

# *Ottawa Greenhouse Gas Roundtable*

## *Summary Report*

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## Introductory Remarks

COUNCILLOR MARIA MCRAE  
City of Ottawa

Councillor **Maria McRae**, chair of the city's environment committee, acknowledged the "exceptional group of people" who had gathered for the Ottawa Greenhouse Gas Roundtable.

Public response to the original Roundtable invitation was "overwhelmingly positive, and it shows us that our community's commitment to protecting and preserving not only the beauty of Canada's capital, but the health of our residents, is a priority for all of us," she said.

"I share that priority," and "I'm eager to work with my city council colleagues with a view to renewing both our corporate and our community emissions targets" as part of a long-term commitment to address climate change.

McRae said she hoped the day would deliver "practical and affordable solutions" that would support Ottawa's continuing efforts to reduce its greenhouse gas (GHG) emissions. "We at the city are doing our part, but we know much more has to be done," based on partnerships between municipal government, the private sector, and the community at large.

She said the results of the Roundtable would build on work already under way on Ottawa's official plan and its transportation and infrastructure master plans, all of which will set the stage for a renewed air quality and climate change management plan.

"We're committing to get this done by the end of the first half of 2014," McRae said. "We're going to task our staff to make that a priority," and "between now and then, we're going to keep making progress as a city."

## Panel Discussion

LYNN TYLER  
Facilitator

SHANNON JOSEPH  
Federation of Canadian Municipalities

COUNCILLOR DAVID CHERNUSHENKO  
City of Ottawa

GRAHAM SAUL  
Ecology Ottawa

JOHN MANCONI  
OC Transpo

RODNEY WILTS  
Windmill Developments

NANCY SCHEPERS  
City of Ottawa Planning and Infrastructure

DAVID MCLAUGHLIN  
Former CEO, National Round Table on the Environment and the Economy

BRYCE CONRAD  
Hydro Ottawa

CHRIS HENDERSON  
Lumos Energy

Facilitator **Lynn Tyler** introduced a series of five-minute panel presentations, followed by a round of audience questions and discussion.

**Shannon Joseph** said the Federation of Canadian Municipalities (FCM) advocates for municipalities with the federal government and delivers programs to enable municipal action on climate change. The Green Municipal Fund provides funding and knowledge services, while Partners for Climate Protection (PCP) leads communities through a process of assessing their GHG emissions.

Joseph identified two drivers of federal environment policy: alignment with U.S. policy, since the Canadian and American economies are so closely linked, and a preference for GHG regulation in key sectors over fiscal tools like a carbon tax, or market tools like a carbon trading regime.

Recognizing that municipalities “have direct or indirect influence over close to 45% of GHG emissions in Canada,” Joseph said the FCM’s program objectives focus on local governance as a focus for climate change mitigation and adaptation. With stable, predictable funding, the FCM can support infrastructure and capacity-building to help communities take action on sustainable transportation, energy efficient buildings, and waste management, all of which are critical pieces of the low-carbon puzzle.

PCP has 240 members among Canadian municipalities, and Joseph said Ottawa had earned recognition for attaining Milestone 5, the program’s highest level of achievement.

**David Chernushenko** identified a half-dozen steps Ottawa could take to strengthen its climate change programming, including:

- Allowing homeowners to pay for energy retrofits through their property tax bills, on a time scale that aligns the added cost with the dollar savings they achieve, through a system that costs the city nothing and allows both the benefit and the cost of the retrofit to stay with the home if the owner sells
- Energy retrofits in the stock of affordable housing owned by the city or the private sector
- Continuing energy retrofits of the city's lighting stock
- Recognizing the "right to light" for owners of solar heat or photovoltaic electricity systems that depend on incoming daylight
- Making cycling a more attractive option on a daily basis for utility purposes, including multimodal systems that enable transit users to ride their bikes for the last mile or kilometre of a trip
- Dimming the lights in municipal buildings, and in the entire commercial building stock, to the minimum required for safety, maintenance, and cleaning.

**Graham Saul** said public advocacy—much of it from participants who were in the room—had helped make the Roundtable happen. He acknowledged Mayor Jim Watson, Councillor McRae, and other city officials for making the day possible.

"We see the Roundtable today as the beginning of an exciting process, and the press release that was issued...made that very clear," Saul said. "[City representatives] have clearly stated that they want to renew the climate change plan within a year, and we're going to need everybody in this room to continue with the process over that time and help keep it moving forward."

Saul said the 2004 Air Quality and Climate Change Management Plan had all the important components of an effective GHG reduction strategy. Key elements for the next plan include:

- Clear analysis of the successes and failures of past city climate change plans
- A clear statement that the city has a legitimate role in reducing both corporate and community GHG emissions
- A clear statement that the city wants to be a leader in the fight against climate change, since "most Canadians live in cities... you can't build a better world without figuring out how to build a better city"
- Clear acknowledgement of the "overwhelming scientific consensus" on anthropogenic climate change and the "decisive role" of burning oil, coal, and natural gas
- Clear acknowledgement of the threats of climate change and the benefits of taking action
- A clear statement that all levels of government have a role to play in climate solutions

- Strong partnerships between the city and key stakeholders
- A plan that addresses both climate adaptation and mitigation
- Specific targets for reducing both corporate and community emissions, and a mechanism for monitoring progress against those goals
- A plan of action, with clear objectives and timelines.

