing

4,100 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **84,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **8%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION



Burnaby — Outer suburb, mix of housing

5,500 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **38,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **7%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION



Langley — Outer suburb, mostly detached housing

6,700 ESTIMATED ANNUAL WOODPILE AND WOODPILE GAS EMISSIONS (MT) | **26,000** NUMBER OF HOMES WITHIN 5 KM OF HOME | **3%** SHARE OF HOMES WITHIN 1 KM OF TRANSIT STATION

SOURCE: DMG

PHOTOS: DENIS GIBLIN FOR THE GLOBE AND MAIL

CLIMATE FOR CHANGE

How urban sprawl goes against the green

Province's dream of slashing emissions rests with where newcomers choose to live

BY DEBORAH JONES, VANCOUVER

With a quarter century more than one million newcomers are expected to settle on B.C.'s south coast between Vancouver and Hope. How and where they live will make or break the B.C. government's new plan to tackle global warming. Will people flock to Vancouver's West End or Richmond, Metro Vancouver or downtown New Westminster? Options against sprawl will be population growth in high-density, highly urban centres — neighbourhoods where people would live in compact, energy-efficient homes, walk to nearby workplaces and shops, and easily get access to public transit.

Or will the people spread through Surrey, north along the Sea-to-Sky corridor and eastward in the Fraser Valley? Will they live in high-energy sprawling homes on suburban streets lacking public transit, and drive cars to distant workplaces, schools and grocery stores? Premier Gordon Campbell has declared a province-wide goal of slashing greenhouse gas emissions to 30 per cent below 1990 levels by 2020. But that goal does not take into account how people live on the Metro Vancouver south coast, where, say experts, major changes are needed in regional infrastructure. The recommended changes are so huge it would be easy to see them as a series of fables. "What is politically feasible is ecologically irrelevant, and what is ecologically necessary is politically impossible," said William Ho, an environmental economist at the University of B.C. and the director of the ecological program, a tool used worldwide to measure human impact on the environment.

Cabbies go green

Taxi drivers' decision to turn to hybrid vehicles pays off at the pump, possibly paving the way for a future fleet of hybrid cabs. B.C. and personal choices are driven largely by economics — and the structure of all economic activities now will increase rather than decrease B.C.'s greenhouse-gas emissions, several experts told The Globe and Mail. Without major technological breakthroughs, greenhouse gases are generated mostly from transportation and household energy use, with consumption of goods a distant third. And while public transit may suggest that people use cars less, climate change is the most important public policy issue, they also suggest that very few are willing to change their lives to stop it. "There are incentives in consumer, not to consumer," said Lawrence Frank, who holds the Bombardier Chair in Sustainable Transportation at the University of B.C. Because of the high square-footage costs of urban living, it's cheaper

Series schedule

Monday: B.C. a carbonized path to a green future. Plus, one Vancouver family goes on a carbon diet to save money on gas emissions. Tuesday: B.C. is a province of green power — or is it? Plus, the links to air pollution and climate change. House guests will be taught on the lines of suburban. Plus, economic power and evolution in Vancouver's taxi industry. Wednesday: How B.C. businesses could turn their carbon into profit. Plus, the province's carbon score. Friday: The path to green. How B.C. can stop greenhouse gases. Plus, Part 2 of the carbon diet. Radio and TV: Listen to The Air Good Show on CFMT this morning, and watch CTV at 6 p.m. for more climate change coverage.

Series schedule

Monday: B.C. a carbonized path to a green future. Plus, one Vancouver family goes on a carbon diet to save money on gas emissions. Tuesday: B.C. is a province of green power — or is it? Plus, the links to air pollution and climate change. House guests will be taught on the lines of suburban. Plus, economic power and evolution in Vancouver's taxi industry. Wednesday: How B.C. businesses could turn their carbon into profit. Plus, the province's carbon score. Friday: The path to green. How B.C. can stop greenhouse gases. Plus, Part 2 of the carbon diet. Radio and TV: Listen to The Air Good Show on CFMT this morning, and watch CTV at 6 p.m. for more climate change coverage.

