

Let's Transform TO! Brainstorming for a Sustainable City

Sat. April 16th, 2016 | Theatre Direct, Artscape Wychwood Barns

Report summary by Christelle Broux



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1. Context:

The City of Toronto has set a greenhouse gas emissions reduction target of 80% by 2050, and is currently seeking community input for its climate action plan through [Transform TO](#) community conversations. In recognition of Toronto’s goal to include health, equity and prosperity in its climate plan, [Green Neighbours 21](#) (grassroots neighbourhood organization) brought together community members to generate additional ideas to feed into the city’s plan. Based in Ward 21, Green Neighbours hosted an open space style event to “brainstorm” ideas for a sustainable city. Participants packed the Wychwood Barns theatre with energy and enthusiasm; the results of their discussions are summarized in this report for the purpose of fostering a greater understanding of community inputs to sustainable city building.



2. Presentation: City of Toronto Toronto Environment & Energy Office

- Linda Swanston presented the challenge and opportunity of the city’s Transform TO initiative as a means to address climate change
- Introduced status of Toronto’s emissions profile and programs
- Emphasized necessity of local action to build on Toronto’s current environmental initiatives; inclusion of social equity considerations
- Community engagement strategy and participatory planning will be essential to ensuring success



3. Open space “visioning” session

- Green Neighbours organizer Paul Antze asked participants to close their eyes and envision what Toronto will look like in 20-50 years; how will we move around? What will our food systems look like? What kinds of jobs will be available, and will our economy look the same?



- Community members were then invited to share their visions of a futuristic Toronto and what they think it should look like, which included:
 - **Geothermal neighborhood district energy retrofits**; utilizing public space (streets) to power residential, commercial buildings. Increase resilience through localized power sourcing
 - Buildings could be below ground to reduce heating and cooling energy needs; would need to pipe in air and light for **alternative living spaces**
 - There will be **gardens** everywhere to make use of urban space and increase local food consumption; solar powered green houses, vertical gardens, more opportunities and support for urban agriculture
 - Our economy will have transitioned, there will be **increased trading and shared goods**; perhaps monetary transactions will play a different role
 - Urban space will be maximized; alleyways will serve to accommodate smaller vehicles as well as **vibrant community gathering spaces** with amenities such as gardens and playgrounds
 - Food will be sourced locally to a greater extent even throughout winter; employers could host “**preserving parties**” to encourage social acceptance and interest in preserving food, reskilling for adaptation to changing food landscapes

4. Brainstorming Phase 1: key ideas

- Participants were asked to reflect on the vision that was put forth and come up with ideas for how Toronto can get there. Ideas were grouped into 8 areas:

1.) Geothermal/district energy planning support mechanisms	2.) Increase transparency/accountability of carbon footprints generated	3.) Green Building standards and home energy assessments	4.) Urban agriculture/rain gardens – providing more support for these ventures
5.) Managing low carbon transportation and behaviour change	6.) Community bike shops – strengthening cyclist networks	7.) Green transport – municipal level actions	8.) Schools as hubs, integrating as multi-use facilities

5. Brainstorming Phase 2: participatory group discussions

- Group discussions for each idea/area were led by designated facilitators; participants were free to drop in to several groups to provide their input where they felt they could contribute most. The room reorganized into 8 groups where ideas were discussed in greater detail by building off individual suggestions. Facilitators recorded these discussions, summarized below. Photos from the event:



- 1.) Geothermal/district energy planning support mechanisms (Facilitator: Christelle Broux)