**John Manconi** said transit rides by OC Transpo passengers replace 80 million car trips per year. “The more transit ridership we attract, the more cars we take off the road,” and if not for transit in Ottawa, “we’d be adding 30,000 additional tonnes of carbon dioxide (CO<sub>2</sub>) emissions per year.” So the company contributes to emission reductions in two ways: by offering an efficient, safe, green mode of transit, and by boosting efficiency in its own operations.

He said OC Transpo has met the targets in its emissions reduction strategy by introducing high-capacity articulated and double-decker buses, introducing ultra low-sulphur diesel fuel, training drivers to operate vehicles more efficiently, reducing temperatures in garages, changing parking procedures to lower trigger points for warm-up, and earning certification for two of its buildings under the Leadership in Energy and Environmental Design (LEED®) program. And in 2018, the new Confederation Line light rail system will become the backbone of the region’s transportation system.

But Manconi said OC Transpo must do more to get more commuters to use its services: “Each time someone decides to leave their car at home and take transit, GHG emissions are reduced immediately.” He said an expansion in park and ride lots, bike rack programs, real-time transit information systems, rider comfort and security programs and, soon, electronic fare payment will all make transit a more efficient, attractive option. For the future, the company is looking at ways of encouraging younger generations “not only to choose transit, but to become lifelong users,” by introducing wi-fi and other onboard features to attract and retain them.

**Rodney Wilts** said LEED buildings are a very tangible step to reduce GHG emissions, boost the economy, and make the city more competitive. He listed five opportunities for Ottawa to reduce its GHGs emissions:

- A Property Assessed Payments for Energy Retrofits (PAPER) program for single-family homes, multi-use residential buildings, and offices, like the one offered through CMHC
- A green express lane for proposed LEED buildings
- World-class demonstration projects, for which the Lansdowne Park redevelopment was a missed opportunity
- An Ottawa Centre EcoDistrict that would require retrofits to meet LEED gold or platinum standards and become Canada’s most cycle-friendly downtown
- Aligning property tax and development charges with the true costs incurred by the city.

“Urban developments are subsidizing suburban developments, green developments are subsidizing non-green developments,” Wilts said, “and the city, with help from others, needs to clean that up.”

**Nancy Schepers** said the city’s record investment in cycling, its green convention centre, its express lane for green buildings, the Ottawa River Action Plan, and the redevelopment of Lansdowne Park as the first application of a LEED neighbourhood approach add up to “a fundamental transformation that we can be proud of.” She said a sustainable, vibrant city is more compact, making it easier for residents to live within their means.

Schepers said the 12.5-kilometre Confederation Line will encourage increased transit use by lifting the capacity limit on the current bus system. The trains are expected to be 50% more efficient than originally forecast and will feature LED lighting, regenerative braking, and a 98% efficient electric drive system.

“Using transit, choosing where you live, and choosing to recycle are all important individual choices,” she said. “I hope we all continue to choose the right decisions.”

Although a great deal of climate action is needed at the municipal level, **David McLaughlin** said inconsistency has been a problem at the federal level, where governments have introduced six targets and three plans since 1992 but made very little tangible progress. Before it was shuttered by the Harper government, the National Round Table on the Environment and the Economy found that Canada will fulfill at best 50% of its 2020 target for reducing GHGs, based on programs already in place and those that have been discussed but not yet initiated.

McLaughlin attributed this paralysis to “the political economy,” noting that no one wants to pay more than they have to for economy-wide solutions like carbon pricing: Instead, governments pursue the easiest GHG mitigation measures, then stop. With provincial climate change plans “running out of steam” and the federal plan non-existent, he said it’s up to municipalities to take the lead.

With three hydro, two landfill gas, and multiple solar facilities in and around Ottawa, **Bryce Conrad** said Hydro Ottawa is the province’s largest renewable energy provider. Hydro has also provided \$4 million in energy efficiency incentives, covering efficient lighting and sensors, peak-saver thermostats, and replacement of old refrigerators. And the company is greening its own operations, recognizing that its gas-guzzling fleet accounts for 75% of its annual GHG emissions.

**Chris Henderson** said “failure is more common than success” in renewable energy work, but the projects succeed when they find the “sweet spot” that combines GHG reductions, economic development, and improved quality of life.

He said Ottawa could move in that direction by:

- Fostering collaborative leadership to build community and private sector support
- Planning for success

- Protecting ecological zones
- Offering choices to residents
- Investing in game-changers like a \$100 million active transit program
- Leveraging low interest rates and encouraging the private sector to invest in green projects
- Building on the provisions of the Algonquins of Ontario land claim settlement in June.

He invited participants to attend the Solar Soirée April 29 and help launch Ottawa's first solar beer.

### Questions and Discussion

A participant tried to ask McRae what the city had done with its past environment and GHG plans. "When is the rubber going to hit the road?" he asked. "We've all been here before." After much research and consultation, "we're still planning to widen the Queensway," when "if widening roads would relieve traffic congestion, Los Angeles would have the least congestion in the world." The moderator replied that questions were to be directed to session panelists only.

