
Environmental Action Committee

Date

2018/02/13

Time

9:30 AM

Location

Civic Centre, Committee Room A - Second Floor,
300 Civic Centre Drive, Mississauga, Ontario, L5B 3C1

Members

Matt Mahoney	Councillor - Ward 8 (Chair)
George Carlson	Councillor - Ward 11 (Vice-Chair)
Brad Bass	Citizen Member
Melanie Kramer	Credit Valley Conservation
Andrew Roblin	Citizen Member
Andrea Dawber	Ecosource
Chelsea Dalton	Citizen Member
Sheila Storey	Sawmill Sid Inc.
Dianne Zimmerman	Partners in Project Green
Pujita Verma	Peel Environmental Youth Alliance
Lea Ann Mallett	Citizen Member
Minal Waqar	University of Toronto Mississauga

Contact

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Find it Online

<http://www.mississauga.ca/portal/cityhall/environmentalactioncommittee>

1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

3. **DECLARATION OF CONFLICT OF INTEREST**

4. **MINUTES OF PREVIOUS MEETING**

4.1. Environmental Action Committee Minutes - December 5, 2017

5. **DEPUTATIONS**

5.1. Matthew Sweet, Manager, Active Transportation to speak regarding Cycling Master Plan

5.2. Herbert Sinnock, Manager, Sustainable Energy Systems, Sheridan College to speak regarding District Energy

5.3. Cameron McCuaig to speak regarding the City of Mississauga's vision to "inspire the world"

5.4. Julius Lindsay, Climate Change Specialist to speak regarding Climate Change Project Engagement Strategy

6. **PUBLIC QUESTION PERIOD - 15 Minute Limit (5 Minutes per Speaker)**

Pursuant to Section 42 of the Council Procedure By-law 0139-2013, as amended:

Environmental Action Committee may grant permission to a member of the public to ask a question of Environmental Action Committee, with the following provisions:

1. The question must pertain to a specific item on the current agenda and the speaker will state which item the question is related to.
2. A person asking a question shall limit any background explanation to two (2) statements, followed by the question.
3. The total speaking time shall be five (5) minutes maximum, per speaker.

7. **MATTERS TO BE CONSIDERED**

7.1. Environmental Action Committee Work Plan

7.2. EAC Environmental Actions Summary

8. **OTHER BUSINESS**

9. **DATE OF NEXT MEETING** - Tuesday, March 20, 2018 - 9:30 AM, Committee Room A

10. **ADJOURNMENT**

City of Mississauga
Minutes



Environmental Action Committee

Date

2017/12/05

Time

10:10 AM

Location

Civic Centre, Committee Room A - Second Floor,
300 Civic Centre Drive, Mississauga, Ontario, L5B 3C1

Members Present

Councillor Matt Mahoney, Ward 8 (Chair)
Councillor George Carlson, Ward 11 (Vice-Chair)
Councillor Jim Tovey, Ward 1
Andrew Roblin, Citizen Member
Andrea Dawber, Ecosource
Lea Ann Mallett, Citizen Member
Minal Waqar, University of Toronto Mississauga

Members Absent

Brad Bass, Citizen Member
Chelsea Dalton, Citizen Member
Melanie Kramer, Credit Valley Conservation
Sheila Storey, Sawmill Sid Inc.
Pujita Verma, Peel Environmental Youth Alliance

Staff Present

Michael Cleland, Director, Environment
Mary Bracken, Supervisor, Environmental Initiatives
Christopher Pyke, Supervisor, Waste Management
Diana Suzuki-Bracewell, Environmental Outreach Coordinator
Andrea J. McLeod, Supervisor, Environmental Outreach
Lisa Urbani, Environmental Research Assistant
Trish Sarnicki, Legislative Coordinator, Legislative Services

Find it online

<http://www.mississauga.ca/portal/cityhall/environmentalactioncommittee>

1. **CALL TO ORDER** – 10:10 a.m.

2. **APPROVAL OF AGENDA**

Approved (A. Roblin)

3. **DECLARATION OF CONFLICT OF INTEREST** – Nil.

4. **MINUTES OF PREVIOUS MEETING**

4.1. Environmental Action Committee Minutes - November 7, 2017

Approved (Councillor Carlson)

5. **DEPUTATIONS**

5.1. Jon Joyce, MBTW Group spoke regarding the Paul Coffey Park Master Plan

Mr. Joyce provided an overview of the Paul Coffey Park Master Plan, and spoke to the project context, design framework, conceptual approaches and key environmental considerations. Mr. Joyce explained the preferred master plan and spoke to preliminary recommendations which include, but are not limited to: a long term strategy for the protection and enhancement of biological diversity within the park, continued restoration planting and invasive species management, habitat creation, altering the creek to prevent flooding, stormwater quality and quantity controls, low impact development strategies, preserving and enhancing the natural features of the park, integrated interpretative and educational signage, and designing the park space to accommodate a range of programming and engagement opportunities. Mr. Joyce noted that there had been an extensive public engagement program in preparing the Master Plan.

Questions from Committee members arose regarding the following:

- water filling stations;
- the size of the park;
- whether there is a Lacrosse box;
- whether Toronto Regional Conservation Authority (TRCA) had been consulted with regard to creek rehabilitations;
- an update on the flood plain;
- inquiring on the state of the north and south of the creek watershed;
- whether soil samples have been taken and checked for contaminants;
- the possibility of a pedestrian and cycling bridge in the north end of the park;
- and whether the trail system connects to Mimico Creek.

Mr. Joyce responded that each picnic station will have a shade structure, power, and water filling station, with an area for cooking. Mr. Joyce noted that the park is 113 acres, and does not have a Lacrosse box. Further, Mr. Joyce added that the TRCA's modelling is being used for the creek rehabilitations, and that flood plain mapping was updated 3

weeks ago. Mr. Joyce continued that there is an overview of the area and watershed but no detailed updates or studies, with the master plan process not looking into great detail but providing an overview. However, Mr. Joyce explained that the bioswale along the backside means that water that runs off from that area can go through a treatment process. Mr. Joyce elaborated that the City undertook an environmental assessment for the site and discovered jet engine contaminant had been found in some of the area, and that the report can be shared with the Committee, if requested. Mr. Joyce added that it is possible to install a pedestrian and cycling bridge north of the park but that some concern regarding geomorphology and pedestrian safety indicate that an overpass may be the best approach. Lastly, Mr. Joyce indicated that there are some concerns with connecting the area, as it does not really connect to anything except industrial areas, and that it is not a paved surface, constrained by banks and slopes. Mr. Joyce added that perhaps a larger City-wide pedestrian corridor study could be considered to investigate the issue.

Councillor Mahoney, Chair inquired whether the Paul Coffey Park Master Plan would go to General Committee on March 15, 2018, with Mr. Joyce confirming that is the expected timeline.

RECOMMENDATION

That the deputation and associated presentation by Jon Joyce, MBTW Group with respect to the Paul Coffey Park Master Plan be received.

Received (A. Dawber)

Recommendation EAC-0054-2017

5.2. Diana Suzuki-Bracewell, Supervisor, Environmental Outreach spoke regarding the 2017 Environment Outreach Wrap-up

Ms. Suzuki-Bracewell provided an overview of the 2017 Environmental Outreach Wrap-up and spoke to the Community Outreach Program, noting a variety of events and volunteer programs, earth markets and a community environmental appreciation evening. Ms. Suzuki-Bracewell explained that 62 events of varying size occurred across the city in 2017 and spoke to the earth market partnership with students at the University of Toronto at Mississauga, as well as the earth market event at Celebration Square. Ms. Suzuki-Bracewell added that the environmental appreciation evening was an effort to recognize the volunteer work of community groups and individuals in Environment and Forestry. Ms. Suzuki-Bracewell also spoke to the Internal Outreach Program, noting the Green Leaders program, waste audits, energy walkthroughs, and 2018 program expansion. Ms. Suzuki-Bracewell discussed the Green Leaders program, which focuses on detailed waste audits and energy conservation efforts, and shared a video entitled "Why I became a Green Leader." Lastly, Ms. Suzuki-Bracewell discussed the focus for community outreach and Green Leaders program in 2018.

RECOMMENDATION

That the deputation and associated presentation by Diana Suzuki-Bracewell, Environmental Outreach Coordinator with respect to the 2017 Environment Outreach Wrap-up be received.

Received (A. Roblin)
Recommendation EAC-0055-2017

5.3. Diane Gibson, Waste Diversion Assistant regarding Waste Diversion Annual Overview

Item 5.3 was not considered, and was deferred to the next meeting of the Environmental Action Committee.

5.4. Julius Lindsay, Climate Change Specialist regarding the Climate Change Project Engagement Strategy

Item 5.4 was not considered, and was deferred to the next meeting of the Environmental Action Committee.

5.5. Jayne Wilkinson, Assistant Curator, Blackwood Gallery at UTM spoke regarding Blackwood Gallery at UTM/Temporary Public Art and Climate Change Project entitled "The Work of Wind: Air, Land, Sea"

Ms. Wilkinson provided an overview of the partnership of the Blackwood Gallery with the City of Mississauga, noting that the purpose of the project is a longer term engagement that will encourage citizens to talk about environmental and social issues on community and global levels. Ms. Wilkinson explained that 6 broadsheet publications will be distributed across the city and test runs will take place at museums and galleries across the Greater Toronto Area. Ms. Wilkinson spoke to the 13 components of the exhibition, explaining that the project is based on the Beaufort scale of wind force, with each component expressing the increasing intensity of the scale. Ms. Wilkinson noted that the preliminary site plans include publications, screenings, and artist talks in advance of the exhibits and that the exhibition sites will include City Hall, University of Toronto at Mississauga campus, and the Southdown industrial area.

In response to questions from Councillor Tovey, Ms. Wilkinson responded that Christine Shaw, Director and Curator, Blackwood Gallery undertakes curatorial research by visiting artists and researching their works, and sought a wide representation of artists with a diversity of viewpoints. Ms. Wilkinson added that the Beaufort scale of wind force is helpful in having people literally orient themselves with the exhibition. Further, Ms. Wilkinson noted that the project did not have open submissions as the idea was to have new commissions that fit to scale. Lastly, Ms. Wilkinson explained that the hurricane wall piece was created by a group of Cuban artists named Los Carpinteros, and that she would be glad to provide the Committee with further information about the artists if requested.

