

Great Lakes and St. Lawrence Cities Initiative

Greenhouse Gas Emission Reduction Targets among Member Cities

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This document aims to offer a comprehensive picture of greenhouse gas (GHG) reduction commitments from members of the Cities Initiative as well as of the political context in which they operate.

Fast facts

- 31 of our member cities (26%) adopted targets. Among them, 19 cities have targets that apply to the entire municipality, while the remaining cities' targets apply only to their municipal corporation.
- The reduction targets represent at the very least a reduction of more than 28 million tons of equivalent CO₂ (TeCO₂).
- The cities that have targets represent more than 13 million people.
- At least 73 of our member cities are taking actions to reduce their CO₂ emissions. Some are in the process of adopting a GHG reduction target, some already have energy consumption reduction targets and energy action plans, and others are retrofitting and changing items such as: LED lights for streets, electric and hybrid vehicles in their fleet and energy-wise retrofits in buildings.
- 16 of our member cities have committed to the



This document is a draft copy dated 12/03/2015. Data provided in it has not been confirmed by listed cities and is subject to change.

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Table 1 : Highlights from Member Cities		
Cities with GHG emission reduction targets	31/119	26%
IL	3/5	60%
IN	0/3	0%
MI	2/11	18%
MN	0/2	0%
NY	1/2	50%
OH	0/3	0%
ON	15/58	26%
PA	0/1	0%
QC	9/26	35%
WI	0/8	0%
Canada	24/84	29%
USA	6/35	17%
Cities with targets for their municipal corporation only	≥ 10/31	≥ 33%
Cities with targets for their entire municipality	≥ 19/30	≥ 63%
Cities with per capita targets	1	
Cities committed to the Compact of Mayors	16 : Ashland, Chatham-Kent, Chicago, Durham, Evanston, Grand Rapids, Hamilton, Milwaukee, Montreal, Racine, Rochester, South Haven, St. Catharines, Thunder Bay, Toronto, Windsor	
C40 member cities	2 : Chicago, Toronto	
ICLEI member cities	Canada : 5; USA. : ≥ 2	
Partners for Climate Protection (FCM – Canada only) member cities	25	

Federal targets

As part of the 21st UN Climate Conference that will be held in Paris in December, each member state is invited to provide in advance an *Intended nationally determined contribution (INDC)*, which is a template-like document that provides a framework for nations to develop new GHG reduction targets [1]. Canada and the United States have already submitted their INDCs. These two countries have also set GHG reduction targets at the Copenhagen Conference in 2009. Neither country has ratified the Kyoto Protocol [2].

Canadian goals

↓17% by 2020 compared to 2005 [3]

↓30% by 2030 compared to 2005 [4]

United States goals

↓17% by 2020 compared to 2005

↓ 26-28% by 2025 compared to 2005; ideally reaching 28% [5]

Canadian Energy Strategy

To learn more : <http://goo.gl/j1BI5Q>

Targets by province/state

Illinois, Michigan, Minnesota, New York, Ontario and Quebec have GHG reduction targets where the base year, the percentage and the target year vary significantly. All have action plans. Indiana, Ohio, Pennsylvania and Wisconsin have not adopted reduction targets; the latter two, however, have plans of action against climate change (see *Table 2*).

Ontario Regulation 397/11 (Green Energy Act, 2009)

Ontario has adopted a regulation requiring its municipalities to make public no later than 1 July 2014 an *energy conservation and demand management plan (ECDMP)* in which municipalities must include a summary of annual electricity consumption and greenhouse gas emissions and a summary of previous, current and planned measures to reduce the energy consumption of the municipal corporation. Thus, the vast majority of Ontario municipalities have corporate targets for reducing energy consumption and measures for greenhouse gases [6]. This regulation may have influenced some to adopt GHG reduction targets.

Midwest Greenhouse Gas Reduction Accord

This agreement was signed in 2007 by Manitoba, Illinois, Iowa, Kansas, Michigan, Minnesota and Wisconsin and aimed to provide the Midwest with GHG reduction targets as well as a cap-and-trade system for carbon. The Accord was implemented from 2007 to 2010, but since 2010, none of the signatory states and provinces have pursued its goals. However, the Accord has not been formally suspended [7].

Targets by member city

Methods

To identify the GHG reduction targets of member cities, staff surveyed the website of each municipality and performed a Google search with the name of the city plus the words *greenhouse gas* or *gaz à effet de serre*. Staff also contacted cities by phone if the city did not list GHG reduction targets online. However, not all cities could be reached, leading to a small amount of uncertain data in the table below.