sustainable, said regional decisions now will affect B.C.'s carbon footprint for the long term, and most of the key questions involve transportation: "We can either have Los Angeles-style traffic jams or investment in public transport." B.C. Transportation Minister Edwin Baker recently said the government will accept most recommendations from an independent review of the Greater Vancouver Transportation Authority. It called for a revamped public transit system that would receive steady funds from a fuel tax, parking, property taxes and transit fees, and cover a vast area from Pemberton in Vancouver to Hope, serving a population expected to grow to 3.6 million people from 2.2 million within 24 years. But at the same time, the province is planning to expand highways and build the Port Mann bridge to provide B.C. with transportation gateway between North America and Asian markets. "We are faced with a provincial government hell-bent on increasing sprawl," said Dr. Frank. "Tell me what they're doing that is consistent with the facts."

See GLOBE on page S2

THOMPSON OKANAGAN

Super, Natural British Columbia

Return Golf Links

Mecca [mek-uh]
[as noun.] [a Mecca] Any place that many people visit or hope to visit: *Kamloops is a Mecca for golf enthusiasts.*

- Tobiano — Opens in June
- Talking Rock — Opens in August
- The Dunes at Kamloops
- Ravenhorn Golf Links
- San Paolo Golf Course
- San Rivers Golf Resort

BC's Newest Golf Mecca

golfkamloops.com

Book your golf getaway now!
1.888.232.6603

FEEDBACK TO GLOBE@GLOBEANDMAIL.COM

Abbotsford has one of Canada's highest population growth rates.

Chris Elliott, local vice-president with the World Wildlife Fund, which runs a One Planet program aimed at helping cities become sustainable, said regional decisions now will affect B.C.'s carbon footprint for the long term, and most of the key questions involve transportation: "We can either have Los Angeles-style traffic jams or investment in public transport."

"There are incentives to consume, not to conserve," said Lawrence Frank, who holds the Bombardier Chair in Sustainable Transportation at the University of B.C.

Because of the high square-footage cost in urban living, it's cheaper and logical to choose spacious suburban homes over urban areas, he said, even when factoring in the cost of cars.

"People could choose to live in neighbourhoods that don't require that they drive for all daily needs, with tremendous environmental benefits, but it would be their gift to society, a donation to society."

Vancouver is pushing to increase density, but it is just one of 22 jurisdictions in the Greater Vancouver Regional District, and no local body oversees the region from the Sea-to-Sky corridor to the north or the eastern regions of the Fraser Valley, where recent census data shows that

B.C. Transportation Minister Kevin Falcon recently said the government will accept most recommendations from an independent review of the Greater Vancouver Transportation Authority. It called for a revamped public transit system that would receive steady funds from a fuel-tax surcharge, property taxes and transit fees, and cover a vast area from Pemberton to Vancouver to Hope, serving a population expected to grow to 3.4 million people from 2.2 million within 24 years.

But at the same time, the province is planning to expand highways and twin the Port Mann Bridge to position B.C. as the transportation gateway between North American and Asian markets.

"We are faced with a provincial government hell-bent on increasing sprawl," said Dr. Frank. "Tell me what they're doing that is consistent with the talk."

For its part, the province predicts that more than 70 per cent of Lower Mainland travel will continue to be by road, and officials argue the Gateway project is necessary to move goods from the port of Vancouver and reduce congestion, especially because "rush hour conditions on the Port Mann bridge are approaching 14 hours a day," a transportation official said in an e-mail. He said the project will improve air quality by reducing idling, and accommodate High Occupancy Vehicle lanes, transit and a cycling network.

B.C. has been down these roads before. In 1996, the Greater Vancouver Regional District (GVRD) passed a livable region strategic plan, once praised throughout North America for protecting green zones and trying to channel population growth into urban centres. However, but few of its successes have come in the key area of public transit. Of the three rapid transit lines planned in the 1990s, said Johnny Carline, GVRD commissioner and chief administrative officer, "not one of them has actually been completed."

Only the RAV line from Richmond to Vancouver is now under way, with the once top-priority Evergreen line to the Northeast and Vancouver's Broadway corridor line languishing. A lack of money "has meant [that] progress in switching from single-occupancy vehicles to other forms of transportation has not been as fast as we would like," said Mr. Carline.

Dr. Frank said an attack on greenhouse-gas emissions would require changes in all levels of government and by businesses and individuals.