RECOMMENDATION

That the deputation and associated presentation by Jayne Wilkinson, Assistant Curator, Blackwood Gallery at UTM with respect to the Blackwood Gallery at UTM/Temporary Public Art and Climate Change Project entitled "The Work of Wind: Air, Land, Sea" be received.

Received (Councillor Tovey)
Recommendation EAC-0058-2017

6. **PUBLIC QUESTION PERIOD**

No members of the public requested to speak.

7. **MATTERS CONSIDERED**

7.1. **Environmental Action Committee Work Plan**

No discussion took place on this item.

RECOMMENDATION

That the Environmental Action Committee Work Plan be approved as discussed at the December 5, 2017 meeting of the Environmental Action Committee.

Received (M. Waqar)
Recommendation EAC-0059-2017

7.2. **EAC Environmental Actions Summary**

No discussion took place on this item.

RECOMMENDATION

That the EAC Environmental Actions Summary be approved, as amended, as discussed at the December 5, 2017 meeting of the Environmental Action Committee.

Received (L. Mallett)
Recommendation EAC-0060-2017

8. **OTHER BUSINESS** – Nil.

9. **DATE OF NEXT MEETING** – Tuesday, February 13, 2018 - 9:30 AM,
Committee Room A

10. **ADJOURNMENT** – 11:14 a.m.

Cycling Master Plan Update

Environmental Action
Committee

Feb 13, 2018



Agenda

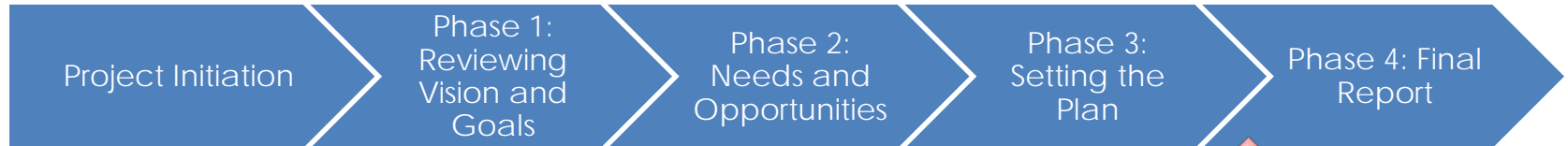
- Project Background
- Project Status Update
- Vision, Goals and Proposed Directions
- Draft Cycling Network
- Public Input
- Wrap Up



Project Status

February 2017

June 2018



We are here

Concurrent Projects

Peel Region Sustainable Transportation Plan

2016		2017				2018			
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

TDM Plan

Dundas Connects

Parking Master Plan

Transportation Master Plan

Cycling Master Plan

Lakeshore Connecting Communities

Climate Change Plan

Future Directions 2018

Project Status - Milestones

- **Milestones completed:**
 - Draft Cycling Network
 - Draft Performance Monitoring Framework
 - Draft Recommendations – internal consultation
- **Work in progress:**
 - Implementation Plan
 - Draft Final Report

Vision and Goals

The City of Mississauga will be a place where people choose to cycle for recreation, fitness and daily transportation needs.

Cycling will become a way of life that supports vibrant, safe and connected communities and enhances our overall health and quality of life.

Goal 1: Improve safety for cycling

Goal 2: Increase the number of cycling trips in Mississauga

Goal 3: Build a connected, convenient + comfortable bicycle network

Goal 4: Foster a culture of cycling

Proposed Directions

Goal 1: Improve Cycling Safety



5 'E's Engineering, Enforcement, Education, Encouragement and Evaluation

Develop Bicycle Facility Design Guidelines for Trails and On-Road Facilities

Upgrade existing cycling facilities in some locations

Update proposed facility types in the Draft Cycling Network

Pilot projects with new facility designs

Safety campaigns for drivers and cyclists

Introduce a strategy for improved maintenance

Bicycle skills training programs for adults, youth, and elderly residents

Proposed Directions

Goal 2:

Increase the number
of cycling trips in Mississauga



Safety campaigns for drivers and cyclists

Connect cycling routes to neighbouring towns and cities

Provide direct routes between neighbourhoods and destinations

Launch a Bicycle Parking Program

Investigate the possibility of Bike Share for Mississauga

Update proposed facility types in the cycling network to serve all types of cyclists

5 E's: Engineering, Enforcement, Education, Encouragement and Evaluation

Bicycle skills training programs for adults, youth, and elderly residents

Proposed Directions

Goal 3:

Build a connected, convenient, comfortable cycling network

Provide direct routes between neighbourhoods and destinations

Be consistent with Regional and Provincial Cycling Network Plans

Connect to neighbouring towns and cities

Launch a Bicycle Parking Program

Investigate the possibility of Bike Share for Mississauga

Bike Parking and Bike Share Demonstration projects



Update proposed bicycle facility types to serve all types of cyclists

Develop Bicycle Facility Design Guidelines for Mississauga

Pilot projects with new bicycle facility designs

Upgrade existing bicycle facilities in some locations

Introduce a strategy for improved maintenance

Continue to implement wayfinding

Proposed Directions

Goal 4:

Foster a culture of cycling



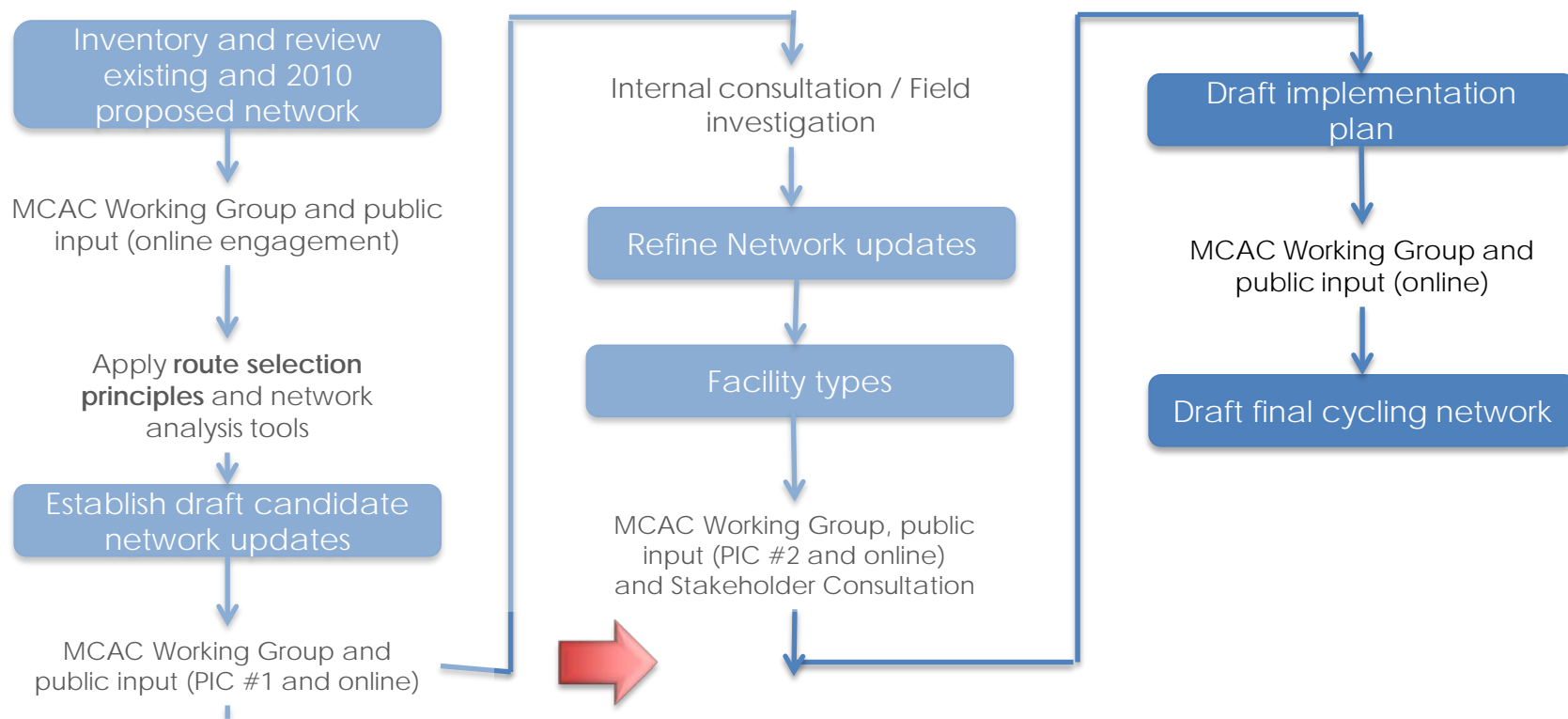
Regular reports on the progress toward achieving Cycling Master Plan Goals