A participant noted that the Conservative mayor of London, UK had just announced a 10-year, £1-billion investment in cycling infrastructure, and asked Chernushenko about other jurisdictions taking similar steps. Chernushenko cited examples he'd encountered during the recent National Bike Summit in Washington, DC, including the Republican, ex-Marine mayor of Indianapolis who had increased the city's bike lanes from one to 70, en route to a target of 200. Or New York, where the city administration is committed to biking and other modes of active transportation because "there's nowhere left to grow."

Chicago Mayor Rahm Emanuel now hopes to attract high tech employees from Seattle by offering the benefits of downtown living, and Seattle is retaliating with its own cycling plan. "It's a quality of life issue," Chernushenko said. "I lost track of all the mayors who said it's about attracting the best and the brightest...It's no longer about how to get a big, cheap home and a highway to get me there. It's where is that quality of life," whether that means downtown living or a retrofitted suburb with more efficient mobility.

"If we are not a leader, we're going to get outpaced and actually lose people. So on a purely defensive approach, we have to do it."

A participant asked Henderson how the city would sustain the change that is needed on GHG emissions. "As a manager, if I want to not move something forward because I don't want it to have any steam, what do I do?" she asked, noting that the city has no remaining staff or budget for the GHG plan, and no pressing time frame in which to complete it. Henderson pointed to other city programs that have momentum, as well as private sector initiatives that support greenhouse gas reductions. "Be skeptical," he said.



“But if you can, get over the skepticism, be practical, and focus the existing momentum to make new progress.”

A participant described a new subdivision off March Road North that could be turned into a showcase for a project that is “not just another Kanata development,” by making the streets walkable and providing transit from the start. “This is our chance to get it right,” she said. Schepers said the last five to 10 years of city priorities have encouraged walkable, denser neighbourhoods with a wider mix of uses. “There’s demand for that kind of development. So when you see those things come together, it’s just phenomenal. It’s a sweet spot.”

A participant said decisions on urban densification are a central driver of GHG emissions and suggested a “radical rethink” of planning strategies to get beyond the impact of individual, smaller projects. Schepers agreed that higher-density communities have lower per capita GHG emissions, noting that the more compact footprint encourages and facilitates different modes of transportation.

A participant asked whether recent work on retrofitting suburbs would be reflected in the city’s updated official plan. Chernushenko said low-density, suburban industrial parks in the U.S. are converting to mixed use “because of all the things we’ve mentioned: Quality of life, and really inefficient use of people’s time” due to traffic congestion. He added that communities with “completely car-dependent design” are now shifting to a form of transit-oriented development that Ottawa will be embracing with the new Confederation Line stations at Blair, Cyrville, and Hurdman. “Having a transit station right there really changes the way we can look at the next most practical communities to build.”

A participant asked what cities can do about right to light issues. Chernushenko said there’s been very little activity so far. “Until now, sunlight has been seen as a nice thing to have. We like it,” he said. But with more homes adding solar collectors, the right to light becomes a much more immediate issue. He said Ottawa’s first step to address the issue would be study what other municipalities have done since, “with many of these issues, someone’s already doing it.”

A participant asked how OC Transpo is building faith in its new service among new riders and making room for them on the transit system. The other half of the challenge, he said, is to make it more difficult to drive a car than to step on a bus or ride a bike. Manconi said it’s unusual for transit agencies to survey anyone under the age of 18, but OC Transpo recognizes the need to attract lifelong users—using techniques like iPhone access to make the service accessible, and projects like the Confederation Line to increase capacity. By the time the full system conversion is complete, there will be more bike racks, a smart card program, park and ride lots, and careful attention to the transfer points between the LRT and other transit.

The goal is to “make it attractive, make it simple to use,” he said. As for disincentives, “when it comes to young kids, it’s the cost of owning a vehicle. It’s parking costs.” When

youth are asked how they would spend the money they could save by using transit rather than investing in a car, “it’s amazing the dialogue you get.”

Schepers said the city is slowing down its construction of new roads, and the new transportation master plan will include proposals to shift road capacity from peak hours to peak period. Transit carries 24,000 passengers per hour in each direction, compared to 2,000 in a typical highway lane, so the task ahead is to make transit, cycling, and pedestrian paths as widely accessible as possible. “Once the system is in place, we’re also putting in all the incentives to make sure the development complements it and creates the success we want.”

A participant asked what the city is doing to enhance urban forests and green spaces and prevent more parkland and wetlands from being turned into shopping centres and urban sprawl. Schepers said development is controlled through an official plan in which some areas are protected and others are developed, a choice that reflects the direction of city council. She added that city policy requires all staff to embrace sustainability in their day-to-day work, “so that means it’s a part of all our jobs, each and every day...that’s the best way to actually move the yardstick.”

A participant asked the nine panelists to list the one step they would each recommend to reduce Ottawa’s GHG emissions. Panelists responded with:

- Chernushenko: PAPER
- Manconi: More transit ridership
- Schepers: Light rail
- Conrad: Home retrofits
- Joseph: Densification
- Saul: Appropriate but rapid densification
- Wilts: PAPER
- McLaughlin: More transit ridership
- Henderson: Densification and solar beer.