- **Identified problem:** city is running on natural gas as a transition fuel to replace more carbon-intensive energy sources. Will need to supply energy from more renewable sources at some point, how do we plan for that?
- **Objective:** to have carbon-neutral regional/district supply for heating and energy needs. Recognize that neighbourhoods have different configurations and may not be suited for a prescribed energy model, but should begin planning options to accommodate these differences and include them in the goal of establishing localized energy sites.
- **Brainstorming:** renewable alternatives to natural gas include geothermal, as well as an emerging technology known as “air source” energy (commercialization still in the works)
- Group decided to focus on geothermal – there have been pilot projects in Toronto regions such as Cabbage town and Christie street, could contact them to build on their research and expand geographic coverage
- Some municipalities in Germany have taken this community approach, with neighbourhoods developing their own plans for localized energy through participatory engagement
- **Suggestions for City of Toronto:**
 - ⇒ Offer bonds to neighbourhood residents to finance district geothermal energy projects that would pay out over time (20-30 years)
 - ⇒ Streamline relevant regulations to facilitate uptake of pilot geothermal projects, as well as solar thermal and PV projects. This would help to achieve economies of scale for localized renewable energy projects
 - ⇒ Consider the role of the private sector for upfront capital provisions, while recognizing the need for projects to have community ownership component
 - ⇒ Develop distribution framework and refine for different district configurations (i.e. residential, commercial, industrial)
 - ⇒ Cooperate with gas distributors to build on and repurpose existing infrastructure
- **Other considerations:**
 - ⇒ Beyond geothermal, district heating could be provided by sustainable biomass power operations using co-generation models (CHP – combined heat and power)
 - ⇒ Partner with city owned sewage/waste water treatment plants/compost facilities to capture methane emissions for energy, maximize efficiencies.
 - ⇒ *Group members: John Paul M., Richard G.*

- 2.) Increase transparency/visibility of carbon footprints generated (Facilitator: Mariko Uda)



- **Identified problem:** there is a disconnect among the general public regarding the quantitative GHG emissions impact of choices made at the personal and business level. Behaviour change starts with being informed, how can we increase visibility of consumer choices while connecting embedded emissions directly to climate change?
- **Objective:** to have heightened public awareness of the relative emissions associated with individual/corporate consumer choices, in order to incentive behaviour change and shift towards low carbon consumption patterns. This objective should be pursued as a complementary measure to the city's GHG emissions reduction strategy, recognizing the element of accessibility to low carbon options for low income groups. Transparent disclosure of emissions by corporations should also be approached through incentivizes that would encourage simultaneous efforts to achieve carbon neutral operations.
- **Brainstorming:** labelling is an effective public awareness tool – for example: calorie labelling for better health choices is now a social norm.
- Another initiative by the organization [Our Horizon](#) is seeking to equip gas pumps with warning labels in order to inform consumers of climate change impacts. But what about the carbon footprints of everything else?
- Group focused on the various ways to go about labelling; should there be rations or “carbon quotas” for citizens? How far is too far? Need to make low carbon choices equitable (consider low income groups).
- **Suggestions for City of Toronto:**
 - ⇒ Conduct an overview analysis of carbon footprint calculation tools relevant to consumption, identify gaps and strategies to increase number of products/actions with visible emissions “labels”
 - ⇒ Support entrepreneurial ventures that partner with “green” businesses to include emissions reductions on product labels (emerging one – [Green Story Inc.](#))
 - ⇒ Require businesses to undergo carbon audits to increase transparency and encourage greater environmental/social responsibility and accountability
 - ⇒ Foster carbon footprint awareness through public engagement
- **Other considerations:**
 - ⇒ Group decided to follow up through a draft letter to the city that will articulate the need for increased visibility of embedded carbon emissions, to be accomplished through carbon labelling
 - ⇒ *Group members: Phillip Girard, Rebecca Lester, Prem K*

- **3.) Green Building standards & home energy assessments - combined (Facilitator: Jim Eager)**