The lists of *ICLEI-Local Governments for Sustainability*, of *C40* and of *Partners for Climate Protection* were consulted to determine which members of the Cities Initiative are also members of these organizations. Note that membership lists of the United Cities and Local Governments (UCLG / UCLG) and ICLEI US were not available – the two cities identified as members of ICLEI in Table 3 are listed as such because the cities had listed this information in their own documents.

Compact of Mayors: An initiative supported by C40 that offers a standardized GHG emissions management platform for cities around the world. The organization also facilitates climate change adaptation practices sharing.

ICLEI – Local Governments for Sustainability: An international association of local and metropolitan governments dedicated to sustainable development.

C40 Cities Climate Leadership Group: An association of the world's largest cities that focus on tackling climate change.

Partners for Climate Protection: A network of Canadian municipalities that have committed to reducing greenhouse gases. This organization is supported by FCM and constitutes the Canadian equivalent of the *Cities for Climate Protection* network of the ICLEI.

Our Member Cities and Greenhouse Gas Emission Reduction

Of our 119 member cities, at least 73 are taking actions to reduce their greenhouse gas emissions, whether it is adopting a GHG target, having targets and action plans to reduce energy consumption, or implementing efficient actions such as renewing the vehicle fleet with hybrid and electric cars, changing street lights for LED or constructing energy-efficient buildings.

At least 31 have a GHG reduction target, which represent 26% of our members. For 19 of them, the target covers the whole community. The targets of the remaining cities cover the operations of the municipal government.



Figure 1: Proportion of member cities that have taken actions to reduce their greenhouse gas emissions, that have adopted reduction targets and that have adopted reduction targets that applies to all of their community.

28,697,367 TeCO₂ is the minimum number of tons of equivalent CO₂ that will not go in the atmosphere in 2020 when our 31 cities will meet their targets, compared to base year emissions as their base year. This equals avoiding burning more than 12 billion liters of gasoline or taking more than 6 million passenger cars off the roads for a year.

Our member cities have targets with different base years, reduction goals and target years; some targets are as high as a 100% reduction and future target years vary from 2016 to 2050. Together, these 31 cities represent 13,781,383 people.

16 of our member cities now have committed to the Compact of Mayors and this number grows from week to week.

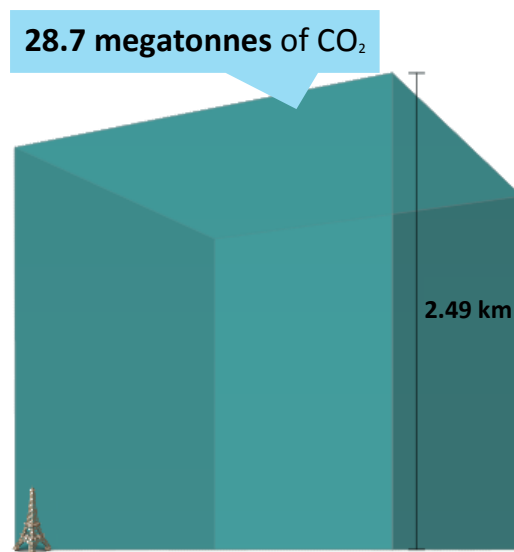


Figure 2: Volume that represents 28.7 million tons of equivalent CO₂ at 15°C and standard pressure.

ISATION

About the Cities Initiative

The Great Lakes and St. Lawrence Cities Initiative (glsclcities.org) is a binational coalition of over 115 mayors that works actively to advance the protection, restoration and sustainability of the Great Lakes and St. Lawrence River basin.

References

[1] CCUNCC / UNFCCC (2015). *Contributions prévues déterminées au niveau national (INDC) / Intended nationally determined contributions (INDC)*. [PDF] Repéré à <http://www.cop21.gouv.fr/fr/espace-medias/salle-de-presse/decryptage-les-contributions-prevues-determinees-au-niveau-national> / Retrieved from <http://www.cop21.gouv.fr/en/media-facilities/press-room/decryptage-les-contributions-prevues-determinees-au-niveau-national-indc>

[2] UNFCCC (2014). *Status of Ratification of the Kyoto Protocol*. Retrieved from http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php

[3] Gouvernement du Canada / Government of Canada (2013). *Accord de Copenhague / Copenhagen Accord*. Repéré à <http://climatechange.gc.ca/default.asp?lang=Fr&n=AA3F6868-1> / Retrieved from <http://climatechange.gc.ca/default.asp?lang=En&n=AA3F6868-1>