## Luncheon Remarks

MAYOR JIM WATSON

**Mayor Jim Watson** thanked participants for their time, interest, and “commitment to the issues that we’re dealing with, with regard to greenhouse gases and climate change.” Ottawans are fortunate to live in a beautiful city with magnificent green spaces and waterways, but the city is always looking at ways to “work with residents to make green choices.” Among a series of environmental highlights from the first half of the current council term, Watson singled out the decision to build the Confederation Line as “one of the most significant environmental and economic game-changers” for the city.

By replacing half the buses that pass through downtown, the LRT will reduce Ottawa’s GHG emissions by more than 90,000 tonnes per year, Watson said. “This is one of the largest one-time reductions in transportation greenhouse gases and air pollutants in our city’s history,” and the \$2.1 billion investment was made possible by a shared commitment from residents and taxpayers and all levels of government.

“We can only succeed if we’re working collaboratively as a team,” he said.

“Environmental leadership is a moral and social obligation that crosses committee structures and ward boundaries.”

He added that the current council has committed to adding 2,243 park and ride spaces at a cost of \$19 million. “In practical terms, this means an opportunity for literally thousands more residents to leave their cars behind and take public transit.” The spaces are filling as quickly as the city can build them, and at an estimated 20 kilometres per trip avoided, each car represents 1.3 tonnes of GHG savings per year.

The city also installed a gas collection system that captures 47% of the methane released by the Trail Road landfill site. (Methane is 21 times as potent a greenhouse gas as carbon dioxide.)

Community GHG emissions in Ottawa increased 1% from 2004 to 2008, against a 5% increase in population, and Watson listed steps the city is taking to achieve long-term emission reductions. “Our city is going in the right direction, making decisions both big and small that will dramatically increase our environmental sustainability,” including:

- A unanimous council decision not to expand the urban boundary
- Phase III of the Ottawa River Action Plan, which calls for large containment tanks for heavy rainfalls that exceed the peak capacity of sewage treatment facilities
- A \$26 million investment in cycling infrastructure, the largest in Ottawa’s history
- A new charging station for electric vehicles, installed in partnership with Hydro Ottawa.

Watson said he was proud that Ottawa had committed to renew its targets for corporate and community GHG reductions. “Not only are we going to set the goals. It’s my

objective and our council's objective to meet and exceed the goals," and to those who've asked about recent layoffs in the city's environment department, "of course we'll have staff. We have to have staff to monitor this." He added that the new Environmental Stewardship Advisory Committee will "keep our feet to the fire" through a series of quarterly public forums. The city's objective is to refresh its greenhouse gas plan through 2013 and release a new plan in the first half of 2014.

## Keynote Speaker

ALEX WOOD  
*Sustainable Prosperity*

**Alex Wood** stressed the essential role of municipalities in reducing greenhouse gas emissions.

“If you take one thing away from what I say, it is that we cannot deal with climate change without solutions that come from the municipal sector” and deliver significant economic, social, and quality of life opportunities to the communities that embrace them. “There is a real virtuous cycle in having municipalities necessarily play the role they play, but also deriving substantial benefits from that activity.”

The big picture on climate change is mixed, Wood said. “We’ve got good and, in some cases, great provincial action,” including a carbon tax in British Columbia and a possible cap and trade system in Ontario, combined with “defensive federal action” that has produced very little consistency at the national level. The cost of that inconsistency has become clear in recent months, in the scrutiny that greeted the application to build the Keystone XL Pipeline through the United States.

“What’s happening with Keystone is in fact the cost of inaction,” Wood said. “The lack of a strong policy at the federal level is now becoming a competitive disadvantage for Canada.”

The commitment in the U.S. has been similarly mixed, but the big difference is the engagement President Obama expressed in his second inaugural address and 2013 State of the Union. Elsewhere, Wood said the European Union, China, and Australia are “taking very serious action at the structural level, in their big national policies, to address climate change and reap the economic benefits coming out of that action.”

On the horizon, the Intergovernmental Panel on Climate Change (IPCC) will release its fifth assessment report in 2014. “This report will essentially tell us that the issue, if anybody ever had any doubts, is more serious than ever, that human links are more established than ever, that the timeline is probably shorter than we’ve been assuming,” he said. This matters for elected officials, since publicity around IPCC reports “almost always results in a very high level of public interest and public demand for action.” In early 2014, Wood predicted, “we will have demand for action that we’ve never seen before. That’s something our elected officials need to be aware of, and need to prepare themselves for.”

The impact of climate change on municipalities is a question of numbers, he said: if they think they’re feeling a fiscal pinch now, “wait until climate change really hits.” The National Round Table on the Environment and the Economy (NRTEE) estimated that the annual cost of climate adaptation will reach \$5 billion in 2020, escalating to \$21 to

\$43 billion by 2050, and the weight of that adaptation will fall on city authorities and municipal infrastructure, both hard and soft.

But cities can also play a major role in mitigating climate change, with several major categories of emissions within their purview: transportation, buildings, waste, and to some extent, electricity. In a country where the 10 largest Census Metropolitan Areas account for 70% of GDP, many of the most important climate solutions will be found at the municipal level, and “those solutions represent economic benefits for our cities and our populations.”