- **Identified problem:** a sizable percentage of Toronto’s emissions come from buildings, need to accelerate retrofits in order to maximize energy efficiency (low hanging fruit). As well, people don’t know the true emissions from their homes and this contributes to disconnect between energy consumption and generated emissions/associated impacts.
- **Objective:** to reduce emissions from buildings through concerted efforts to incentivize greater transparency of home energy consumption as well as strengthened measures for greener buildings.
- **Brainstorming:** two groups combined to discuss the converging objective of reducing emissions from buildings; focus was around identifying benefits to justify proposal
- Idea is to motivate home/property owners to take action on energy efficiency and reduce their fear/apprehension, facilitate building retrofits
- **Suggestions for City of Toronto:**
 - ⇒ Require mandatory energy assessment at time of home/property sale
 - ⇒ Benefits include modest cost (<\$100);
 - ⇒ Increased transparency of energy costs;
 - ⇒ Creation of employment opportunities for energy analysts (‘green jobs’)
 - ⇒ Educating property owner/purchaser of associated energy consumption costs & savings as well as necessary steps required for effective cost/energy efficiencies
 - ⇒ Creation of useful benchmark for comparison of energy use between buildings of various sizes across different cities
 - ⇒ Ties in to Toronto’s low-interest loan program for home energy retrofits and the idea of pricing carbon – incentivizing energy efficiency
 - ⇒ Improve building standards by
 - ⇒ Expanding items in mandatory [Tier 1 regulations](#)
 - ⇒ Mandating some of the voluntary Tier 2 items and/or increasing incentives for compliance with voluntary items
 - ⇒ Lobbying Province of Ontario to revise building code to incorporate Tier 1 and 2 items
 - ⇒ Close loophole allowing private garbage collection for multi-residential buildings
- **Other considerations:**
 - ⇒ Make smart meter data available as part of energy assessment strategies; support entrepreneur ventures aiming to increase visibility of home energy use
 - ⇒ Group will follow up to consider potential next steps (*Group members: Hassan, Sheila, Lyn, Elizabeth*)

- 4.) Urban agriculture/rain gardens – provide more support (Facilitator: Sandra Campbell)



- **Identified problem:** increasing food security in cities requires maximizing the agricultural potential of urban greenspace; this should be pursued alongside climate change/stormwater mitigation design measures that work with nature.
- **Objective:** to increase food security, community connectivity, and accessibility to local food, alongside city's goal of adapting to climate change (higher food prices) and mitigating impacts (extreme weather and floods, declining pollinator health). Ties in with reducing emissions by reducing the distance food travels from farm-to-fork.
- **Brainstorming:** greenspaces have great potential – everything from backyards, rooftops, and gardens/unused lots in churches, schools, hospitals, and parks.
- Group discussed design considerations for local growing; using native seeds, supporting seed exchanges for increased diversity and resilience (such as [Toronto Seed Library](#)), irrigating using rain water, soil and water testing, more vertical gardens (trellis fences)
- City will require more green/blue infrastructure to mitigate flooding on streets and basements (will need to change building codes)
- Example- city cistern at 146 Vaughan Rd. (designed by [Nelson Wong Architect Inc.](#))
- **Suggestions for City of Toronto:**
 - ⇒ Increase financial support for existing local/community growing initiatives (seed exchanges and pollinator gardens with stormwater management qualities)
 - ⇒ Designate strategy to recruit and train Community Urban Farming Mentors to assist in design, support, and administration of urban agriculture initiatives; partner with city councilors (potentially ward based)
 - ⇒ Bring community kitchen programs to schools (serving as community hubs) to increase cooking skills using local ingredients, where mentors could also lead workshops on other skills such as preserving and gardening (similar to existing programs led by [The Stop Community Food Centre](#))
 - ⇒ Community/ward based workshops on green/blue building codes, how residents or property owners can use stormwater management infrastructure to mitigate street and basement flooding (ties in with climate change)
- **Other considerations:**
 - ⇒ There was great enthusiasm surrounding public engagement through Food & Water Community-led tours, including one in Ward 21 on August 28th and the upcoming Jane's Walk in Nordheimer Ravine on May 7th
 - ⇒ *Group members: Susan Aaron, Nelson Wong, Helen Mills, Sharon Marcus, Priscilla Kalevar, Niki Andre*

- 5.) Managing low carbon transportation & behaviour change (Facilitator: Susan Ludwig)