"Employers need to provide incentives for car pooling and locate business in walkable settings near transit," said Dr. Frank. "The government needs to provide incentives to live in walkable environments, provide more transit, and incentives to develop housing near transit. Governments need to reduce funding for highways, and to control outward growth so development is more focused, and governments need to change zoning."

Experts suggest specific changes that could be made without massive investment. For example, building codes that focus primarily on safety issues should also include energy conservation. About 40 per cent of all materials and one-third of energy used in cities are in connection with large buildings being heated wastefully, said Dr. Rees. "North America has the most inefficient building stock in the developed world. If you've got cheap oil and gas you can afford to piss it away to heat vast spaces."

Public agencies and private companies have set examples that save long-term costs and cut emissions. The University of B.C. upgraded a central steam plant used to heat a cluster of buildings and cut

greenhouse-gas emissions by as much as 20 per cent in eight years, said Jorge Marques, acting director of the UBC Sustainability Office.

The GVRD is investigating capturing heat lost in sewer systems, has worked with municipalities to encourage installation of solar panels on public buildings such as recreation centres, and is building a geothermal system, which takes natural heat from the ground to heat and cool a building at a new water filtration plant. The region is also producing power from a garbage incinerator, and capturing methane gas from wastewater treatment plants and landfills.

"The single most effective way of reducing greenhouse-gas emissions would be full social-cost pricing of fossil fuel," said Dr. Rees. "The price we pay for a litre of gasoline or a cubic meter of natural gas should reflect the cost of the damage caused by the use of that material. . . . if we were to do that, we would be paying \$3 to \$6 a litre for gasoline."

Currently, with built-in government subsidies for fossil fuels and no major political parties willing to impose a carbon tax, he said, it's unlikely that transportation habits in B.C. will soon change. "The first axiom of economics is if you underprice something, you can bet it will be overused. That's why we're driving vastly overpowered, fuel-guzzling automobiles."

Dr. Rees charged that the public is "basically ignorant" of the severity of the threat, and blamed a lack of political leadership and the news media for what he called a misguided attempt "to give a 'balanced' perspective on climate change when there's no dispute among the scientists. . . [in media reports on global warming] it's as if we're debating the existence of gravity."

He said while the green goals of B.C.'s government are the best in North America, Europe is making far deeper cuts to greenhouse gases. "We need politicians with the guts to move us forward."

Series schedule

Monday: B.C.'s uncharted path to a green future. Plus, one Vancouver family goes on a carbon diet to slim its greenhouse-gas emissions.

Tuesday: B.C. is a province of green power -- or is it? Plus, the limits to alternative energy and conservation.

Today: The battle to cut B.C.'s greenhouse gases will be fought on the lawns of suburbia. Plus, economics powers a green revolution in Vancouver's taxi industry.

Tomorrow: How B.C. businesses could turn their pollution into profit. Plus, the province's dirtiest dozen.

Friday: The path to green: how B.C. can slash greenhouse gases. Plus, Part 2 of the carbon diet.

Radio and TV: Listen to *The Bill Good Show* on CKNW this morning, and watch CTV at 6 p.m. for more Climate for Change coverage.

How green are Greater Vancouver neighbourhoods?

West End -- Central area, mostly high density housing

2,100

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

252,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

38%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

Kitsilano -- Central area, mix of housing

2,300

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

229,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

70%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

South Cambie -- Inner suburb, mix of housing

3,600

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

118,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

14%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

*****South Vancouver -- Inner suburb, mostly detached housing**

4,100

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

84,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

8%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

Burnaby -- Outer suburb, mix of housing

5,500

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

38,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

7%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

Langley -- Outer suburb, mostly detached housing

6,700

ESTIMATED ANNUAL WEEKDAY GREENHOUSE GAS EMISSIONS (KG.)

26,000

NUMBER OF JOBS WITHIN 5 KM OF HOME

3%

SHARE OF HOMES WITHIN 1 KM OF RAPID TRANSIT STATION

© Copyright 2007 CTVglobemedia Publishing Inc. All Rights Reserved.

globeandmail.com and The Globe and Mail are divisions of CTVglobemedia Publishing Inc.,
444 Front St. W., Toronto
2S9
Phillip Crawley, Publisher