Cycling information available on Open Data

Cycling campaigns and events to showcase commuting and recreational cycling

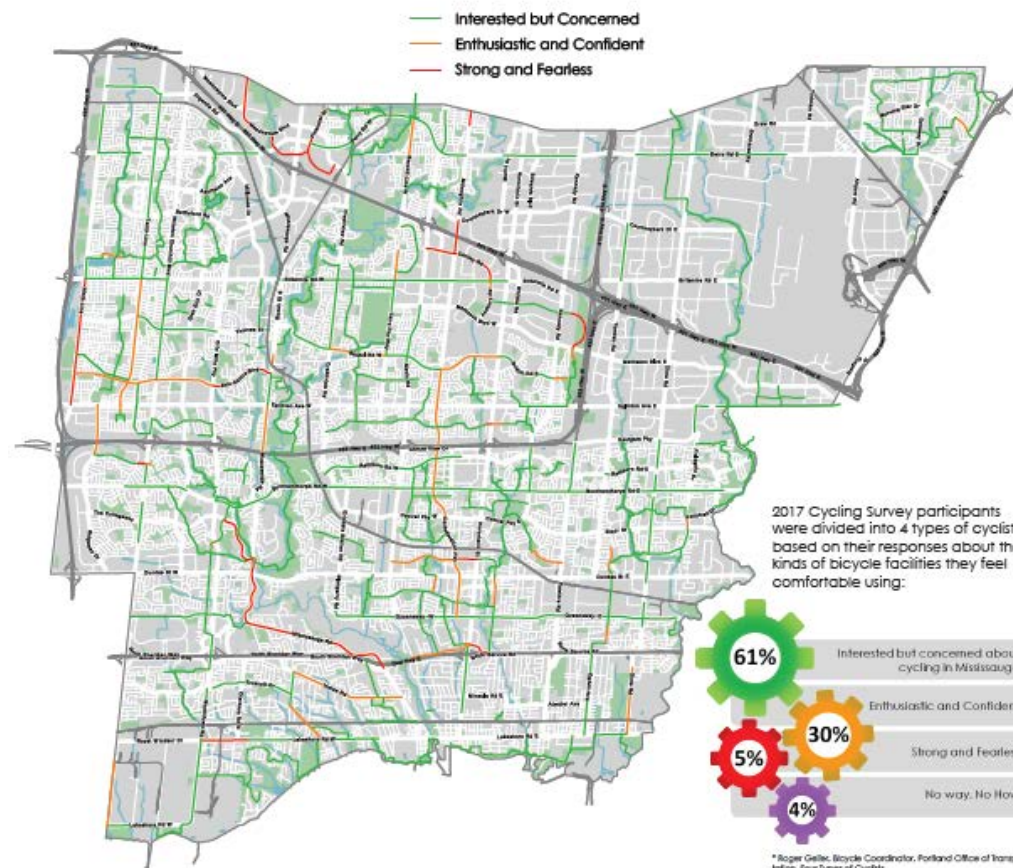
Cycling Ambassadors to promote safe cycling in the community

Project Status: Cycling Network



What's Comfortable?

The map below shows Mississauga's existing cycling network. Using roadway data, such as the type of bicycle facility, traffic speed, and number of lanes, each route was categorized based on the level of traffic stress experienced by cyclists on them. The categories show the types of cyclists that would be comfortable riding on existing cycling facilities.



* Roger Geller, Bicycle Coordinator, Portland Office of Transportation, Four Types of Cyclists

Strong and Fearless

People who are comfortable riding a bicycle anywhere, even on busy roads with motor vehicles.



Enthusiastic and Confident

People who are comfortable riding a bicycle on most roadways shared with motor vehicles but would prefer to be on a bicycle facility. These cyclists are comfortable riding on:



Bike lanes



Paved shoulders



Mixed traffic on slow roads

Interested but Concerned

People who are curious about cycling and would like to cycle more often but are afraid of sharing the roadway with motor vehicles. These cyclists prefer riding on:



Separated bike lanes



Multi-use trails



Quiet residential streets

No Way, No How

People who are not interested in riding a bicycle at all.



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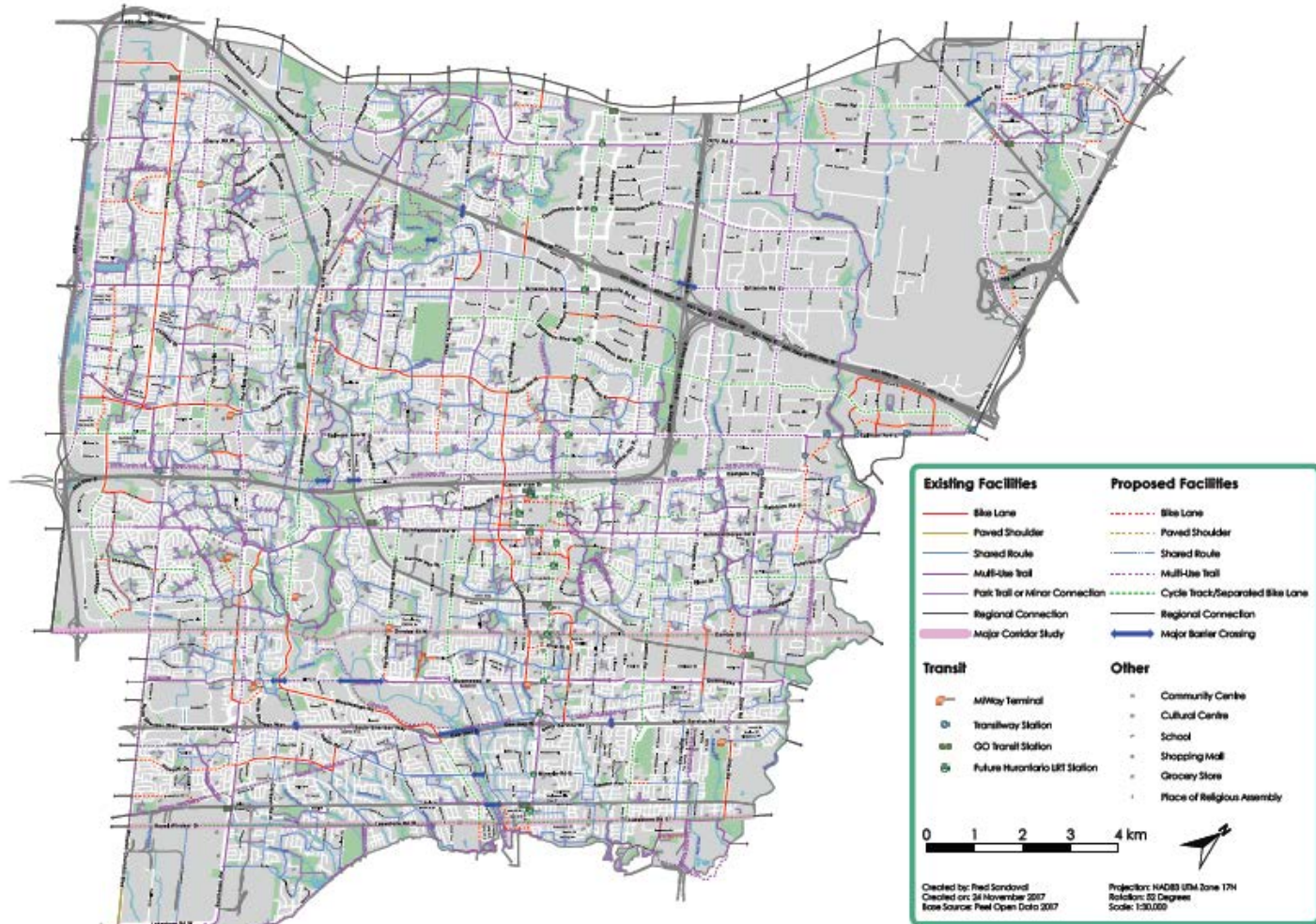
Quiet residential streets

No Way, No How

People who are not interested in riding a bicycle at all.



Draft Cycling Network



Public Open House #2

Interactive display board comments

Broad support for:

Completing the cycling network;
Bicycle friendly intersection design;

Physically-separated cycling facilities;
More education for drivers and cyclists

1. Improve safety for cycling

- Repair cracks and potholes
- Remove snow, loose gravel
- Enforce no parking in bike lanes
- Enforce 1-metre passing law

2. Increase the number of cycling trips in Mississauga

- More bike parking
- More education and facilities at schools
- Bike share program
- Promote the benefits of cycling

3. Build a connected, convenient and comfortable bicycle network

- Improve wayfinding
- Signage and crossings when trails switch from one boulevard to the other
- Separate cyclists and pedestrians
- Sharrows considered “inappropriate”
- More green paint

4. Foster a culture of cycling

- Consider people with disabilities
- Provide information on planning, construction and completion of bike facilities
- Provide a way to report issues with cycling network (e.g. interactive map)
- Create a recreational facility (e.g. large-scale BMX or mountain bike park)

