

Notes

Environment Committee - Regional Climate Planning Kickoff Meeting

October 8, 2019, 9:00 AM to 4:00 PM

233 S. Wacker Drive, Suite 800 (Cook County Room), Chicago, IL 60606

The Metropolitan Mayors Caucus (MMC) Environment Committee and (Chicago Metropolitan Agency for Planning) CMAP co-hosted the kickoff meeting of the Regional and Metro-Scale Climate project. Representatives from county governments, regional water utilities, academic and civic institutions, non-profit groups, state and federal agencies, philanthropy and the electric utility joined 18 municipal members of the Environment Committee. A total of 83 people participated in the workshop.

The purpose of the meeting was to introduce regional-scale climate action planning to municipalities and partners and to engage them in the process. This meeting is the first of 2 large workshops planned. It focused on the climate planning process and climate mitigation. The second large workshop, planned for spring 2020, will address climate risks and adaptation.

Our Regional Collaboration

Environment Committee Chairman and Mayor of the City of Geneva Kevin Burns led the meeting. Mayors Burns introduced the Environment Committee, which guides the sustainability work of the Metropolitan Mayors Caucus and engages municipalities to address challenges and opportunities collaboratively. The Committee works on behalf of the 128 local governments that formally support the goals of the Greenest Region Compact.

Mayor Burns invited all participants to actively engage in the regional climate project. He stated that we are all learning how to do this regional climate plan – as one of just four regions in the US to tackle the challenge. He thanked all participants for attending, all partners for collaborating, and thanked the Global Covenant of Mayors and the International Urban Cooperation program for supporting the project.

Edith Makra, Director of Environmental Initiatives for MMC described the Greenest Region Compact (GRC) and how it serves as a foundation for sustainable action at the local and regional level. The goals of the GRC unite and focus municipal leaders; the GRC Framework offers strategies and an organizing tool for addressing these goals. The GRC is synthesized from all municipal sustainability plans and all ongoing sustainability programs being undertaken by member municipalities. Many GRC goals and practical strategies are helpful in mitigating impacts of climate change by reducing greenhouse gas (GHG) emissions. Collaborative work led by the Caucus, like the effort to streamline solar codes through the SolSmart program, leverages collective resources to achieve GRC goals locally and regionally. The work municipalities did to earn SolSmart increases solar energy in the region and therefore will reduce GHG emissions. The MMC has a long history of environmental programs, which have broadened to include social and economic impacts in more recent years with the GRC. The aim of this regional climate plan is to accelerate and focus collaborative work under the GRC to have the greatest impacts in addressing climate change.

Paula McCombie, Mayor of South Barrington, reported on previous commitments by GRC mayors to address climate change. These include pledges to the Global Covenant of Mayors for Climate and Energy, Climate

Mayors, and the Chicago Climate Charter, as well as participation in the Global Climate Action Summit and the North American Climate Summit. Some MMC member communities participate in 8 different pledges. The largest is the GRC with 128 communities, while Climate Mayors and the Chicago Climate Charter each have 12 municipal supporters in our region. Five MMC municipalities are currently pledged to the Global Covenant of Mayors for Climate & Energy (GCoM). She stated such pledges are important public proclamations. Though relatively small numbers of municipalities in the region have made such pledges so far, this regional climate plan would better enable many more municipalities to engage in strategic climate action.

Overview of Project & Global Covenant of Mayors for Climate and Energy

Ryan Glancy, Technical Coordinator of the International Urban Cooperation & GCoM, described the European Union's (EU) leadership in fostering sustainable urban development globally. The EU's International Urban Cooperation (IUC) program aligns with international agreements on urban development and climate change, namely the EU Urban Agenda; the UN's Sustainable Development Goals; and the Paris Agreement. The IUC program focuses on supporting and connecting cities and regions. Cities hold 50% of the world's population, consume 66% of the world's energy and are responsible for 70% of all GHG emissions. Ryan explained that the IUC works through the Global Covenant of Mayors for Climate and Energy (GCoM), the first-of-its-kind and largest global alliance of cities leading the fight against climate change, with support from city networks and other partners.

Ryan described formal commitments made to GCoM by the 9,200+ cities in 130 countries to address climate change through assessment, planning, and reporting climate risks and actions to reduce greenhouse gas emissions (GHG) and adapt to climate impacts. GCoM brings data, financing and other tools to support cities in taking effective climate action. He explained how regional cooperation in other parts of the world has led to successful climate planning that supports local governments and accelerates collaborative solutions.