- **Identified problem:** need to reduce automobile-focused transportation in order to reduce emissions in this sector, do this by creating financial incentives for behaviour change. Problem requires revenue, what opportunities exist for carbon pricing in line with the “sin tax” approach?
- **Objective:** to enable green responses (i.e. a shift towards low carbon transportation) and generate revenue; need to be conscious of health, environmental and social equity elements to avoid disproportionately affecting low income groups
- **Brainstorming:** what will transportation look like in the short term and long term (2050)? Group focused on the present, while recognizing that strategies will need to be scaled up over time as low carbon transportation management is integrated into regional planning efforts.
- Discussed issue of construction and industrial vehicles inhibiting public transit frequency and access, ways to reduce physical obstruction and ease transportation flow.
- **Suggestions for City of Toronto:**
 - ⇒ Develop and implement a “carbon reduction / convenience fee” by charging businesses that offer drive-through services; while this won’t eliminate driving, it serves as internalizing the external environmental/health costs of idling vehicles and may incentivize a reduction in the use of drive-through services
 - ⇒ Create an educational campaign regarding the health impacts of idling in order to encourage walking and cycling; promote benefits including environmental, family health, community building
 - ⇒ Partner with communities to create “Walking Bus” supervisors that can facilitate children in walking safely to school, ease parental fuss of driving; build connectivity and trust vs. fear. Could offer this as a volunteer hour opportunity for students
 - ⇒ Make streets accessible for all abilities and ages (guiding principle) through creation of more benches to encourage rest, social gathering, and visibility
 - ⇒ Install road sensors in cycling and transit lanes that will charge levies to vehicles if they obstruct flow for too long
 - ⇒ Construction (and other) city permits – allocate a portion to go towards greening transportation, include a requirement for vehicles to park outside of commuting corridors when not in use in order to reduce vehicle emissions and facilitate flow
 - ⇒ Improve coordination of road closures from construction so that they do not coincide with subway closures; ensure this does not additionally overlap with large events
- **Other considerations:**
 - ⇒ There needs to be greater land use planning coordination at the provincial level to ensure new communities are not created using automobile-dependent spatial configurations; use transit first approach
 - ⇒ Complexity of sin taxes and social equity; large road infrastructure projects paid for by Toronto taxpayers disproportionately benefits commuters from outside municipal boundaries. Implementing road tolls/carbon pricing needs to take a holistic approach in looking at which demographics use roads
 - ⇒ *Group members: Jeanne, John, and Jeremy Sandler*

- **6.) Community bike shops – strengthening cyclist networks (Facilitator: Madison Van West)**



- **Identified problem:** need greater access to community bike shops across the city in order to remove barriers to cycling; would facilitate low carbon transportation.
- **Objective:** to create greater support for community based bike shop spaces in order to advance cycling uptake in the city; beyond existing focus on cycling infrastructure. Connect network of shops throughout Toronto – one in each ward.
- **Brainstorming:** wouldn't it be great if all communities had equal access to cycling skills training such as all ages bike lessons (fostering knowledge of safety, hand signals, your rights as a cyclist) as well as the chance to be mentored through community bike rides, and having access to space for DIY repair services
- Currently, there are 5 community-based cycling organizations, 1 city funded (all in the downtown core), policy needs to change to incorporate space for community projects all over the city; group emphasized space as the crucial component, inexpensive ideas such as repurposing shipping containers
- Model for community bike shop exists, look to [CBN \(Community Bike Network\)](#), [Bike Pirates](#), [Evergreen Bike Works](#)
- There was lots of discussion surrounding ideas on how to move community based cycling initiatives forward, as part of broader complete streets strategy (other aspects include wider sidewalks and pedestrian friendly infrastructure)
- Also discussion of the general need for the city to recognize cycling issues on the same level of priority as driving issues, and the need for youth targeted engagement
- **Suggestions for City of Toronto:**
 - ⇒ Simplify the process (i.e. remove red tape) for small community groups to acquire affordable bike shop space and remove funding barriers where possible
 - ⇒ Improve function of Toronto cycling app/311 to allow cyclists to report infrastructure damage/improvement areas to the city (ex. By dropping a pin on a map or uploading a photo, would quicken process); incorporate into broader green jobs strategy – proposal to hire back-end team of mobile fixers/repair monitors to respond quickly to issues
 - ⇒ Manage this data through Environment & Energy office and share results throughout relevant city departments; ex. Through a co-op student job
- **Other considerations:**
 - ⇒ Group decided to reach out to existing community based bike shops and produce a best practices report to facilitate the city's understanding of community needs, which can be shared with community groups looking to start their own shops
 - ⇒ Group also agreed to start a petition to the city to create a strategy for a community bike shop in every ward; starting with more pilot projects
 - ⇒ *Group members: Tim W., Adrian C., Carol L., Kathryn T.*