[4] CCUNCC / UNFCCC (2015). *Présentation de la CPDN du Canada devant la CCNUCC / Canada's INDC submission to the UNFCCC*. Repéré à <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/CPDN%20-%20Canada%20-%20Fran%3%A7ais.pdf> / Retrieved from <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf>

[5] UNFCCC (2015). *U.S.A. INDC submission*. Retrieved from <http://www4.unfccc.int/submissions/INDC/Published%20Documents/United%20States%20of%20America/1/U.S.%20Cover%20Note%20INDC%20and%20Accompanying%20Information.pdf>

[6] Gouvernement de l'Ontario / Ontario's government (2011). *Règlement de l'Ontario 397/11 / Ontario Regulation 397/11*. Repéré à <http://www.ontario.ca/fr/lois/reglement/r11397> / Retrieved from <http://www.ontario.ca/laws/regulation/r11397>

[7] Center for Climate and Energy Solutions (N.D.) *Midwest greenhouse Gas Reduction Accord*. Retrieved from <http://www.c2es.org/us-states-regions/regional-climate-initiatives/mggra>

Image credits

From top to bottom:

Wind turbine near Traverse City, MI (Photo by: Unknown): <http://www.tclp.org/Page/RenewableEnergy>
<http://mainetoday.com/blog/how-to-order-a-fruit-tree/>

Solar array near Traverse City, MI (Photo By: CEC): <http://www.ect.coop/power-supply/renewable-energy/northern-co-ops-adding-solar-power/57064>

Hydroelectric power plant in Beauharnois, QC (Photo by: Unknown): <https://fsh.ugam.ca/conseil-de-diplomes/493-invitation-aux-diplomes-visite-de-la-centrale-hydroelectrique-de-beauharnois.html>

Municipal Tree Nursery of Montreal, QC (Photo by: Unknown): <http://www.avevq.ca/bulletin/docs/PresentationPepiniereAREVQ2011.pdf>

Annex 1: Greenhouse gas reduction targets by province/state and by member city

Table 2: State and provincial greenhouse gas emission reduction targets in the Great Lakes and St. Lawrence Region

State or Province	Base year ¹	% Reduction	Target year	Source	Notes	Action plan?
Illinois	1990 1990	↓0% ↓60%	2020 2050	http://goo.gl/9V0IQT	•Signatory of the Midwest Greenhouse Gaz Reduction Accord : http://goo.gl/Vh7Dbi	Y: http://goo.gl/4pSBjN
Indiana	NT			http://goo.gl/9V0IQT		N: http://goo.gl/4pSBjN
Michigan	2005 2005	↓20% ↓80%	2025 2050	http://goo.gl/9V0IQT	•Signatory of the Midwest Greenhouse Gaz Reduction Accord : http://goo.gl/Vh7Dbi	Y: http://goo.gl/Dqg1JX
Minnesota	2005 2005 2005	↓15% ↓30% ↓80%	2015 2025 2050	http://goo.gl/9V0IQT	•Signatory of the Midwest Greenhouse Gaz Reduction Accord : http://goo.gl/Vh7Dbi	Y: http://goo.gl/4pSBjN
New-York	1990 1990 1990	↓5% ↓10% ↓80%	2010 2020 2050	http://goo.gl/9V0IQT		Y: http://goo.gl/8XbCti
Ohio	NT			http://goo.gl/9V0IQT		N: http://goo.gl/4pSBjN
Ontario	1990	↓15% ↓37% ↓80%	2020 2030 2050	http://goo.gl/L3Ht0D	Achieved in 2014 : ↓6%	Y : http://goo.gl/uK8bZs
Pennsylvanie	NT			http://goo.gl/9V0IQT		Y : http://goo.gl/OK6Wtv
Québec	1990	↓20%	2020	http://goo.gl/DgE05Q http://goo.gl/EcKHha	Achieved in 2012 : ↓8%	Y : http://goo.gl/DgE05Q
Wisconsin	NT			http://goo.gl/9V0IQT	•Signatory of the Midwest Greenhouse Gaz Reduction Accord : http://goo.gl/Vh7Dbi • Actions regarding energy : http://goo.gl/6MSURZ	Y : http://goo.gl/T3xa5Q