But cities’ ability to tap those opportunities will depend on smart planning, smart infrastructure, and smart policies at all levels of government. “There’s a huge race on internationally for this kind of investment and economic activity,” led by countries that came out of the 2008/2009 recession with a focus on clean energy as the key to rebuilding their economies. Global clean energy investment is expected to reach \$3.9 trillion by 2050, and the NRTEE projected that Canada’s \$8 billion in low-carbon goods and services would grow to \$60 billion by mid-century.

“The [local] question is how much of that economy will be captured by Ottawa, and what set of policies, practices, and supportive activities our elected officials need to put in place to make sure we capture this benefit while addressing climate change.”

U.S. research also shows that clean technology investment leads to employment growth for engineers, labourers, and construction, “all things that Ottawa can and should aspire to achieve.”

To tap the low-carbon opportunities ahead, Wood said the city will have to:

- Decide the pace and form of development in a way that “integrates completely the implications of climate change from a resilience point of view,” installing infrastructure that can withstand a more severe climate while minimizing Ottawa’s greenhouse gas emissions
- Learn from model programs in other parts of the world, from congestion pricing to building standards, that deliver the highest impact at the lowest cost, recognizing that “someone else has done it before, someone’s done it right, someone’s done it wrong”
- Capture the opportunity to build a local economy based on innovation and knowledge by connecting to clusters the city has already put in place, including biofuels/biowaste and possible application of IT network infrastructure expertise to the emerging smart grid.

The electricity grid of the future will involve a high level of communication between generators and users, to allocate the available electrons more efficiently than ever before. So “think about what the strength has been in Ottawa as an IT centre,” he said. “What are all those Nortel guys doing right now? It’s essentially the same set of issues and problems.”

But Wood said the single biggest priority for Ottawa is to integrate a focus on climate change and GHGs with the rest of its planning.

“My number one ask would be to ensure that all the other plans being developed are very closely integrated with the climate change plan being developed on the other side,” he said. “The earlier that happens, the better. Otherwise, you’re making infrastructure investments that are not climate resilient, and that you’re going to have to change at some point because these weather events and other climate-related factors have made those investments essentially moot. It’s about being smart about the decisions we make, knowing what we know now.”

He added that the energy sector, other orders of government, and some other organizations use a shadow carbon tax of \$25 per tonne to establish a “notional tax” to guide infrastructure planning and capital investments.

In response to a question from the audience, Wood acknowledged “the absolute importance of energy efficiency” as part of any big-picture solution to climate change, particularly in the buildings sector. “We also know that those opportunities typically run into barriers that are economic and financial in nature, and that a lot of work needs to be done” on financial incentives and models.

He also stressed the need for consistent, long-term policy support: “When we had a federal incentive for [home energy] retrofits, all kinds of people made serious personal investments in getting training and certification,” only to be “left twisting in the wind when that incentive went away.” Through 2050, deep reductions in building energy use will also require longer-term changes in urban form.



## Enviro Cafés

In each of four discussion groups, city staff presented a set of prepared questions on which they were looking for participants' ideas and feedback, then opened the floor to moderated discussion. The questions were:

1. *What actions provide the biggest GHG reductions?*
  - *Some can be one large change, others are small changes adopted by many people*
2. *Which offer the fastest paybacks?*
  - *Council looks at a five-year payback*
3. *Which solutions offer the lowest barriers to uptake?*
- *Which ones entail limited behavioural change or lifestyle impact*
4. *How can efficient appliances and building features be promoted?*
5. *What are the opportunities for synergies?*

### Group # 1

- Based on a literature review, city staff identified the best paybacks on GHG reductions as:
  - Electronic equipment, lighting, vehicles, and heating and cooling in the residential sector
  - Building controls and more efficient heating and cooling in the commercial sector
  - Conversion of coal-fired electrical generation to natural gas, nuclear power, solar, and other renewables in the energy sector.
- A city staff member said GHG reduction measures with the lowest barriers to success have short paybacks and little or no impact on lifestyles, but require widespread adoption to have any measurable impact on emissions. A participant asked whether the assessment was based on full cost accounting or the impact on the adopter. The staff member said the approach varied among studies.
- A participant said the list of questions prepared by the city was “a travesty,” and asked: “If this is low-hanging fruit, why am I so short?” The participant said the single greatest GHG impact within the city’s jurisdiction would be to cancel the Alta Vista corridor.
- The city’s GHG data is at least five years out of date, making it important to look back before moving forward. Staff should be looking for a more systematic approach to GHG reductions before picking specific tactics, or asking citizens to.
- The climate plan must include serious attention to adaptation, since we know climate change is already happening.
- The climate plan should factor in the role of tree canopies in cooling cities and reducing GHGs. More trees in parks would help absorb increased storm water. The city should recognize the long-term value of a tree and credit residents for maintaining them.



- The city should save money on programs that subsidize vehicles and reinvest the savings in bicycle infrastructure, transit, and more walkable communities.
- The city has to organize meaningful consultations, not just “show and tells,” and consult earlier before plans are put in place.
- The city doesn’t need ideas on GHG reductions. It needs a structure to process, screen, and assess the ideas it has already received, then a commitment to “a real, hard target.”
- A “100% intensification factor” would reduce urban sprawl.
- City staff had considered a possible residential water rebate system for homeowners who reduced storm water runoff by maintaining green space, but the idea never made it into their final planning proposals.
- Transit should place less emphasis on park and ride lots at the end of east-west lines and treat rural areas in south Ottawa as transit hubs.
- Several participants focused on the benefits of energy retrofits, including bylaw measures to require green roofs or cool roofs on new buildings. A participant noted that assistance to homeowners wouldn’t be of much benefit to renters.