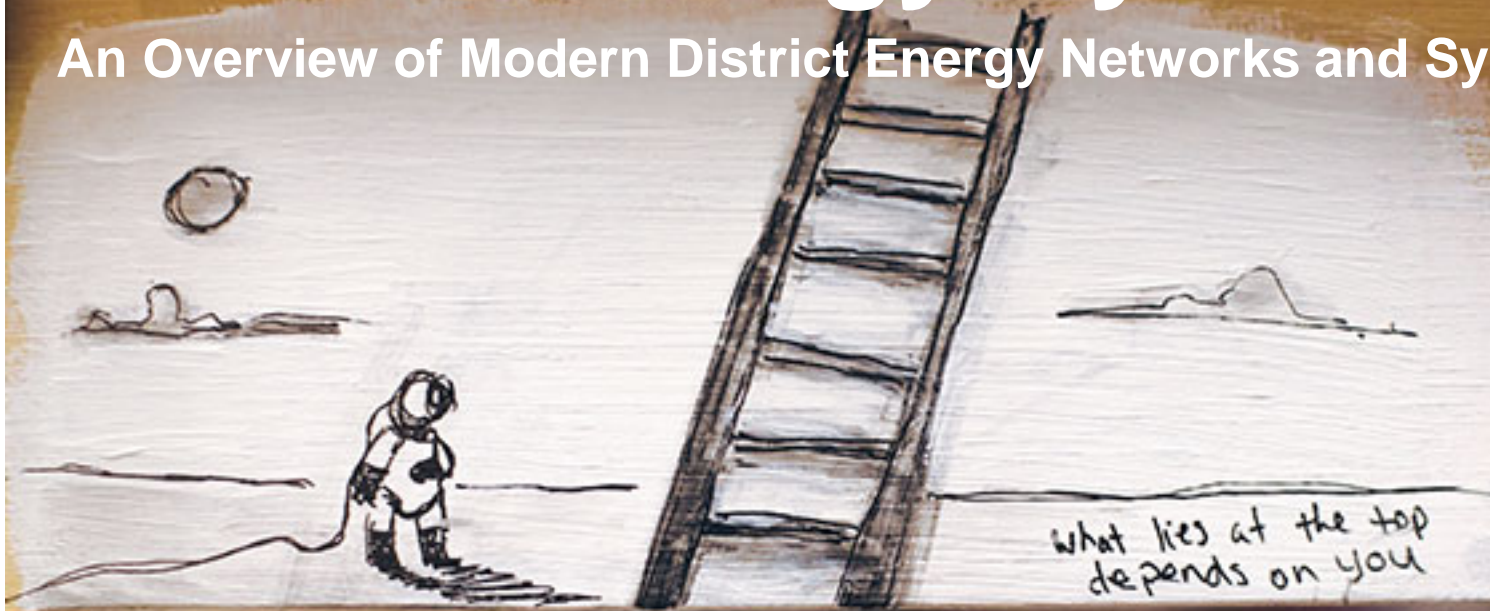
Wrap Up / Next Steps

1. Implementation Plan
2. Draft Final Report
3. Report to General Committee – June 2018

www.doescyclingmoveyou.ca

District Energy Systems

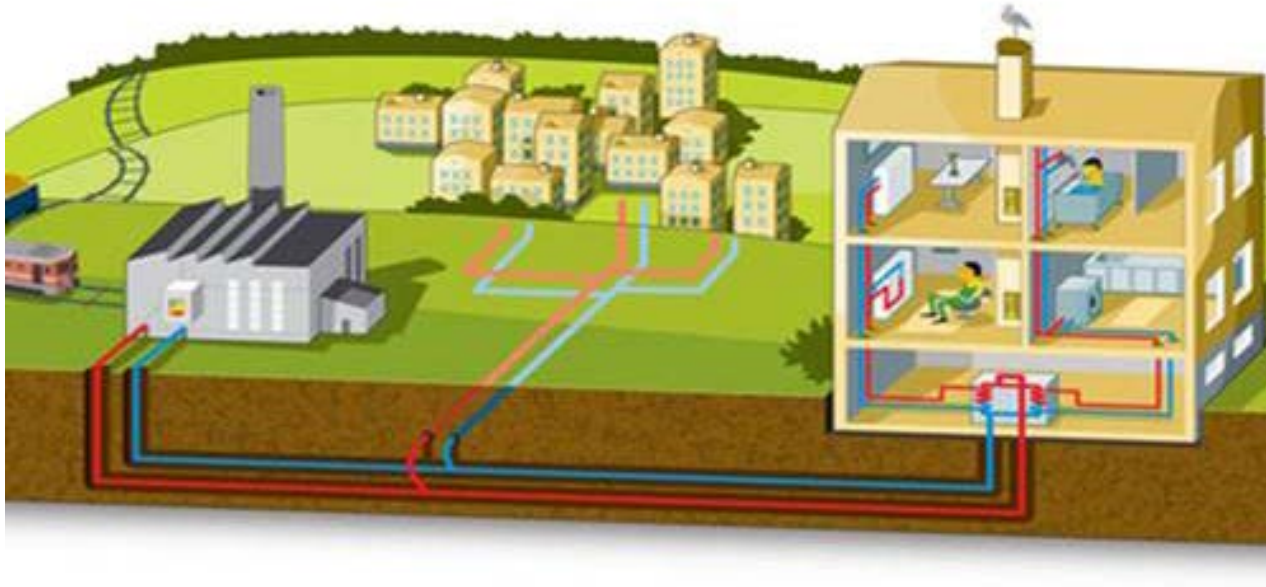
An Overview of Modern District Energy Networks and Systems



DISTRICT ENERGY SYSTEMS

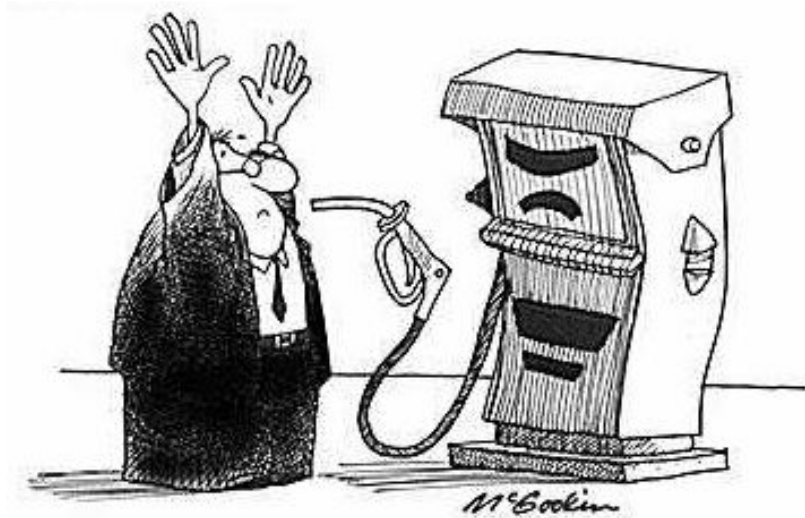
End-to-End System

5.2 - 2



OIL CRISIS – 1973 & 1978

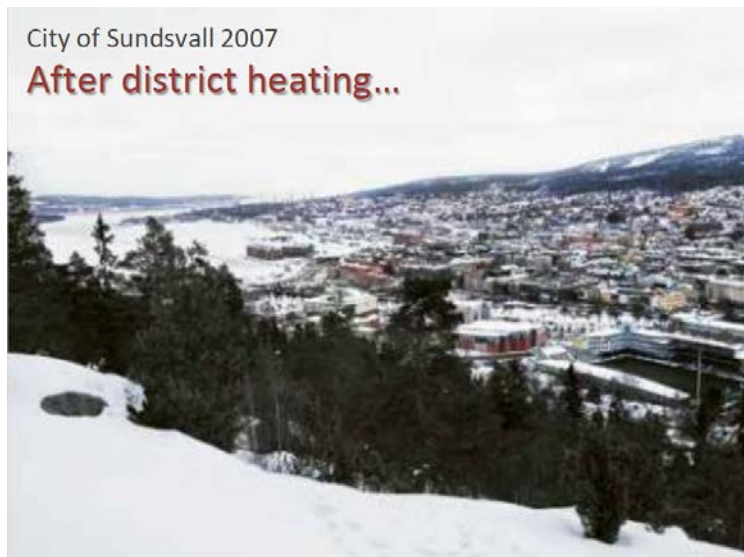
5.2 - 3

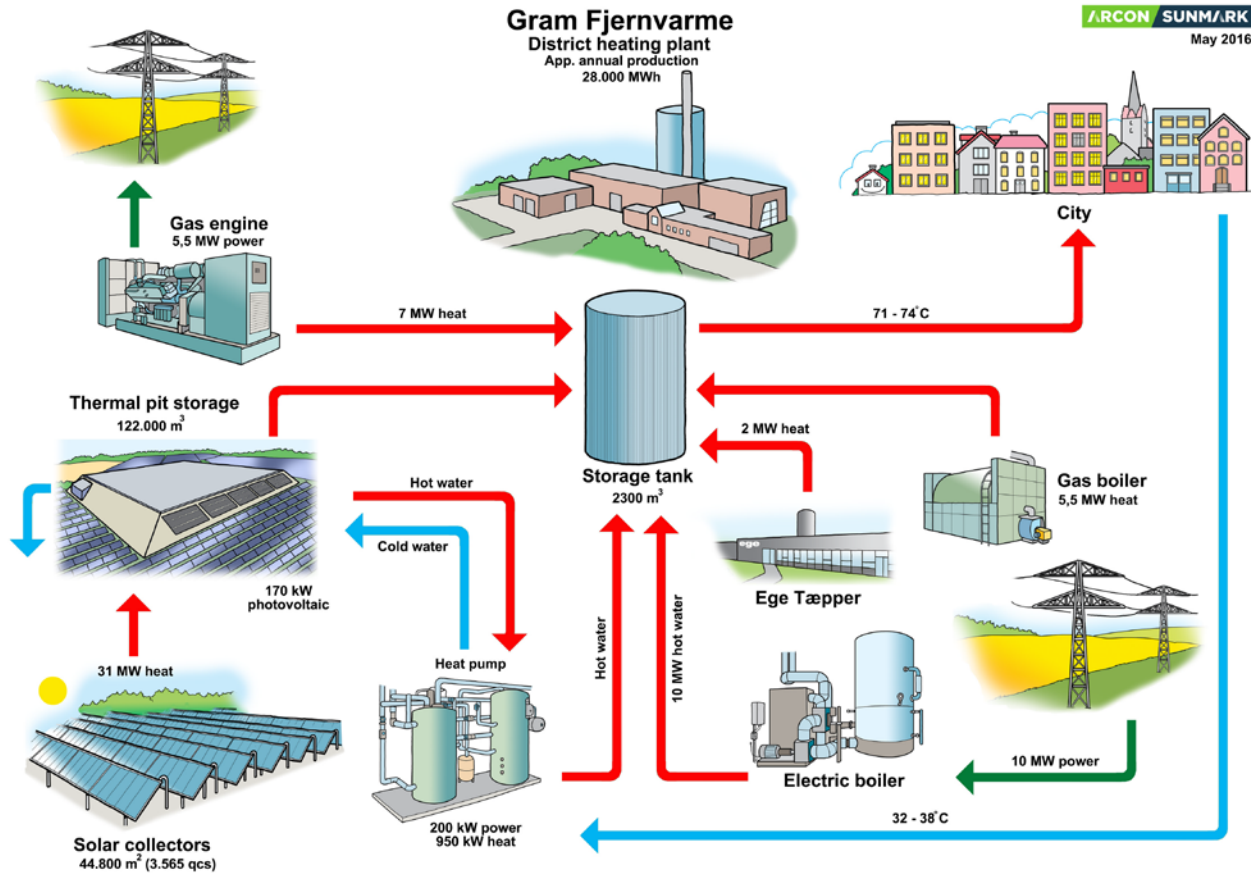


City of Sundsvall 1969

Before district heating...







5.2 - 6

DISTRICT ENERGY SYSTEMS

District Energy Architecture?