- 7.) Green Transportation – municipal level actions (Facilitator: Geoffrey Singer)



- **Identified problem:** as Toronto seeks to reduce emissions from transportation, the challenge of automobile dependence remains a complex one; various factors to consider including affordability and accessibility to low carbon transport, need for greater financial incentives for green transport shift
- **Objective:** to promote focus areas within green transportation realm in order to accelerate and incentivize the shift towards low carbon means of transport.
- **Brainstorming:** while the transition towards greener transportation is a cross-jurisdictional challenge for both provincial and municipal levels, group decided to focus on what Toronto could do within their regulatory authority
- First area of idea discussion was the need to promote alternatives to car use
- Second area of idea discussion was the need to recognize that cars will likely still remain on city roads through to 2050, and the city should encourage a transition to low/no-emission vehicles (primarily electric)
- **Suggestions for City of Toronto:**
 - ⇒ Integrate sustainable transportation considerations when developing new communities, foster less automobile-dependency by prioritizing transit and pedestrian-oriented development (requires cross-jurisdictional collaboration between province and city, as well as with neighboring suburban municipalities)
 - ⇒ Advertise locally to encourage uptake of provincial electric car rebates (facilitate public outreach component, most people don't know about this initiative)
 - ⇒ Lead by example – electrify municipal vehicle fleets, public transport (i.e. buses)
 - ⇒ Support EV recharging station infrastructure expansion on city-owned land – partner with province
 - ⇒ Provide or require “preferred parking” spots for EVs on new properties as well as general parking spaces
- **Other considerations:**
 - ⇒ Consider sourcing electricity from renewable sources (replacing non-renewables) to supply EV charging stations; long term strategy in partnership with utilities and province
 - ⇒ *Group members: John W., Max C., Ed*

- **8.) Schools as hubs - integrating as multi-use facilities (Facilitator: Barbora Grochalova)**



- **Identified problem:** as the city densifies, finding complementary spaces will be increasingly difficult. Reducing emissions requires rethinking spatial configurations to reduce trips taken, in order to maximize efficiency while promoting livability.
- **Objective:** to grow complete communities around a space that supports everyone, while building resilience, intergenerational connections, and partnerships to increase livability and social equity aspects of sustainable city life
- **Brainstorming:** why don't we use schools as multi-purpose facilities? Having schools is important for complete neighbourhoods and allows children to walk to school, but integrating them into multi-use facilities would provide greater certainty when facing risk of school closures
- Multi-use model already been done: [St. Matthew's Church](#), [Roncesvalles United Church](#)
- Using existing space is cost effective and efficient in promoting community connectivity, intergenerational interactions (ex. Daycares in retirement homes), allows space for skills sharing across a diversity of hub frequenters
- Other ideas for multi-use facility services include community gardens, kitchens, public health promotion and access to a "community nurse"
- **Suggestions for City of Toronto:**
 - ⇒ Identify schools at risk of closure and propose partnerships with community members regarding possibility of becoming a multi-use facility; contact school board trustees, city councilors, Toronto Public Health for support of this initiative
 - ⇒ Create a guide/framework for emerging school hubs/multi-use facilities to facilitate growth beyond pilot projects
- **Other considerations:**
 - ⇒ Consider potential barriers and strategies to overcome them, including security concerns, branding/communication of the multi-use designation, and ensuring inclusive, welcoming space where community knows it is for them to use
 - ⇒ *Group members: Caroline, Niki, Sarah T., Jerry, Bob*