Specific action items included:

- Replacing the requirement for parking spots attached to all buildings with a property tax incentive for “soft” spots with permeable surfaces
- Encouraging retailers to use less packaging
- Building any future plan with measurable, triple bottom line targets tied to five-year horizons, with clear priorities and regular performance updates
- Extending the city’s current communications, which seem to be directed at residents, to include retail and commercial businesses, community associations, multi-residential complexes, and workplaces
- Reversing the hollowing out in which neighbourhood corner stores have been replaced by “swishy coffee shops,” then can’t be re-established because of local zoning
- Allocating funds from mandatory development charges to cycling or walking infrastructure, as well as or instead of roads
- Placing a minimum two-year moratorium on new roads and bridges
- A better effort by the city to determine the true cost of urban sprawl, and to consult more effectively with communities to understand the development that best fits each area.

## Group #2

- How do the city’s prepared questions get at the economic activity Alex Wood described over lunch, and set Ottawa on course for an 80% reduction in its GHG emissions by 2050?

- The technical questions in the consultation document aren't suitable for a public consultation. On the other hand, they're important questions, and they're the ones city councillors said they wanted answered.
- What are Ottawa's current GHG emissions, where do they come from, and what are the biggest sources? Changing light bulbs is an action with very low barrier to entry, but it will affect 0.0001% of the GHG problem. "If I need to attack a problem, I need to know what the problem is."
- Let's look at where we can have the greatest impact in our daily lives and in our jobs.
- In the two segments of the city's plan, corporate and community emissions, the questions to be answered are very different.
- Lifestyle changes require no investment capital, and the same physical facility operated in a different way can achieve major energy efficiency gains.
- Property Assessed Payments for Energy Retrofits have a low barrier to success. The group should report out that this is a viable, doable, short-term solution that requires little budget or staffing to implement. The city can adopt it on its own, since the province has enabled it, and it creates a dynamic where "inaction has an economic disincentive." The retrofits would make Ottawa more resilient, and therefore a more attractive place for people to live and work as climate impacts become more prevalent.
- Most municipalities don't measure consumption, but they have to be able to communicate residents' consumption footprints before encouraging lifestyle changes that reduce GHG emissions.
- In food production and consumption, a 50% shift from meat to dairy would have a greater GHG impact than local consumption. The city needs to reach "hundreds of thousands of people in Ottawa with this kind of message" through social marketing.
- Ottawa can address climate change by protecting the urban forest from the emerald ash borer and Class 1 farmland from development. "First, we have to maintain the biome we have."
- It should be an explicit expectation in every city employee's job that they will contribute to greenhouse gas emissions in whatever work they do. All city departments should look for the best low-carbon practices from around the world to guide the way they work.
- The city's 2004 climate action plan was a good document, but it expired in 2012 without much progress on implementation. The plan should be refreshed, not weakened, and it can and should inform all the Official Plan decisions that will be made before the new climate action plan is officially finalized.
- Ottawa should adopt a shadow price for carbon of \$25 per tonne.
- The city should adopt several quick, simple planning measures that wouldn't cost a lot of money: shifting dollars from roads to active transportation, embracing

suburban retrofits for density and mixed use, implementing Ontario Nature's plan for densifying Merivale Road, and dealing with right to light issues.

- All the ideas the Roundtable is coming up with will need public will and acceptance, flowing from a committed communications campaign that recognizes the emotional basis for peoples' decisions. "You've got to reach out to the people who are committed, but how many of us know people who are not committed, who are not onside, and if you mention something they just don't want to hear anything about it?"
- The relentless communication behind successful public health campaigns can be a guidepost for local climate campaigning. People may be sick of hearing about climate change, but campaigns could focus on the city we want Ottawa to be.
- A neighbourhood energy and GHG challenge, with energy monitoring and prizes for the best results (the deepest GHG reductions? The deepest reduction per unit cost?), would empower Ottawa residents to take decentralized action without necessarily relying on the city. A small fund would be enough to get a contest off the ground. The ultimate goal would be to "release the power of people to do something."
- For housing co-ops that have lost their federal funding, and particularly for co-op members living on lower incomes, installing solar panels is a way to reduce energy costs and boost affordability.
- The city should try to engage the National Capital Commission on dossiers like active transportation, as a way of leveraging the NCC's larger social presence in the city and building bridges between the municipal and federal levels.
- The biggest bang for the buck is in moving people out of cars and into transit. For all the talk about the Confederation Line, OC Transpo has been taking buses off the road and raising fares, "two things just designed to lower ridership." The bus company should do what it needs to do to get people into the system now, not just talk about how great things will be five years from now.
- Local school boards should set aside their competition for enrolment and do a better job of coordinating busing services. When students are old enough to use bus passes instead of yellow buses, they should.
- Climate adaptation must be a part of the city's plan, alongside mitigation. City engineers are still using the 100-year storm as the criterion for planning, but Ottawa has had three of them in the last seven years.
- Lower speed limits should be set, then enforced by the way streets are designed. Parking fees are ridiculously low. "We can provide all the incentives in the world, but if it's still easy and convenient to make energy-intensive choices, people will."
- Another participant countered that climate change action can't be portrayed as a war on drivers—if you vilify people, they won't join the effort. The solution is to build up the positive alternatives to owning and operating a vehicle, not to make it more difficult to drive—and to embrace transit and active transportation for everything people do, not just commuting to and from work.