DISTRICT ENERGY SYSTEMS

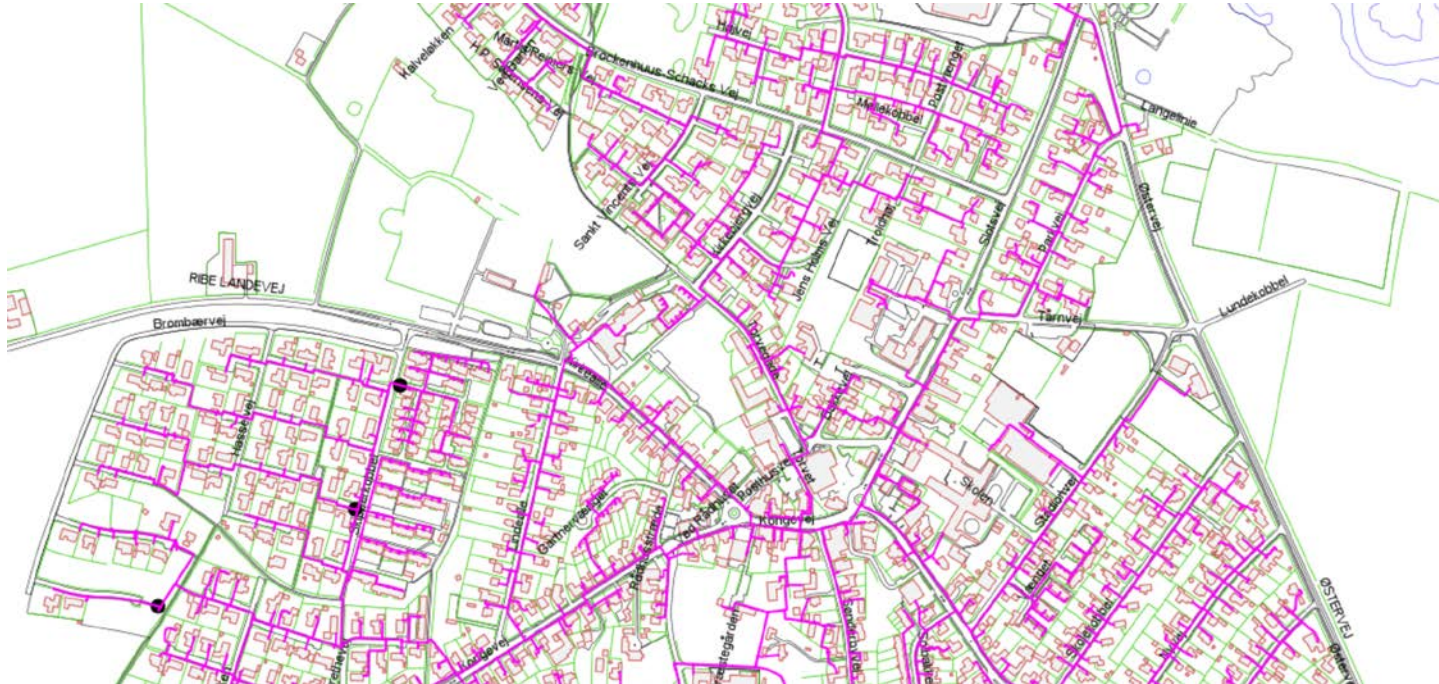
Pre-Insulated Pipe Systems

5.2 - 8



DISTRICT ENERGY SYSTEMS

Pre-Insulated Pipe Systems



DISTRICT ENERGY SYSTEMS

Energy Transfer Stations

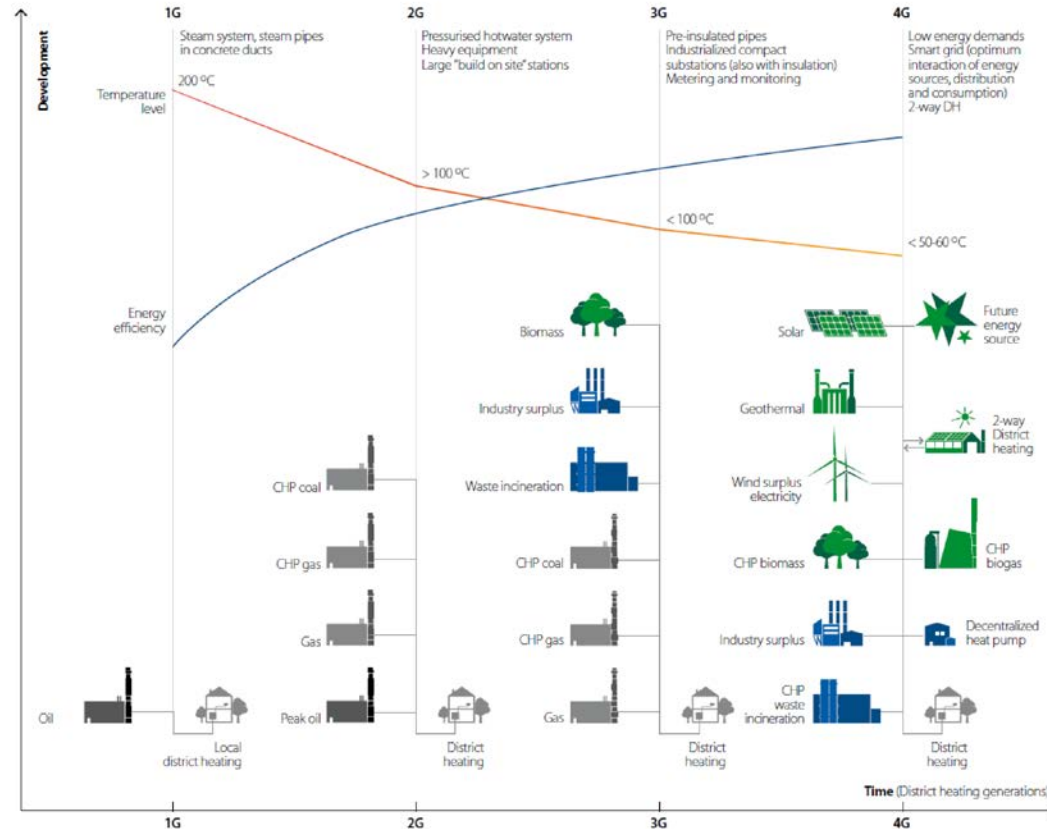


5.2 - 10



District heating from 1G to 4G

5.2 - 11



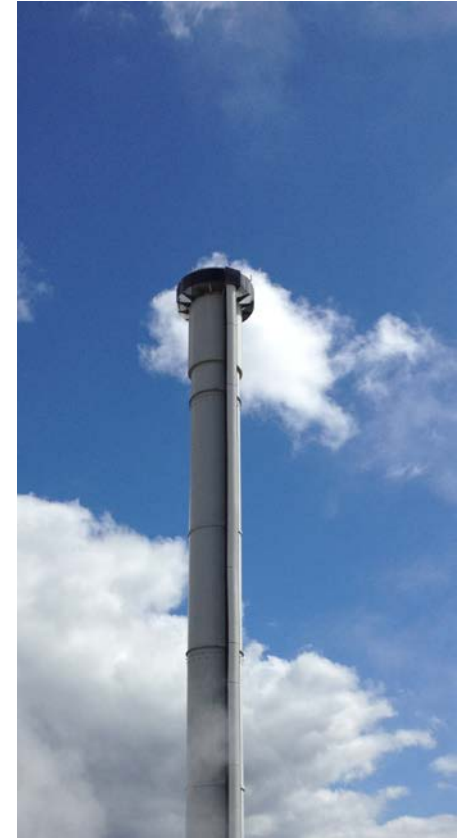
DISTRICT ENERGY SYSTEMS

Biomass District Heating



DISTRICT ENERGY SYSTEMS

Biomass District Heating



5.2 - 13





DISTRICT ENERGY SYSTEMS

Low-Temp Hydronic Heating

5.2 - 16



Thank You

Herbert Sinnock, P.Eng., CEM, CMVP, LEED GA
Manager – Sustainable Energy Systems
Office for Sustainability
herbert.Sinnock@sheridancollege.ca

Inspire the World

February, 2018

Environmental Action Committee

Today's Ask

- **Bring heritage, environment and the city vision together.**
- **Endorse the city vision to “inspire the world” will be fulfilled ...**
 - *“by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to live, work, and play”.*
- **Support 2018 net zero carbon objective on key properties.**
 - *Identify net zero carbon build sites including Inspiration Port Credit, Inspiration Lakeview, Canada Lands, and other important properties, as delaying to 2019 climate plan will be too late.*

Future Heritage

- **Heritage is about the past and the future.**
- **Heritage is more than about buildings, and links to the environment:**
 - *“to be an outstanding example of a traditional human settlement, land-use, representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change”* World Heritage Organization selection criteria
- **We need to create more future heritage, and net zero carbon is an enabler.**
 - Iconic Design Competition, Urban Design Awards are not enough.
 - Current Green Development Standards need updating.

Future Environment

- **2019 climate plan will start with 2018 view of 5 key areas.**
 - 1) decrease CO2 fleet study 2) land use planning 3) infrastructure 4) green economy 5) energy management.
- **Some climate plan actions need to be accelerated to 2018.**
 - 50 U.S. cities on the record to meet goals comparable to those of the Paris climate accord.
- **Capability to build net zero carbon cities exist today.**
 - Copenhagen a net zero carbon city by 2025 states: “policies that protect the climate also improve the capital city’s economy and global competitiveness.”
 - At least 16 net zero carbon building sites in progress in Canada.

How we could “Inspire the World”

- ***“We need that one thing that we can be famous for, but, we don’t know what that one thing is going to be yet.”***
 - Councillor Pat Saito, chair of the city’s tourism board
- **Taking the lead from the Mayor’s big idea:**
 - *“to build energy sustainable, low carbon, complete communities”*
- **We will be known as “a World leading Net Zero Carbon City.”**
 - The 2018 sites and beyond could become a series of Expo-like examples, while creating future heritage.
 - Opens up a citywide opportunity to inspire the world whether that be economic development, transit, education, city branding, public art, heritage retrofit, cultural landscape creation through strategic tree planting, and tourism to name a few.