Regional climate planning is relatively new to the US, however. The IUC program and GCoM have selected the Chicago region as one of 4 metropolitan regions in the US to demonstrate regional climate planning. The effort is being led by the Mayors Caucus with support from CMAP. IUC and GCoM will provide organizing and promotional assistance, as well as offering technical assistance through the services of the engineering firm, BuroHappold. The MMC will commit to GCoM on behalf of interested member communities.

The BuroHappold team, including Mike Stopka, Alexan Stulc, and Mikayla Hoskins, each contributed information to frame the Regional and Metro-Scale Climate Leaders project and describe essential steps for the regional climate plan. These are:

1. Conduct a baseline greenhouse gas (GHG) inventory
2. Assess climate risks and vulnerabilities
3. Set GHG reduction targets and scenarios for different levels of GHG emissions
4. Develop and prioritize GHG mitigation activities
5. Develop and prioritize actions to adapt to climate risks and vulnerabilities
6. Prepare a regional climate action plan
7. Comply with ongoing GCoM requirements using the Common Reporting Framework (CRF)

Some of these actions have already been completed or have been partially completed. Each step and the status of that task is further described below.

Chicago Region's Greenhouse Gas (GHG) Inventory & Climate Risk and Vulnerabilities

Jared Patton, Associate Planner for CMAP, reported that CMAP has completed the baseline regional GHG inventory for 2015, an update to the one completed for 2010. CMAP conducted this inventory to inform ON TO

2050, the region's long-term plan. This inventory identifies activities in the region that use fossil fuels and therefore generate GHG emissions. Understanding the sources of emissions and their relative impacts is critical to setting a GHG reduction target for the region and for planning climate mitigation actions to meet the target.

Jared explained methodologies and parameters for the inventory, which includes the 7-county metropolitan region. Energy data were analyzed and transportation data, such as vehicle miles traveled (VMT), were extrapolated to determine energy consumption and resulting emissions. The analysis of the data included emissions per capita and total emissions by county. Naturally, total emissions are highest for Cook County and lowest for the least populous counties of Kendall, Kane, and McHenry respectively. Per capita emissions, however, are lowest for the City of Chicago and highest for Will County. Overall, our region compares favorably to other major metropolitan regions in the US for per capita emissions.

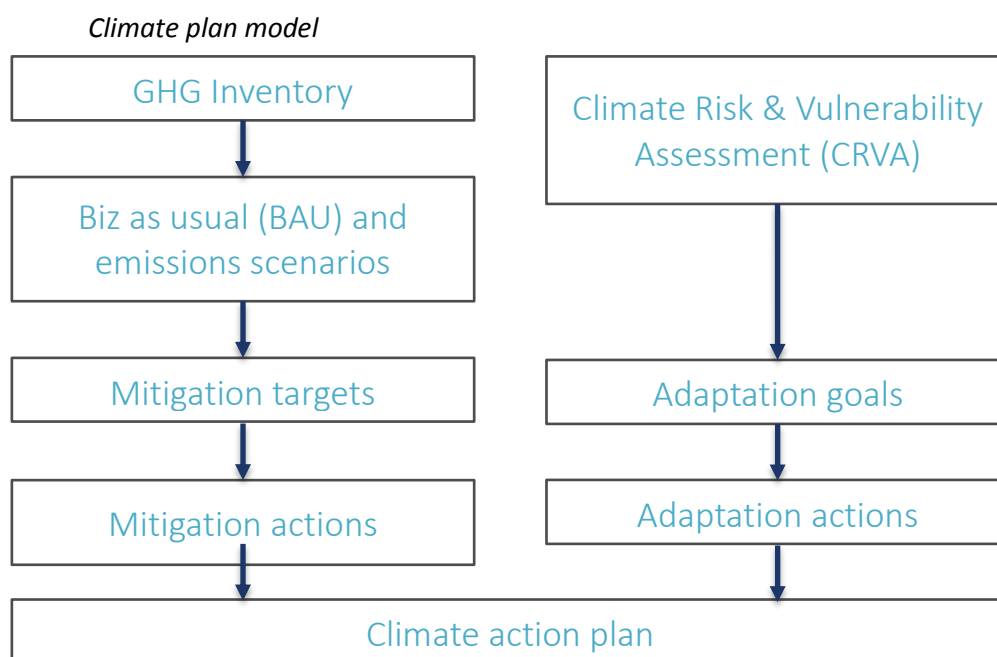
Analyzing energy use by sector showed that 69% of all emissions come from stationary energy, or the use of energy for buildings. Energy use by the residential sector comprises 38% of all building energy while commercial and institutional buildings use 34%. Transportation accounts for 29%, and the vast majority of that is used by vehicles for on-road transportation. Waste, including wastewater, generates 3% of the region's emissions.