⇒ **Appendix A: Other participant ideas – gathered at registration table**

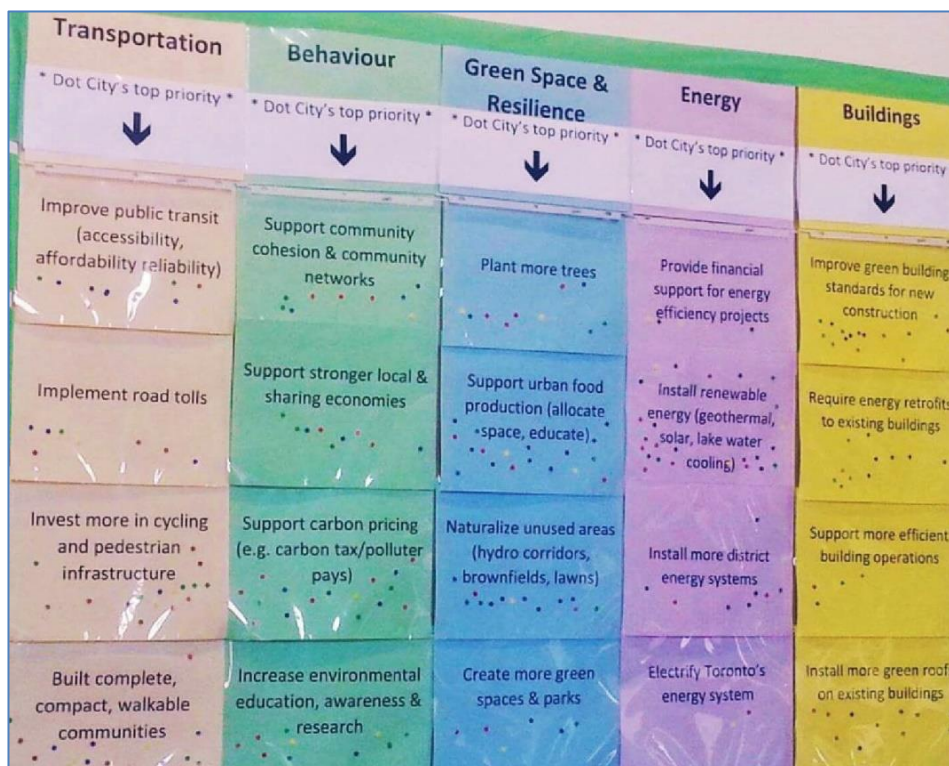
- Some participants were not able to stay for the full duration and gave their ideas at the registration table; they have been documented for the sake of greater community inclusion.



