GLOBAL COVENANT
of MAYORS for
CLIMATE & ENERGY

@Mayors4Climate
Workshop 1 Agenda
Day 1: Part 1

I. Introductions and Welcome
II. Introduction to IUC and GCoM
III. GCoM Reporting Framework
IV. Project Plan
V. MARC Region
VI. Questions and Discussions
Welcome & Introductions
Climate Action Plan Region

- **10 counties**
  (MARC region + Douglas County)

- **123 Cities**
Introduction to IUC and GCoM
Introduction to:
1. International Urban Cooperation
2. GCoM USA
3. ‘Metro-scale Climate Leaders’

Ryan Glancy
IUC North America Technical Coordinator
EU Context and the International Urban Cooperation Program
International Urban Cooperation Program

The four-year *International Urban Cooperation* (IUC) program enables cities and regions to **learn and share** solutions to common urban challenges.

It is part of a long-term strategy by the European Union to foster **sustainable urban development** in cooperation with both the public and private sectors.

The program activities support the achievement of EU policy objectives as well as major international agreements on urban development and climate change, namely:

- EU Urban Agenda
- Sustainable Development Goals
- The Paris Agreement
The EU's vision of the future global "New Urban Agenda" is based on the understanding that an **integrated and place-based approach** to urban development, together with a **long-term vision**, is necessary in order to promote well-managed, socially inclusive and safe, resilient, resource-efficient and environmentally sustainable as well as economically prosperous cities.

12 PRIORITY THEMES

- Integration of Migrants & Refugees
- Air Quality
- Housing
- Urban Poverty
- Circular Economy
- Climate Adaptation
- Energy Transition
- Urban Mobility
- Digital Transition
- Public Procurement
- Jobs and Skills in Local Economy
- Sustainable Land Use and Nature-based Solutions
IUC Program Components

1. City-to-city cooperation on sustainable urban development

2. Sub-national action under the Global Covenant of Mayors initiative
Introduction to GCoM USA
WHY CITIES MATTER

More than 50% of the world’s population live in cities.

Cities account for more than 70% of global CO2 emissions.

Cities consume more than 66% of the world’s energy.

Global Covenant cities and local governments could collectively reduce CO2e by 17 billion tons by 2030.

...60 billion tons CO2e by 2050.
What is the Global Covenant of Mayors for Climate and Energy?

A first-of-its-kind and largest global alliance of cities leading the fight against climate change, with support from city networks and other partners

- Recognizes that climate action is about improving quality of life, creating new jobs and economic opportunities, and ensuring a safe climate for future generations
- Values vertical alignment and collaboration across all levels of government to support local-level action
- Makes all city-level data on local climate actions publicly available on one consistent online platform – for the first time ever
- Creates an evidence base for increased investment in low-carbon urban infrastructure
9,200+ CITIES

130+ COUNTRIES

800+ MILLION PEOPLE

100+ GLOBAL PARTNERS (city networks, private partners, research institutions)

10+% OF THE GLOBAL POPULATION
The GCoM Board sets the strategic direction for the initiatives and provides local and regionally specific perspectives.
Signatories become a part of a historical and powerful response by the world’s cities and communities and join the largest global coalition of local governments, supported by city networks and committed to greater climate impact and recognition.”

- Networking, cooperation and knowledge exchange
- Amplifying the voice of local governments at the global level
- Collaboration across all levels of government
- Support through the Data4Cities, Innovate4Cities, and Invest4Cities initiatives
Three Game-Changing Initiatives: Mobilizing Innovation & Resources for Scale

**INNOVATE4CITIES**
- Accelerating transformational innovation
- Addressing critical data, research and technology gaps
- Deploying for speed and scale

**INVEST4CITIES**
- Unlocking project pipelines
- Mobilizing innovative finance solutions
- Integrating urban issues into national climate investments

**DATA4CITIES**
- Standardizing city reporting to level the playing field
- Driving consistent and transparent progress reporting
- Enabling data-driven decision making
Innovate4Cities