Next Steps

- **Review with Mayor and Council.**
- **Identify net zero carbon requirement for specific sites now.**
 - Modify Mississauga Green Development Standards to support net zero carbon site requirements.
 - Announce Canada's largest net zero carbon build sites.
- **Integrate our answer to “Inspire the World” into 2019-2022 business and strategic plans.**
 - *“by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to live, work, and play”.*

Inspire the World

“by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to live, work, and play”

Background Document

***THIS IS A DRAFT DOCUMENT FOR EAC DISCUSSION.
THIS HAS BEEN DISCUSSED AT HAC BUT HAS NOT YET
BEEN OFFICIALLY ENDORSED.***

How Mississauga could choose to “Inspire the World”

Recommendation:

Taking the lead from the Mayor’s big idea discussed November 2017 – *“to build energy sustainable, low carbon, complete communities.”*

- I. That the recommendation from the Heritage Advisory Committee (HAC) and Environmental Action Committee (EAC) to recognize the city vision to “inspire the world” will be fulfilled “by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to live, work, and play” will be endorsed by Council.
- II. That this direction is provided to the Climate Change Stakeholder team and this position is integrated into all appropriate elements of the strategic plan and green plan resulting in adjusting 2019-2022 budget and tactical decisions to support this vision.
- III. Given time is of the essence for some critical decisions, and the climate change plan is not due until 2019, we recommend that steps are taken in 2018 to avoid a missed opportunity by identifying net zero carbon build sites including Inspiration Port Credit, Inspiration Lakeview, Canada Lands, and other important properties where key site decisions are being made in 2018.
- IV. By adopting this recommendation, Mississauga will increase the likelihood of creating a greater inventory of future heritage sites, and initiate important steps to fulfill our net zero carbon city goal, while also answering the question on where we plan to inspire the world.
- V. As demonstrated through other cities, this effort will also be a net revenue gain for the city in both the short and long term.

Just like other cities with close proximity to larger cities like San Jose - known as “Silicon Valley” - and Austin – known as “Live Music Capital of the World”, this action will create a difference versus Toronto/GTA.

We will be known as “a World leading Net Zero Carbon City.”

The 2018 sites and beyond will become a series of Expo-like examples, teaching the world on the net zero carbon opportunity.

This will truly inspire the world.

How Mississauga could choose to “Inspire the World”

Background:

- a. The Heritage Advisory Council (HAC), “is an advisory committee of Council which makes recommendations to Council on matters relating to proposed and designated heritage properties within the City, their identification, research, recording and interpretation. Includes cultural landscapes and natural heritage.”
- b. The Environmental Action Committee's mandate includes: “championing local action to address environmental issues; offering advice and recommendations to Council in support of environmental direction in the City's Strategic Plan and Living Green Master Plan; and providing a forum for the public to share their concerns and discuss new or changing environmental legislation or regulations, conservation, environmental sustainability and the environment in relation to overall quality of life.”
- c. As such, given the mandates of HAC and EAC, we believe it is our responsibility to provide Council recommendations to enhance future heritage and environmental direction. The common thread of the two committees is HAC has interest in creating more important places, and expressing what is culturally important to an era. Today's world environmental issues are strong cultural forces and future heritage opportunities. EAC has interest in the environment and the net zero carbon goal.
- d. Environmental matters are recognized in many heritage mandates. Heritage Ontario “recognizes that our heritage tells us who we are, where we have come from and what we have accomplished”, and states, “we comply with a statement of environmental values.” Of interest, the provincial environmental bill of rights was opened for public comment in 2016 with revisions expected Spring 2018. The government of Canada heritage division promotes “Canadian identity and values, cultural development, and heritage”. We believe it is reasonable to connect environmental leadership as part of our identify and consistent with our values, and needs to be reflected in our city building decisions. Further, the Canadian Environmental Protection Act (CEPA) is under review with over 87 recommendations under evaluation by Minister McKenna with an expected June 2018 decision. “The Right to a Healthy Environment” is one of the decision points, and if taken, will no doubt impact how we build our cities of the future.
- e. As we seek to “Inspire the World”, the World Heritage Organization has 10 elements to assess recognition. One states, “to be an outstanding example of a traditional human settlement, land-use, representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change” . This statement is interesting heritage guidance as we evolve to a green economy.

How Mississauga could choose to “Inspire the World”

- f. Although HAC is proud of Council’s efforts to recognize past heritage through properties, landscapes and districts; and support the effort to gather history through efforts like the “The Story of M” and the updated “Culture Plan”, we believe the City needs to be more proactive in establishing a greater inventory of future heritage sites for current and future generations.
- g. We are aware of previous efforts to build future heritage through the International Iconic Design Competition that led to Absolute Towers and the City Hall, but this is not scalable to all Mississauga efforts. We also acknowledge there are many examples of innovative design as demonstrated through the Urban Design Awards, and the recognition through programs like the “Brownie Awards” (recognizing the rehabilitation efforts of brownfield sites in Canada) where Mississauga was recognized for excellence in communication and community engagement for Inspiration Port Credit. However, these efforts, and others have not been enough to build a city that inspires the world.
- h. We are also aware of the many environmental efforts undertaken to date, yet this progress can only be measured though other cities in Canada and the World, and we are not yet operating at a level that will inspire the world.
- i. As one general measure to acknowledge there is an opportunity for our city to inspire the world, Moneysense ranks Mississauga as 128th of best places to live in Canada, which is contrary to how we feel, but provides a wake up call for us to do better in the future if we truly want to inspire the world. Ottawa, Burlington and Oakville are in the top 15. Toronto ranks 129th.
- j. As profiled in Insauga, “According to a new report from real estate website Point2Homes, Mississauga is Canada's 34th hottest city for millennials in 2018 on a list of 85 of the most populous cities across the country.” The top five were Quebec City, Victoria, Guelph, Halifax and Ottawa. Ajax was ranked just ahead of Mississauga. Toronto was ranked 24th.
- k. At the same time, according to the International Affordability Housing Survey, of the most populous 50 cities in North American, Mississauga is ranked as the 14th most unaffordable area to live in North America . This is especially concerning given there is distinct heritage or world leading city feature to help justify this high cost standing.
- l. While there are many positive measures such as the Macleans recently released ranking of Canada’s Most Dangerous Places for 2018 and “the list indicates that the Region of Peel sits at 170 on the list of 229 regions and cities.”, and, in the American Cities of the Future Report, Mississauga is recognized as “the most business-friendly mid-sized city in the western

How Mississauga could choose to “Inspire the World”

hemisphere”, we are still searching for that leadership opportunity that is deserving of inspiring the world.

- m. The City itself is searching for the areas where we could inspire the world, per the recent tourism discussion. “We need that one thing that we can be famous for,” said Coun. Pat Saito, chair of the city’s tourism board. “But, we don’t know what that one thing is going to be yet.”
- n. As Mississauga is in such a close proximity to Toronto, it is understandable why finding our “one thing” is so difficult. Toronto will likely always lead in large scale Museums, Art Galleries, Music Venues, Aquariums, Zoos, Racetracks, Indy Races, Theatre, Ballet and Major League Sports Teams.
- o. Taking the lead from the Mayor’s big idea – *“to build energy sustainable, low carbon, complete communities”*, by becoming a world leading net zero city, we can uncover that “one thing” and take comfort knowing that it is already supported by public opinion , public input and political momentum.
- p. The timing is perfect. We believe our 2012 goal to become a net zero carbon city is a statement ready for accelerated action. It is promising to see a climate plan to support this 2012 statement is now approved and subject to discussion in 2019. It is also promising that Mississauga has recently joined the Global Covenant of Mayors for Climate & Energy and has stated support for federal and provincial legislation to support the right to a healthy environment.
- q. Although we are heading in the right direction, it appears Mississauga is falling behind on the climate change opportunity relative to other cities in the world. For example, “more than 50 mayors from cities and townships participated in the North American Climate Summit in Chicago on Dec. 4-6, where they signed the Chicago Climate Charter, an official agreement to reduce greenhouse gas emissions in each of their respective cities. They plan to meet goals comparable to those of the Paris climate accord.” It is uncertain if Mississauga has stated a similar commitment to meet Paris Climate targets, but would suggest this is required, with statements of how the city plans to accelerate our effort, and in fact, exceed the targets, and leap frog others and become a leader, versus a follower.
- r. A net zero carbon city is no longer an aspirational goal, but readily attainable if the will is in place. As reported in July 2017, as one example, Copenhagen is rapidly moving toward meeting the goal of its 2025 Climate Plan to become the world’s first carbon-neutral city by 2025, reducing or offsetting all carbon emissions. As it does so, officials are confirming the same policies that protect the climate also improve the capital city’s economy and global competitiveness. “Each time Copenhagen spends \$1 on its climate plan, it generates \$85 in private investment elsewhere in the city”, says Jørgen

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Abildgaard, Copenhagen’s Executive Climate Director. The city’s economic studies indicate that the climate plan will generate an economic surplus of almost \$1 billion over its lifetime. Disputing the idea that reducing emissions is costly, Copenhagen’s Mayor of Technical and Environmental Affairs Morten Kabell asserts, “It hasn’t been expensive for Copenhagen to go green.”

- s. Progress is also happening in Canada. Through the recently formed Canada Green Building Council, there are at least 16 pilot projects with a net zero carbon objective, with 6 being in the GTA and surrounding area. (See appendix 1) Participants in this Council have organized a trade mission to the Netherlands and Austria to gain more insight from these leaders.
- t. The scope of becoming a net zero carbon city is exciting as it goes well beyond the buildings and spaces we create or renovate. The Spring 2018 Environmental staff report will cover 5 areas that directly connect to this vision through climate plan assessments relating to 1) decrease CO₂ fleet study 2) land use planning 3) infrastructure 4) green economy 5) energy management. A Net zero carbon city can truly span all aspects of the city and become a rallying cry and vision for all: economic development, transit, education, city branding, balanced scorecard, planning/development, public art, heritage retrofit, cultural landscape creation through strategic tree planting, and tourism to name a few. (Preliminary tactics for these areas are included in the Appendix 2 to generate discussion).