ON	Oshawa	152,000	2007	20	2020	Corpo	16,757	3,351.4							
ON	Oshawa	152,000	2007	80	2050	Corpo	16,757								
ON	Oshawa	152,000	2007	5	2015	Comm	1,761,835		575,718						
ON	Oshawa	152,000	2007	20	2020	Comm	1,761,835	352,367							
ON	Oshawa	152,000	2007	80	2050	Comm	1,761,835								
ON	Parry Sound	6,191	NTF												✓
ON	Peel Region	1,350,000	1990	80	2050	Corpo	443,000	354,400	31,000						✓
ON	Penetanguishene	9,111	NTF												
ON	Pickering	88,721	1995	22 pc ³	2016	Corpo								✓	✓
ON	Pickering	88721	1995	19 pc ³	2016	Comm	511,839	(-)/76,031							
ON	Port Colborne	18,424	NTF												✓
ON	Port Hope	16,390	2008	15	2018	Corpo	2937	441						✓	✓
WI	Port Washington	11,250	NT												
QC	Port-Cartier	6,826	NT												
QC	Portneuf	3,144	NT												
WI	Racine	78,860	NT							✓					✓
QC	Repentigny	77,744	2011	19.9	2019	Corpo		51,528							✓
QC	Repentigny	77,744	2011	1.8	2019	Comm									
QC	Rimouski	46,860	NT												✓
NY	Rochester	210,565	2008	20	2020	Corpo				✓					✓
QC	Sainte-Catherine	16,000	NTF												
QC	Salaberry-de-Valleyfield	40,077	2009	20	2020	Corpo		741							✓
QC	Salaberry-de-Valleyfield	40,077	2009	20	2020	Comm		36,168							
ON	Sarnia	72,366	NTF												✓
ON	Saugeen Shores	12,661	NT												✓
ON	Sault-Ste-Marie	75,141	NT												✓
QC	Sept-Îles	25,686	NTF												
WI	Sheboygan	50,792	NTF												
OH	Sheffield Lake	9,137	NT												
ON	Shuniah	2,737	NTF												✓
QC	Sorel-Tracy	34,600	NTF												
ON	South Bruce Peninsula	8,413	NTF												✓
MI	South Haven	5,000	NTF							✓					
MI	Spring Lake	6,412	NTF												
ON	St. Catharines	131,400	NT							✓				✓	✓
ON	St. Clair	14,515	NTF												✓
WI	Superior	27,244	NT												
ON	Tay	9,736	NT												✓
ON	Tecumseh	23,610	NTF												✓
ON	Terrace Bay	1,471	NT												✓
ON	The	566	NT												

	Archipelago													
ON	The Blue Mountains	6,825	2005	20	2016	Corpo	1,687	337				✓	✓	✓
ON	The Blue Mountains	6,825	2005	40	2025	Corpo								
ON	The Blue Mountains	6,825	2005	100	2050	Corpo								
ON	The Blue Mountains	6,825	2005	20	2016	Comm	85,282	17,056						
ON	The Blue Mountains	6,825	2005	40	2025	Comm								
ON	The Blue Mountains	6,825	2005	100	2050	Comm								
ON	Thunder Bay	108,359	2009	20	2020	Comm	1,002,364	200,473		✓		✓	✓	✓
ON	Tiny	11,232	NTF											
OH	Toledo	287,208	NT											
ON	Toronto	2,615,060	1990	6	2012	Comm	22,000,000			✓	✓	✓	✓	✓
ON	Toronto	2,615,060	1990	30	2020	Comm	22,000,000	6,600,000						
ON	Toronto	2,615,060	1990	80	2050	Comm	22,000,000							
MI	Traverse City	14,894	2005	25	2012	Corpo								✓
MI	Traverse City	14,894	2005	25	2012	Comm								
QC	Trois-Rivières	131338	2008	7	2020	Corpo		919						✓
MN	Two Harbors	3,163	NT											
QC	Varenes	20,950	YES											✓
QC	Verchères	5,243	NTF											
QC	Ville de Québec	765,706	2002	22.3	2010	Corpo		11,900					✓	✓
ON	Wainfleet	6,601	NTF											✓
ON	Wasaga Beach	17,537	NTF											
WI	Washburn	2,117	NTF											
IL	Waukegan	89,078	NTF											
ON	Welland	50,631	NT										✓	✓
ON	Whitby	122,022	2014	14 to 19	2019	Corpo							✓	✓
ON	Windsor	210,891	NT							✓			✓	✓

Notes :

- 1) NT: No target; NTF: No target found (In those cases, we weren't able to confirm the absence of target with the municipality.)
- 2) Corporate emissions are the ones produced by the municipal organization itself (vehicle fleet, drinkable water production and wastewater treatment, street lights, etc.). Community emissions are emissions produced by the whole city (cars and trucks on roads, industry and institutions activities, etc.).
- 3) "pc" stands for Per capita. These targets are thus not absolute targets.
- 4) TeCO₂ stands for Tons of equivalent CO₂.
- 5) For references for each data, please refer to the affiliated Excel sheet.