• Development of a City Research and Innovation Agenda

• Innovate4Cities will catalyze the scientific advances necessary to better equip cities with the intelligence and tools to take even more ambitious climate action

• The Edmonton Declaration has galvanized the Innovate4Cities agenda with a bold call to action to seriously consider the role of research, innovation and data in building ambitious climate action plans

• Recent partnership with Mission Innovation to strengthen collaboration with national governments to deliver the research and innovation needed to help cities and governments accelerate the clean energy revolution
Recommendations to remove barriers to adequate financial investment in city climate projects, using high-level advocates/surrogates to engage with decision makers and investors.

Leverage private capital needed to raise the ambition of the NDCs using public funds as seed money.

Call to action for vertical integration of investment plans to implement the Paris Climate Agreement

Supporting the creation of financing/funding opportunities for local climate action such as the Global Climate City Challenge

City Climate Finance Gap to fund early stage project development and project origination “gap” (EUR 50 million in grants to seed EUR 4 billion in infrastructure)
Data4Cities

- **Common reporting framework** for key data on city emissions, targets, risks and actions,
- **City data portal** for creating GHG inventories
- **Co-benefits** report and data visualization tool released for public use
- **Annual impact report** on the GCoM to showcase the total potential represented by all 9,200 + committed cities
- **Partnership with Google** to open their proprietary data for public benefit and to automate generation of GCoM-compliant emissions inventories
GCoM Commitment

- GHG emission inventory;
- An assessment of climate risks and vulnerabilities;
- Ambitious, measurable and time-bound target(s);
- Ambitious climate change adaptation vision and goals;
- A formally adopted plan addressing climate change mitigation, climate resilience and adaptation, and access to sustainable energy.

Global Covenant of Mayors for Climate & Energy
Commitment of
[Name of City or Local Government (please include type of jurisdiction [e.g., city/town/village, etc.])]
[Name of country/region]
[Local Government Logo if applicable]

1. [Name], [Mayor and/or title of equivalent mandated representative] of [name of city or jurisdiction] commits to the Global Covenant of Mayors for Climate & Energy (GCoM), joining thousands of other cities and local governments around the world currently engaged in climate leadership.

GCoM envisions a world where committed mayors and local governments — in alliance with partners — accelerate ambitious, measurable climate and energy initiatives that lead to an inclusive, just low-emission and climate resilient future, helping to meet and exceed the Paris Agreement objectives.

Regardless of size or location, the mayors and local leaders committed to GCoM stand ready to take concrete measures with long-term impact to tackle the interconnected challenges of climate change mitigation and adaptation, as well as access to sustainable energy.

To implement this vision, we pledge to implement policies and undertake measures to (i) reduce / avoid greenhouse gas (GHG) emissions; (ii) prepare for the impacts of climate change; (iii) increase access to sustainable energy, and (iv) track progress toward these objectives.

Specifically, within three years of this commitment, we pledge to develop, adopt, use and regularly report on the following:
- A community-scale GHG emission inventory, following the recommended guidance;
- An assessment of climate risks and vulnerabilities;
- Ambitious, measurable and time-bound target(s) to reduce/avoid GHG emissions;
- Ambitious climate change adaptation vision and goals, based on quantified scientific evidence when possible, to increase local resilience to climate change;
- An ambition and just goal to improve access to secure, sustainable and affordable energy and
- A formally adopted plan(s) addressing climate change mitigation / low emission development, climate resilience and adaptation, and access to sustainable energy.