Project Deliverables:

The following are suggested 2018 deliverables that are within the scope of HAC/EAC to propose:

1. Update the vision to note our intention to “inspire the world” will be fulfilled “by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to improve where we live, work, and play” will be endorsed. Of course, this statement could be converted into a shorter, more memorable city brand and examples are included in the appendix.
2. Identify 2018 net zero carbon sites resulting in more future heritage opportunities. Given time is of the essence for some critical decisions, and the climate change plan is not due until 2019, we recommend that steps are taken in 2018 to avoid a missed opportunity by identifying net zero carbon builds including Inspiration Port Credit, Inspiration Lakeview, Canada Lands, and other properties to be identified. Seeking best practices from Canada Green Building Council and other sources is encouraged, while updating interim Green Development standards. This will drive unique architecture and land use approaches that will attract world attention while representing future heritage potential that future generations will enjoy.

How Mississauga could choose to “Inspire the World”

3. Assess any other activities that may require action in 2018 as to avoid a missed opportunity. These will be uncovered through the upcoming Environmental staff report covering 5 areas of study.
4. Climate change stakeholder team: That this direction is provided to the Climate Change Stakeholder team and this position is integrated into all elements of the strategic plan and green plan resulting in adjusting the 2019-2022 budget and tactical decisions to support this vision. A facilitator would likely be needed to help guide other departments to develop a plan to support this vision.

Strategic Plan:

- The strategic plan needs to be updated to reflect the fact we have chosen to answer how Mississauga will inspire the world will be “by becoming a world leader in building a net zero carbon city, while creating future heritage for residents, businesses and visitors to improve where we live, work, and play”.

Financial Impact:

- The city identified in 2012 the goal to become a net zero carbon city. In 2019, as part of the climate change plan, the financial impact of this goal will be better understood. Interim steps, prior to 2019, such as by identifying net zero carbon build sites and providing direction to other departments will not impact the 2018 budget. As far as future impact, per experience in Copenhagen, this represents a net revenue opportunity, and should be approached with this mindset.

Conclusion:

- We are overdue in clarifying where Mississauga plans to inspire the world.
- This recommendation builds on the Mayor’s “Big Idea”.
- HAC/EAC believes becoming a “World Leading Net Zero Carbon City” is the answer to address our vision, and fulfilling our promise for future heritage and environmental goals.
- The 2018 sites and beyond will become a series of Expo-like examples, teaching the world on the net zero carbon opportunity.
- The current generation, and future generations will applaud this decision.

How Mississauga could choose to “Inspire the World”

Appendix 1: Canada Green Building Council

Spanning the length of the country from Dartmouth to Kelowna, this elite group of 16 projects have been chosen to participate in a two-year pilot of CaGBC's Zero Carbon Building Standard.

Below are 5 examples;:

Toronto and Region Conservation Authority (TRCA) New Headquarters, Toronto, Ontario

TRCA's new corporate headquarters is a six storey, 100,000 square foot, wood-structured building that will be designed to achieve zero carbon, LEED Platinum and WELL Building Certifications.

Mohawk College, Joyce Centre for Partnership & Innovation, Hamilton, Ontario

Mohawk College in Hamilton will be home to Canada's largest, and the city's first, Net-Zero energy institutional building. The 92,000 square foot facility, scheduled to be completed in the spring of 2018, will feature labs, workshops, lecture theatres and industry training centres.

NiMa Trails – Residential, Commercial Net Zero Building, Guelph, Ontario

Consisting of 8 residences and ground floor commercial with basement storage. Constructed of solid precast concrete walls, roof and floors. Thermally broken exterior, insulated continuously with appropriate thicknesses to the outside of the structural concrete mass, providing the resilience and energy efficient building envelope required including triple glazing.

evolv1, Waterloo, Ontario

Waterloo based Cora Group's evolv1 is a uniquely modern 110,000sf urban office building designed for today's millennial tech-savvy workforce. Located on the doorstep of ION Light Rail Transit, evolv1 offers a perfect light-filled home for growing technology or professional services companies.

City of Vancouver Zero Emissions Fire Hall, Vancouver, British Columbia

The City of Vancouver Zero Emissions Fire Hall project is a new fire hall being designed to a post disaster standard. The new building is being designed to be certified to a Passive House standard to reduce energy consumption as much as possible, will use no fossil fuels, and will also be certified to a LEED gold standard.

Appendix 2: The following are other example project deliverables to demonstrate how the opportunity spans city-wide. These are included for illustrative purposes.

- I. Economic Development. Although Canadian cleantech companies are making their mark on the world stage, with a record-breaking 13 businesses being named to the prestigious Global Cleantech 100 list, and Mississauga is home to over 360 Cleantech companies employing 14,000+ people locally, further opportunity exists. As an example, we could utilize this strategy as a means to become the Clean Tech Centre of Canada. According to Analytica, “our nation accounts for 2 percent of the global economy. With the decline of Canada’s global market share in Environmental Goods, Canada should aim to achieve an equivalent global market share in clean technology. If we were to achieve 2 percent, Canada could create a \$50 billion industry by 2022”. This current under performance means we have an opportunity to close this gap. The federal government is supporting this segment as demonstrated through a January 2018 announcement where \$700 million will be provided versus the next five years to the Business Development Bank of Canada.
- II. Transit. Per Global Covenant of Mayors for Climate & Energy. “Twelve major cities including London, Paris, Los Angeles, Vancouver and Cape Town promised on Monday to buy only zero-emissions buses from 2025 and to make major areas free of fossil fuel emissions by 2030 to protect the environment.” Greater clarity from Mississauga in this area should be considered.
- III. Education: At University of Waterloo, they promote a unique program: “Today, smart businesses know that sustainability has to be a core part of their plan. In Environment and Business — the only program of its kind in North America — you’ll develop an in-depth knowledge of environmental issues *and* the business world.” University of Toronto (Mississauga Campus) and Sheridan College could develop a similar/related course that would establish Mississauga as the education destination for Clean Tech.
- IV. City Brand Extension: Just like other cities with close proximity to larger cities like San Jose (known as Silicon Valley), Austin (Live Music Capital of the World) do in their effort to create clear leadership and differentiation versus San Francisco/Los Angeles and Dallas/Houston, we will create difference versus Toronto. We will be known as “a World leading Net Zero Carbon City.” This will truly inspire the world. Some initial shorter examples include: “Canada’s Net Zero North”, “Clean Tech Capital of Canada”, “Canada’s Greenest City”, “Building World Best Net Zero Heritage”, “World Leading Net Zero Carbon City”.
- V. Balanced Scorecard. Net Zero Carbon needs to be measured and included in the balanced scorecard.

How Mississauga could choose to “Inspire the World”

- VI. Planning and Development: Update City of Mississauga Green standards including appropriate incentives and penalties to support vision. The business plan states “actively pursuing grants for energy conservation”, but this needs to be quantified and more substantially funded through new revenue sources.
- VII. Public Art and Interactive displays: Starting in 2018, and supported via the Culture plan, place public art in strategic locations throughout Mississauga focused on the net zero carbon vision.
- VIII. Update current heritage: Lead by example by committing to meet net zero carbon for all public heritage properties, and cultural landscapes by 2025 and private districts by 2030. We believe this should include a plan to retrofit all historic villages to net zero to provide example of addressing current builds.
- IX. Shape future cultural landscapes and natural heritage into key projects under 2018 review: Reconsider current tree planting infrastructure effort and convert to a canopy goal, and increase if not fully supporting the net zero carbon goal. Learning from Washington, “the 16-day National Cherry Blossom Festival is a cherished rite of spring, coloring the capital with delicate pink and white blossoms — and attracting tourists from far and wide. The festival, which began in 1935, brings in at least \$126 million to the D.C. metro area each year, according to the National Park Service, making it the city’s largest annual tourism event by far. The flowering trees, largely concentrated in the Tidal Basin, draw approximately 1 million a year, with 45 percent from out of town”. Plant strategically, creating future heritage cultural landscapes such as the longest stand of Maple Leaf trees in the world to parallel the upcoming LRT route on Hurontario. Compliment with other planting strategies for Dundas Connect and Lakeshore. Just as Washington has heritage cherry trees, we will have heritage Maple trees that will attract the world.
- X. Tourism There are many reasons why people travel. Most broadly, one definition states “people travel because they want to learn others cultures. They want to see the difference between their culture and other cultures. They want to learn others culture because for them traveling is fun while learning. One particular thing about the culture is the food.” Our net zero carbon sites will become an open air, free admission places to view net zero carbon in action. Think of this as a Science Centre without walls, or an Education Learning Centre without a classroom, or a live work and play Museum that is virtually everywhere. Perhaps, approaching Expo in impact. Our refreshed public art strategy will attract visitors to other areas within Mississauga until such time net zero carbon has spread across the entire city.

How Mississauga could choose to “Inspire the World”

Our tree planting approach will create a destination as popular as the Washington Cherry Trees. Come visit the world leading net zero carbon city!

Per web description, Mississauga is currently known world-wide for our huge malls! Is this what we want to be known for?

The description of five cities on the “search” landing page:

Mississauga is a large Canadian city neighbouring Toronto on Lake Ontario. On the lakefront, Port Credit has shops, a working lighthouse and a marina with a grounded freighter. Multi-use trails wind through the city's parks and woodlands. In the centre, Mississauga Celebration Square hosts multicultural festivals and has a skating rink in winter. A popular shopping destination, the city has several huge malls. (Population: 800,000)

Other city descriptions:

San Jose is a large city surrounded by rolling hills in Silicon Valley, a major technology hub in California's Bay Area. Architectural landmarks, from the 1883 Italianate-style Oddfellows building to Spanish Colonial Revival structures, make up the downtown historic district. The downtown area is also home to the Tech Museum of Innovation, devoted to the exploration of science and technology. (Population: 1,000,000)

Austin is the state capital of Texas, an inland city bordering the Hill Country region. Home to the University of Texas flagship campus, Austin is known for its eclectic live-music scene centered around country, blues and rock. Its many parks and lakes are popular for hiking, biking, swimming and boating. South of the city, Formula One's Circuit of the Americas raceway has hosted the United States Grand Prix. (Population: 1,000,000)

Copenhagen, Denmark's capital, sits on the coastal islands of Zealand and Amager. It's linked to Malmo in southern Sweden by the Öresund Bridge. Indre By, the city's historic center, contains Frederiksstad, an 18th-century rococo district, home to the royal family's Amalienborg Palace. Nearby is Christiansborg Palace and the Renaissance-era Rosenborg Castle, surrounded by gardens and home to the crown jewels. (Population: 600,000)

Toronto, the capital of the province of Ontario, is a major Canadian city along Lake Ontario's northwestern shore. It's a dynamic metropolis with a core of soaring skyscrapers, all dwarfed by the iconic, free-standing CN Tower. Toronto also has many green spaces, from the orderly oval of Queen's Park to 400-acre High Park and its trails, sports facilities and zoo.