Jared also described the work done by CMAP to assess risks from climate change impacts in the region. The Climate Risk and Vulnerability Assessment required by GCoM will expand on this knowledge. A general warming trend has been observed in our region, over all seasons. Higher summer temperatures, especially overnight, have been associated with public health risks. More frequent and intense precipitation has also been observed and is expected to worsen. Existing infrastructure is often unable to manage extreme rain events and associated flooding. Damage to property, damage to infrastructure, transportation disruption, and public health impacts result from flooding. CMAP has analyzed data to create a spatial urban flood vulnerability index to guide planning and adaptive response.

John Ostenburg, former Mayor of Park Forest, then spoke about climate impacts disproportionately impacting vulnerable populations in the region. Observations from CMAP's work on climate change impacts and experience in the region shows that low-income and vulnerable populations are at greater risk to flooding and extreme temperatures. He called for equity considerations in the regional climate planning process.

Developing a Climate Action Plan – Goals, Targets, Actions

The BuroHappold Team described the details of the GCoM climate action planning process. See the steps described above and the diagram below. They also explained how essential steps to assess conditions, both as they are now (business as usual) and as they may be under different scenarios, are critical to setting goals and targets. The greenhouse gas inventory and projected emissions scenarios primarily inform mitigation activities. This part of the regional climate plan is completed. The Greenest Region Compact Framework will serve as a foundation for the mitigation action. The Climate Risk and Vulnerability Assessment, yet to be completed, will inform the adaptation strategies. BuroHappold, CMAP and MMC will work to complete this part of the plan and engage stakeholders in the coming months. Metrics and targets will be developed for both mitigation and adaption components. The regional climate action plan will pull all steps together in a strategic, actionable way that guides both local and regional action. Progress towards targets will be measured and reported in GCoM's Common Reporting Framework, used by cities around the globe.



GRC Framework Strategies – Small Group Activity

Participants were asked to contribute to the regional climate plan development by reviewing the GRC Framework and prioritizing sustainability strategies for climate action. Edith Makra described the GRC in three parts. The Greenest Region *Compact* consists of just consensus sustainability goals. The *Compact* is formally supported by 125 municipalities and 3 counties in the region. The GRC *Framework* is a supportive tool that offers objectives and strategies for achieving the goals of the *Compact*. The extensive *Framework* is derived from sustainability actions that municipalities are already taking and from 30 sustainability plans in use by member municipalities. The last part of the GRC is collaborative action to address GRC goals, such as MMC's work on energy efficiency.

She described how the 3 parts of the GRC can be aligned to translate local action into climate action with regional impact. For example, research done to prepare the GRC showed that building energy efficiency was the 3rd most common action taken by municipalities. Building energy efficiency is also the 2nd most common goal found in existing sustainability plans. And through the former Public Sector Energy Efficiency Program, 65% of our members upgraded their facilities to improve energy efficiency. CMAP's GHG inventory shows that buildings are the greatest source of GHG emissions in our region. This demonstrates the ability of communities to take sustainable actions that will contribute to regional climate targets.

The team then distributed sections of the GRC Framework that are most closely tied with GHG reductions. These included strategies from the Energy, Mobility, Land, Water and Waste sections. Eight groups were asked to review the strategies in a given section and determine:

- Which strategies are easy for a municipality to tackle?
- What are the barriers and specific strategies for achieving challenging ones?
- Which strategies will require regional collaboration to achieve?