The targets and action plans for mitigation / low emission development must be quantified and consistent with or exceed relevant national unconditional commitments defined through the UNFCCC (renewed) Nationally Determined Contributions (NDCs). The targets and action plans should be in line with National Adaptation Plans, where these exist and should be consistent with the principles around energy access and urban sustainability embodied in the Sustainable Development Goals (SDGs).
‘Metro-scale Climate Leaders’
ENGAGEMENT OF US LOCAL GOVERNMENT IN CLIMATE CHANGE INITIATIVES

Number of participating municipalities compared to total number of municipalities

- Engaged: 3%
- Not engaged: 97%

Population of participating municipalities compared to total population of municipalities

- Engaged: 38%
- Not engaged: 62%
220 ‘Covenant Territorial Coordinators’ (CTCs) in EU:

- Climate change must be mitigated at different levels of governance;
- Small and medium sized local authorities need support from other bodies such as regions and provinces acting as CTCs
- CTCs can help to create economies of scale in Climate Action Plan development and reporting activities

Source: European Commission Joint Research Centre
What is the Metro-scale Climate Leaders initiative?

- **Recognizes** that there is currently limited small and medium municipalities involved in climate action and an opportunity for regional/metro-scale coordination in the US.

- **Aims** to provide technical support to 4 selected metro regions to progress through GCoM reporting process, share experience with other regions and demonstrate/emphasize the added-value of trans-boundary coordination on climate change related issues.

- **Outcomes** hoped to include 4 high-quality case studies of US metro regions which have successfully created regional Climate Action Plans and provided significant value to beneficiaries which can be promoted nationally and internationally.
Metro-scale Climate Leaders Selected

- Denver/Boulder Region: 48 municipalities (TBC) (4 GCoM members)
- Metropolitan Kansas City: 119 municipalities
- Chicago Metropolitan Region: 275 municipalities (4 GCoM members)
- Metro Washington DC: 24 municipalities (5 GCoM members)
Metro-scale Climate Leaders resources

• **Technical support** in the form of workshops and online assistance to develop:
  - GHG inventory
  - Climate risk & vulnerability assessment
  - Target setting and scenario development
  - Mitigation and adaptation action identification and prioritization
  - Drafting Climate Action Plan document

• **Knowledge exchange** between US regions and other regions internationally (i.e. Europe)

• **Promotion** of regional case studies through GCoM
Join us

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of MAYORS for
CLIMATE & ENERGY

@Mayors4Climate
www.globalcovention-usa.org
www.globalcoventionofmayors.org
info@globalcovention-usa.org
The GCoM Framework
The GCoM Common Reporting Framework

The **Common Reporting Framework (CRF)** was developed to streamline reporting procedures and ensure robust climate action planning, implementation, and monitoring.

The CRF provides flexibility to meet specific local and regional circumstances, while establishing a standardized platform for reporting and tracking progress.
What is the vision?

Shared long-term vision to moving to a **low emission, climate resilient future**

- To reduce/limit greenhouse gas emissions
- Prepare for the impacts of climate change
- Increase access to secure, affordable and sustainable energy
- Track progress toward these objectives
What does the Common Reporting Framework include?

The **Common Reporting Framework** is composed of the following components:

- GHG Inventory
- GHG Reduction Targets
- Climate Risk and Vulnerability Assessment (CRVA) and Adaptation Targets
- Climate Action Plan
# GCoM Pledge Commitments

<table>
<thead>
<tr>
<th>GCoM Pledge Commitments</th>
<th>Reduce/Limit GHG Emissions</th>
<th>Prepare for Climate Change Impacts</th>
<th>Increase Access to Sustainable Energy</th>
<th>Track Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRF Reporting Elements</td>
<td>GHG Inventory</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>GHG Reduction Targets</td>
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<tr>
<td></td>
<td>CRVA</td>
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<td></td>
<td>Climate Action Plan</td>
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<tr>
<td></td>
<td>EAP*</td>
<td></td>
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<tr>
<td></td>
<td>Progress Report*</td>
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</table>