ENVIRONMENTAL ACTION COMMITTEE (EAC) WORK PLAN 2015 - 2018

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EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

ACTION	Member(s)	DATE/Hours
<i>Actions, events, workshops, conferences, training etc., that member(s) have done/ participated in related to being an EAC Member</i>	<i>Name of Member/Members/ Working Group</i>	<i>Date/Days/Hours (e.g. April 25, 2015, volunteer ½ day)</i>
Attended Provincial EAC Symposium	Chelsea Dalton	May 2, 2015 - 1 day
Attended 100% Possible March in Ottawa	Chelsea Dalton	November 29, 2015 – 1 day
Attended Mississauga Moves 2015 Conference	Chelsea Dalton	November 9, 2015 – 1 day
Attended Community Environmental Appreciation Evening	Chelsea Dalton	2015 – ½ day
Attended Clean Air Council Summit	Chelsea Dalton	2015 – 1 day
Represented EAC at Clean Air Partnership 2015-2018 Inter-governmental Declaration on Clean Air and Climate Change in Toronto	Alex Dumesle	2015 – 1 day
Represented EAC at FCM Sustainable Conference in Ottawa	Alex Dumesle	February 2016
PPG partnered with CVC and Stormwater Management Team at City of Mississauga to provide a workshop to 50 industrial and commercial end users on the upcoming stormwater charge (2nd partnership presentation)	Alex Dumesle	2015
Attended FCM – Sustainability Conference in Ottawa	Councillor Jim Tovey	February 2016
Attended Seedy Saturday Mississauga Event	Councillor Jim Tovey	February 20, 2016
Represented EAC at Credit River Alliance meeting at Riverwood	Dave Beaton	February 2016
Working to engage Credit River Alliance members in policy/ by-law review	Dave Beaton	Ongoing
Exploring options re. pollinators/"Bee City"	Dave Beaton	Ongoing
Presenting at Sharing Experiences Workshop	Dave Beaton	March 5, 2016

EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

Green Ambassadors program volunteer	Brad Bass	Summer 2016
Management of small native meadow sites on institutional property following conversion from turf grass or invasive plants to native plants and a Creature Tower to provide habitat for pollinating insects	Brad Bass	April to October 2015
Attended Seedy Saturday Mississauga Event	Chelsea Dalton	February 20, 2016
Toured the Region of Peel Waste Management facility with PEYA	Chelsea Dalton	March 2016
Attended Green Drinks Mississauga	Joanne Deidun-Roorck	April 12, 2016
Attended “Unhooking Your Downspout” Workshop	Joanne Deidun-Roorck	April 19, 2016
The Little Green Schoolhouse started a school composter	Joanne Deidun-Roorck	April 20, 2016
The Little Green Schoolhouse participated in an Earth Day 40 Minute Walk to clean up their local community	Joanne Deidun-Roorck	April 22, 2016
Posted a link to Mississauga’s Earth Days on Facebook	Joanne Deidun-Roorck	April 2016
Attended the Community Environmental Appreciation Evening	Councillor Matt Mahoney, Councillor Jim Tovey, Brad Bass, Dave Beaton, Charles Cooper, Stephanie Crocker, Chelsea Dalton, Joanne Deidun-Roorck, Manasi Goyal, Lea Ann Mallett, Eashan Karnik	April 18, 2016
Facilitated interactive discussion panel at the Community Environmental Appreciation Evening	Brad Bass, Charles Cooper, Chelsea Dalton, Joanne Deidun-Roorck	April 18, 2016
Attended the Swiftwatch Mississauga Open House	Chelsea Dalton	April 2016
Attended Green Drinks Mississauga to promote the Earth Market	Joanne Deidun-Roorck	May 10, 2016
Volunteered at Earth Market	Joanne Deidun-Roorck	May 28, 2016
Installed a rain barrel at The Little Green Schoolhouse	Joanne Deidun-Roorck	May 2016
Tree planting event co-hosted by CVC and PPG at Camilla Park	Alex Dumesle	May 7, 2016

EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

Attended the Provincial EAC Symposium	Charles Cooper	May 2016
Attended Green Drinks Mississauga	Charles Cooper	July 2016
Volunteer marshal on 12 Community Rides with the Mississauga Cycling Advisory Committee including marshal training and organizing the UTM Community Ride in September, as well as participating in the Tour de Mississauga in September	Chelsea Dalton	July – October 2016
1. Hosted Greening Sacred Spaces at Solel Congregation for tour of naturalized landscapes 2. Hosted 40 volunteers from Canon Corp to expand a meadow at Solel Congregation 3. Green Ambassador – Many Feathers Farmers Market, Lisgar GO 4. Cleared invasive plants/established new garden at Solel Congregation	Brad Bass	October 2016
1. Assisted in coordination of Farmer's Market at University of Toronto 2. Assisted in organization of UofT's Environment Week 3. Participated in tree planting event – One Million Trees 4. Attended Friends of the Credit Stewardship Forum 5. Participated in waste removal volunteer event for the Credit River	Eashan Karnik	September – October 2016
1. Assisted in organizing the PEYA September General Meeting 2. Great Canadian Shoreline Cleanup Contributor and Photographer 3. Spoke for PEYA and youth role in environmental stewardship at One Mic United 4. Participated in Dundas Connects Consultation 5. Delegate at United Nations Sustainable Development	Pujita Verma	September – October 2016

EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

Training Conference 6. Organized community cleanup in neighbourhood 7. Attended Canadian Wildlife Federation's "Wild Outside Camp" 8. Assisted in organizing the PEYA October General Meeting (fall gardening and garlic planting)		
1. Opening speeches @ PEYA's Annual EcoBuzz Conference 2. Joined UN Sustainable Development Goals Task Force Toronto 3. Hosted an Upcycling Workshop for Ink Movement Mississauga 4. PEYA November General Meeting on Infrastructure on Sustainable Future 5. Helped with Giving Tuesday eco-friendly workshop	Pujita Verma	November 2016
1. Coordinated University of Toronto's delegation for the United Nations Winter Youth Assembly re. United Nations 2030 sustainability agenda 2. Assisting with UTMSU Farmers Market 3. Assisting with the "Show Me Your Green" conference and case contest	Eashan Karnik	December 2016/January 2017
1. Attended Cycling Advisory Committee's volunteer appreciation event & provided feedback on MCAC's deputation to Council 2. Attended Women's March in Toronto promoting women's rights, social justice and environmental action	Chelsea Dalton	December 2016/January 2017
1. Attended Seedy Saturday event	Chelsea Dalton	February 2017
1. Coordinating with Andrea McLeod and the Undergraduate Commerce Society for the City of Mississauga's involvement in the EAC; 2. Representing the City of Mississauga at the United Nations Winter Youth Assembly to discuss	Eashan Karnik	February 2017

EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

the Sustainable Development Goals of Climate Action being achieved in Mississauga; 3. Representing the City of Mississauga at the United Nations Association in Canada's Active Citizens Social Enterprise conference; 4. Conducting guest lectures at the University of Toronto Mississauga for the UN's work on Climate Action and Clean and Affordable Energy.		
U of T, Mississauga Campus, "Show me the Green" conference and competition	Alex Dumesle	March 2017
Represented EAC at the Globe Capital Conference	Alex Dumesle	April 4 & 5, 2017
Canada 150 Tree Planting events, Wards 4 and 11	Eashan Karnik	April 2017
Shared Mississauga's Earth Day festivities with Canada 150 Community Leaders Network	Eashan Karnik	April 2017
Photographed Earth Week festivities and shared with Canada 150 Community Leaders Network	Eashan Karnik	April 2017
Represented sustainable innovation in Mississauga at the Youth Innovation Summit in Ottawa	Eashan Karnik	April 2017
Participation in the People Power Challenge as a member of UTM's team	Chelsea Dalton	April 2017
Attended the March for Science on Earth Day	Chelsea Dalton	April 2017
Attended the U of T Sustainability Summit	Chelsea Dalton	April 2017
Planned, promoted and ran Repair Café event at UTM	Chelsea Dalton	April 2017
Attended Earth Day event at John C Pallet Park	Councillor Matt Mahoney	April 2017
Participating in the People Power Challenge (UTM)	Chelsea Dalton	May 2017
Volunteered as a Marshal for the Clarkson Community Ride with the Mississauga Cycling Advisory Committee	Chelsea Dalton	May 2017
Installed a geothermal system in her home (replaces air conditioner and furnace)	Chelsea Dalton	May 2017
Hosted the Credit Valley Conservation Youth Corps at Solel Congregation of Mississauga, with CYC students helping in weeding and planting to expand the amount	Brad Bass	August 2017

EAC ENVIRONMENTAL ACTIONS SUMMARY

2015-2018

of land that has been converted to native landscapes		
1. Participating in the Mississauga Bike Challenge (logged 900.2 km so far, equivalent of 6 trees worth) 2. Volunteered as a marshal on 10 of the Mississauga Cycling Advisory Committee's community rides	Chelsea Dalton	July and August 2017
Conducted research as part of the Research Opportunity Program at UTM to see how students' beliefs about the environment, ethical production and social justice translate into their clothing and fast food consumption practices	Minal Waqar	July and August 2017
Attended Canada's Changing Arctic - Walking on Thin Ice Symposium at UTM	Minal Waqar	September 2017
Participated in 50 km Tour de Mississauga route	Chelsea Dalton	September 2017
1. Completed the Great Lakes St. Lawrence Cities Initiative Webinar on Great Lakes Environmental Policy 2. Participated in the Great Lakes Forum	Councillor Jim Tovey	October 2017
Attended Mississauga Bike Challenge tree planting	Chelsea Dalton	October 2017