Groups were asked to report on the top 2 or 3 strategies for local action and the top 2 or 3 for regional collaboration. (Results from this workshop will be compiled with results from subsequent workshops)

Discussion

Throughout the workshop, there was a strong interest from the audience to engage in the climate action planning process. The audience discussion emphasized the need for regional transportation and housing strategies as well as community engagement, particularly in low-income communities and from the biggest GHG emitters in the region. Comments are summarized below:

- Interest in **city-scale inventories** that can be extracted from the regional inventory
- **Transportation** and **housing** are understood as the key sectors for a regional plan
- Interest in getting technical assistance to develop **local data sources** to better understand local contribution to the regional emissions inventory (Ex: transport emissions are reported as % estimate of regional transportation model rather than from locally gathered data)
 - CMAP does provide local VMT, transit ridership and other data on a case-by-case basis but there are not enough resources to do this work for every municipality
- Many smaller jurisdictions are not as interested in data as they are in a regional plan to inspire action at the local level and provide **collaboration** and **support**
- BAUs should be sure to include **migration from coastal cities** (and the future rise in migration)
- Noted that the **emissions projections** should account for the changing climate (Ex: increasing energy demand during the summers might offset reductions achieved)
- Interest to make sure that the biggest emitters in the region are part of the conversation and planning effort – desire to better understand **who the big emitters are** from the emissions inventory
- Discussion that it is important for municipalities to “walk the walk” and explain climate action (and the need for it) to constituents and **lead by example**
- There is a need/desire to include **vulnerable populations** in conversations of climate risk and vulnerability
 - More generally, there is a desire to find a way to actively involve low-income and disadvantaged communities in the planning process
 - Thoughts to bring in **local community groups** that represent vulnerable communities
- Formally **define vulnerability** for the Chicago Metro region and determine what are the triggers/factors
- Municipalities would like to see more action around **green infrastructure** – these projects are also an opportunity to educate and provide co-benefits
- Case study: **Highland Park** is GCoM-compliant and went through the Climate Risk and Vulnerability Assessment (CRVA) process with workshops with emergency services and the health department to discuss climate and its impacts – it was very successful – a similar method could be used for the regional plan
- There is wide interest for **case studies** of sustainability initiatives and projects from across the region to know who is doing what and how they are doing it
- Acknowledge technology is changing and investigate **carbon capture** as an action in the plan
- Case study: the U of I, Chicago costed out potential strategies and calculated the **cost per carbon reduction** for each strategy to prioritize – a similar method could be used for the regional plan

Participants also expressed views about climate through a keypad polling exercise, using digital devices to provide real-time responses to the following questions. The **top two choices** from each question are bolded below.

1. What is your favorite thing about Illinois’ climate?
 - a. [25%] **1-2 full weeks of spring**
 - b. [11%] Seeing C° and F° meet up at -40
 - c. [15%] Hair styles only possible >90% humidity
 - d. [25%] **Using the AC and heat on the same day**
 - e. [18%] Losing pets and small children in the snow
 - f. [7%] Other

2. Why type of agency/organization do you represent?
 - a. [30%] **A municipality**
 - b. [7%] Other local government
 - c. [13%] Regional, state, or federal government
 - d. [23%] **NGO/Non-profit**
 - e. [8%] Academia
 - f. [8%] A utility
 - g. [8%] A professional organization
 - h. [2%] Other
3. Rank the level of support in your community for climate action planning.
 - a. [43%] **Strong support**
 - b. [45%] **Some interest**
 - c. [7%] No strong feelings
 - d. [3%] Some skepticism
 - e. [2%] Opposition
4. What is the primary benefit your community or organization sees in creating a regional CAP?
 - a. [57%] **Reduced climate impacts**
 - b. [21%] **More cooperation/coordination**
 - c. [13%] Potential assistance with future projects
 - d. [7%] Educational value
 - e. [2%] Other
 - f. [0%] None
5. What do you think is the most important action for addressing climate change in the Chicago region?
 - a. [26%] **Building efficiency**
 - b. [5%] Sustainable food systems
 - c. [18%] Driving less
 - d. [28%] **Renewable energy**
 - e. [5%] Efficient/clean industry
 - f. [11%] Ecosystem protection/restoration
 - g. [7%] Other

A Sustainable Meeting

Workshop participants were treated to a vegan lunch, courtesy of the IUC and the MMC. Mayor Burns emphasized the importance of personal action for the climate. Eating a plant-based diet is cited as the 4th most impactful action to reduce greenhouse gas emissions (Project Drawdown).

Postscript

In follow-up discussions, the project team concluded there was great value in the workshop and small-group GRC Framework activity. Two more, shorter workshops have been scheduled to gather more input into the regional climate planning process, which will especially focus on mitigation activities. The second workshop, hosted by the MMC Environment Committee, was held in conjunction with the Global Congress for Climate Change and Sustainability Professionals on December 9, 2019 in Itasca. About 40 people attended and completed the GRC Framework exercise. The Environment Committee will host another workshop on January 21st at the Village of Montgomery.

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<https://mayorscaucus.org/climate-change/>