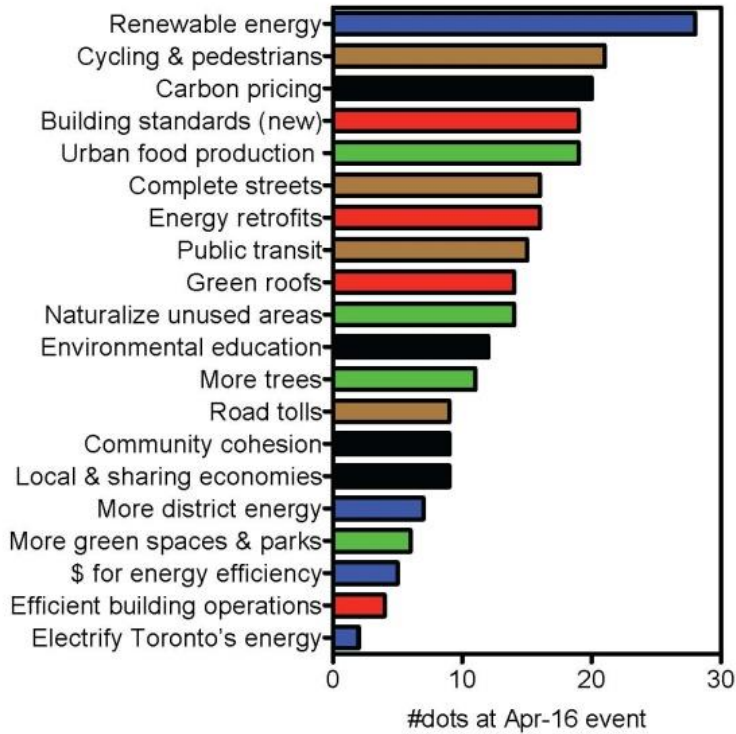
- Increase tax incentives for green roofs, provide list of contractors that interested residents and property owners can consult
- Plant more trees, include greater community stewardship opportunities
- More low rise “green” buildings in the city (4-6 floors)
- Promote cycling through tax incentives for bike maintenance and purchases – equity dimension of making low carbon transport more affordable
- Increasing subsidies for solar panel installations
- City should have input in the planning of Downsview Park (former air force base); model after “greener” High Park. Fund the project through ESP & SDRSP accounting
- Improve existing recycling program; require apartment buildings to have green bins
- Introduce a city-wide ban on plastic disposables (i.e. bags, non-recyclable coffee cups, water bottles, cutlery, etc.) – follow similar path as New York on their ban of Styrofoam
- Increase emphasis on zero waste in residential households through education and outreach, creative incentive mechanisms for positive reinforcement (giving lottery ticket/prize pack ballots to participating citizens- ex. post a picture of your compost to win, engaging public and increasing involvement by leveraging social media)

⇒ **Appendix B: “Dotmocracy” interactive exhibit results**

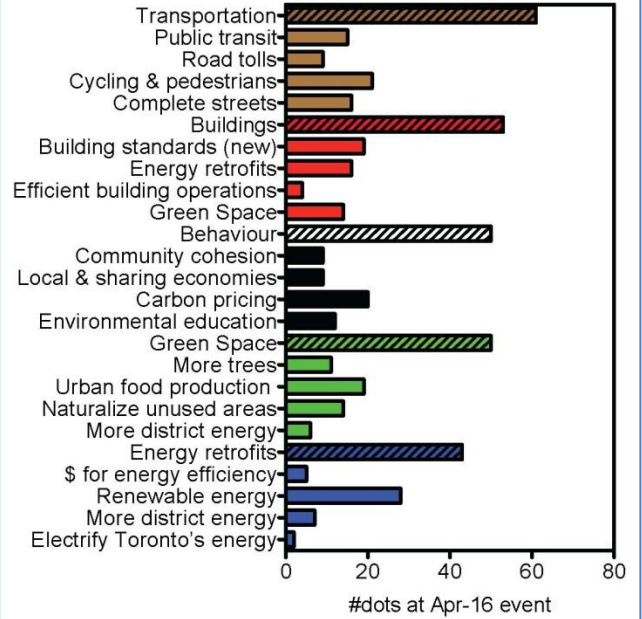
- All participants were given 5 dot stickers to place on a board of environmental areas identified by the city. The distribution provides insight to community’s priorities (mostly Ward 21), with the most significant area revealed to be renewable energy. Categorically, transportation emerged as the top concern for participants.



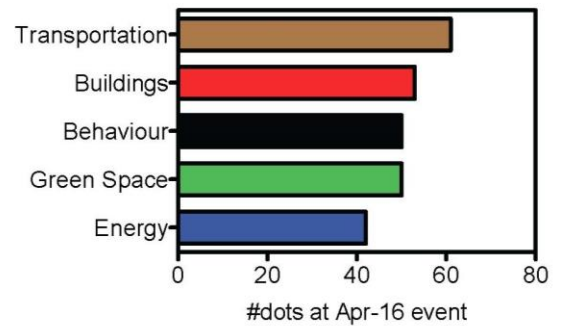
Top priority for City from event on Apr-16-2016



Dots for actions by category



Dots/category (Apr-16-2016)



Dotmocracy result graphs by Lee Adamson (Green Neighbours 21)