- You get what you pay for, so it's essential to move on from the cheapest, easiest, fastest climate solutions to the tougher work that also has to get done. Planning and Infrastructure's answer to an earlier question on the design of new communities was not convincing, but "we have a chance to get it right," by making sure new subdivisions "all have sidewalks, all have schools, all have jobs, all have transit" from the moment they're built.
- Living patterns—whether at least one adult in a household lives near work, whether the kids walk to the local community school, whether to shop locally or drive to Walmart to save five cents on the dollar—are the big choices people can make after they've changed out light bulbs, turned down thermostats, and replaced their SUVs with hybrid vehicles. "You may not need to buy local beef, but you at least shop locally," a participant said. "Those are the big choices we need to start putting on the table."
- When roofs are being replaced, using very light colours can reflect heat away from the earth (as long as homeowners keep their white roofs clean).
- Property taxes should be adjusted to discourage inefficient land uses like parking lots.
- There are disincentives for developers that want to make their projects more sustainable: they have to incorporate features their competitors aren't paying for, then make the case for those features to inspectors who've never seen them before. Cities across the continent are levelling the playing field by offering fast-tracking and special assessments to projects that reduce GHG emissions.
- A sustainability program changes when it scales up, so an ecodistrict is a great way for a municipality to get out of its comfort zone and explore new options. Seattle, San Francisco, and Portland, OR have all done it.

The facilitator asked participants ideas to report back to plenary. Options included:

- A moratorium on new roads
- Following the available research on why the younger generation doesn't want to ride, making them a prime audience for a transit system that works for them
- Charging a supplementary gas tax and earmarking it to put more buses on the road
- Building citizen awareness of the success stories that are out there and the economic opportunities they represent
- Providing low-carbon incentives for builders
- Refreshing the 2004 climate plan rather than starting from zero
- Establishing a shadow carbon tax of \$25 per tonne
- Concluding the new carbon plan by the end of 2013
- Encouraging behaviour and lifestyle change
- Giving citizens feedback on their household carbon footprint
- Increasing public participation, education, and outreach.

### Group #3

- The latest data show Ottawa's GHG emissions increasing 1%, with per capita emissions in the middle of the pack for Canadian cities, at 6.8 tonnes CO<sub>2</sub>e.
- The city's GHG reduction target should be 90% by 2050 from a 1990 baseline, which a participant said is the target set by the Intergovernmental Panel on Climate Change. (*Editor's note: The IPCC target is currently 80%.*)
- Sustainability is an economic opportunity and a boon to business. Ottawa has not committed to being a leader, but the exodus of federal offices from the downtown core creates an opportunity for significant progress. All new buildings should be designed to a LEED standard, and as the community's second-largest user of space, the city itself should practice sustainable procurement to push the market.
- "The city should relearn how to listen," a participant said. "We have been talked to from 9:30 until 1:30 today," and "it's getting worse with every public engagement process." This event would not have taken place if community groups hadn't mounted a Twitter campaign to demand it.
- A measure of the city's limited commitment to engaging with citizens was that there were no plans to publish the official minutes of this meeting. (*Editor's note: This summary report was produced as an independent community product.*)
- The "non-converted" are the biggest obstacle to climate action, but it's difficult to open a conversation with people who are "afraid, vulnerable, and busy." The city should work with media and private public relations firms to build an emotional, ethical case for sustainability. Persuasive public campaigning should focus on the costs of inaction on climate.
- The city should promote pro-active efforts by citizen and publish business cases and success stories of sustainable projects.
- The suburban model is dysfunctional when it takes 30 minutes to walk to a convenience store and there are traffic jams at big box stores. Residents have to have a hand in retrofitting their own suburban communities.
- The city's vision has to span generations, not 20 years, recognizing that major behaviour change may take 50 years to complete.
- The city needs a carbon price, and in the interim should use a shadow price for planning purposes.
- The city should fast-track its climate action plan and rethink the schedule for revising the official plan so the two processes can be integrated.
- The climate plan should include energy retrofit incentives for homeowners, and possibly lower permit costs for efficient buildings.
- Walkability must be a factor in community design.
- Climate action will pay back dividends in the form of energy savings, better health, air quality, and quality of life. A PAPER-style program should be implemented quickly to reduce community GHG emissions, and new buildings should be oriented south to be "solar-ready" for the installation of panels. The ideas in the city's own green buildings report should be implemented immediately. Other

actions include: complete streets, active transportation investments, user-pay systems for roads, district energy systems, community-owned renewable energy such as the Ottawa Renewable Energy Co-op, and directing Hydro Ottawa to offer clean energy at a premium to customers who are willing to pay for it, using a model similar to Bullfrog Power.

- The city should create a tool for budgeting per capita GHG emissions.
- The official plan and the infrastructure plan must be integrated with the climate action plan. Now is the opportunity, and the annual budget for the plan is crucial.
- Public health has to be at the table for conversations about climate solutions and community GHG reductions.
- Bullfrog Power offers residents an immediate opportunity to reduce their GHGs. A number of cities, including Mississauga and Caledon, have “bullfrogged” their own buildings.
- We have to bear in mind that, with 25% of the population aged 65 or over and that proportion increasing, sidewalks have to be wide enough for scooters.

Individual, community, and city actions for the next five years could include:

- Adoption of a short-term goal of a 10-20% GHG reduction, with a focus on buildings and geothermal district heating, especially in new buildings
- Introduction of a congestion charge to reduce GHGs by another 30%
- Smarter integration of commercial and residential properties
- Requiring new buildings to be “green-ready”
- Plans and incentives to bring better jobs to the suburbs, thereby reducing commuting distances
- Speed limits and other measures to change traffic flows
- Better protection of green spaces, watersheds, and trees
- Segregated bicycle lanes on Kent St. and Lyon St. N.
- Lower monthly costs for OC Transpo bus passes, combined with ticket prices that are unchanged or higher
- Congestion charges
- A moratorium on new roads and highways
- Framing the public campaign in a positive way
- Seeking to brand Ottawa as the world’s greenest city
- A shadow tax on carbon
- Gaining political advantage by building on the growing momentum for GHG reductions
- Drawing attention to the climate impacts Ottawa is already seeing, while bearing in mind that guilt won’t motivate people to change their behaviours—they have to know how different options will affect their pocketbooks



- Gaining provincial support for a City of Ottawa Act that would provide the autonomy to do what needs to be done locally
- Building public engagement as a way of distributing political power back to the community level, finding the best ways to address GHG emissions, then reporting results back to city council
- Including measurable gains in public awareness as one of the core indicators for the success of the next climate plan
- Making transit free, or at least affordable, for families, and making all buses free during non-peak hours
- Making a communications specialist available to help implement the climate plan, just as the Mayor's office and Ottawa Public Health have access to communications support
- Using a social finance model to help engage citizens in GHG reductions and leverage long-term, low-carbon investments at the local level
- Planning for more frequent, more intense storms.

#### Group #4

- The city must apply a climate or sustainability lens to all its plans, similar to the accessibility lens it already uses, looking for "cross-cutting drivers" to ensure that climate impacts are taken into account when any program is implemented.
- An accessibility lens is also important to the climate plan itself. People who may walk everywhere because they can't afford transit, and home retrofits aren't always possible for retirees or others living on low or fixed incomes.
- Ottawa's efforts should be benchmarked against initiatives in other capital cities, beginning with London, UK's £1-billion cycling infrastructure announcement.
- Rather than taking a whole year to reinvent the wheel, Ottawa should rework its existing climate plan, while adding benchmarks against which progress can be measured.
- If the climate plan is delayed too long, councillors will be preoccupied with the election when it's time to get anything done.
- Incentives and prizes would encourage people to achieve "disproportionate positive outcomes" with small initial investments.
- EcoDistrict Ottawa could be a strong example of urban planning that supports GHG reduction objectives. Innovative or collaborative elements could include district energy systems, advanced sustainability practices for business, and a deliberate effort to bring people together. It may be counterintuitive that EcoDistrict chose the area of town with the highest concentration of businesses, when more emissions come from the residential sector, but the core area does have a high concentration of old, run-down buildings in need of retrofit.
- The Bayview Yards offer a huge opportunity for eco-efficient, liveable, intensified urban development. But there's been no mention of sustainability or GHG reductions in planning sessions so far.

- The city's cost-benefit analysis is based on a very narrow review of current literature. The Official Plan should be reviewed through the lens of the existing climate plan, and the city should also determine why the 2004 plan fell short of its targets.
- The City Stream Watch Program, which mobilizes more than 500 volunteers every spring and summer, points to the opportunity for Ottawa to crowdsource its data collection on GHG reductions. In a more collaborative relationship, the city and the wider community could sort out all the other ways in which residents could help staff tackle the climate challenge.
- Regular citizens can't afford to pay more taxes, and even if they can, they don't want to. But equitable taxation and tax breaks for CEOs are a problem.
- The city is always pushing people to do their part, but the city has to provide the infrastructure—for example, by adopting a cradle-to-cradle approach to resources, including e-waste.
- Participants suggested three specific projects the city could complete in the next year:
  - Positioning Hydro Ottawa to work with farm producers to recover methane gas
  - Using city facilities like the Tom Brown Arena for park and ride lots, rather than buying new property
  - Building on success stories like Windmill Developments to help other developers see the competitive advantages of green neighbourhoods, including faster sales and lower long-term maintenance costs.
- Local food shopping could put millions of dollars into the local economy.
- The city should not be touting nuclear energy as an alternative for the energy sector after the province had to pay a multi-billion-dollar retirement charge for past projects.
- In transportation, the city should focus on urban air pollution as well as GHG reductions and develop a plan to shift bus and taxi fleets away from fossil fuels.
- The city's new sustainable procurement guideline will be published soon.