* Not included in MARC Climate Action Plan development.
# Reporting Timeline

<table>
<thead>
<tr>
<th>CRF Reporting Timeline</th>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG Inventory</td>
<td>Within 2 Years</td>
<td></td>
<td></td>
<td></td>
<td>Every 2-4 Years*</td>
<td></td>
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<tr>
<td>GHG Reduction Targets</td>
<td>Within 2 Years</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CRVA</td>
<td>Within 2 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Climate Action Plan</td>
<td></td>
<td>Within 3 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAP*</td>
<td></td>
<td></td>
<td></td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progress Report*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Every 2 Years</td>
</tr>
</tbody>
</table>

* Guidance for North America to be determined.
Regional Climate Action Plan

The Kansas City Metro Regional Climate Action Plan will be developed by MARC with support from the Global Covenant of Mayors (GCoM) and the European Union’s International Urban Cooperation (IUC) program and technical assistance from BuroHappold Engineering.
What will the Climate Action Plan include?

The **Regional Climate Action Plan** will incorporate:

- Regional GHG inventory and “business as usual” (BAU) projections.
- GHG emissions mitigation targets and low-carbon scenarios.
- Climate risk and vulnerability assessment and adaptation targets.
- Climate mitigation and adaptation actions.
Climate Action Plan Elements

1. GHG Inventory
2. BAU Projections
3. Mitigation Targets
4. CRVA
5. Adaptation Goals
6. Mitigation and Adaptation Actions
7. Climate Action Plan
Mitigation and Adaptation

**Mitigation**: To reduce/limit greenhouse gas emissions

**Adaptation**: Prepare for the impacts of climate change

*Source: The Partnership for Water Sustainability in BC*
Climate Action Planning Process

GHG Emissions Inventory

**Sectors**
- Stationary Energy
- Energy Generation
- Transportation
- Waste
- IPPU**
- AFOLU***

**Goals**
- BAU
- Emissions Scenarios

**Targets**
- X% by 20XX

**Notes**
**IPPU: Industrial processes and product use (recommended, if significant – not required)
***AFOLU: Agriculture, forestry and other land use (recommended, if significant – not required)**
GHG Inventory

**Purpose:** enables governments to understand the emissions contribution of different activities, determine where to best direct mitigation efforts, and more easily track progress.

**Process:** activity data collection and emissions modeling by sector.

*Figure 3 – Kansas City 2017 City-wide GHG Emissions – By Sector*

*Source: Kansas City 2017 GHG Emissions Inventory*
BAU Projections

**Purpose:** allows for the assessment of the impacts of emissions reduction actions by projecting emissions that would have otherwise occurred

**Process:** emissions modelling accounting for trends in population, economy, and technology

*Source: NYC 80x50 Plan*
Mitigation Targets and Low Carbon Scenarios

**Purpose:** establishes the emissions mitigation trajectory and informs action development

**Process:** emissions projections that meet mitigation targets, accounting for impact of emissions reduction actions

*Source: NYC 80x50 Plan*
Climate Risk and Vulnerability Assessment

**Purpose:** allows for a better understanding of climate risks and vulnerabilities and the development of a climate adaptation plan

**Process:** evaluating changes in risk and vulnerability based on future climate projections

<table>
<thead>
<tr>
<th>Hazard</th>
<th>BY MID-CENTURY</th>
<th>BY END OF CENTURY</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme Heat</td>
<td></td>
<td></td>
<td>The number of extremely hot days, those over 95°F, will likely increase, though not as fast as in areas farther south. Overnight lows have warmed faster than daytime highs, which may lessen opportunities for relief during heat waves.</td>
</tr>
<tr>
<td>Extreme Cold</td>
<td></td>
<td></td>
<td>The number of extremely cold days (i.e., days below 10°F) have decreased in the region and are projected to decrease even more in the future.</td>
</tr>
<tr>
<td>Flood Hazards</td>
<td></td>
<td></td>
<td>Stronger and more extreme precipitation events may overwhelm stormwater infrastructure without appropriate adaptation efforts.</td>
</tr>
<tr>
<td>Drought</td>
<td>Uncertain*</td>
<td></td>
<td>Summer drought and the number of consecutive dry days may increase.</td>
</tr>
</tbody>
</table>

*Source: Cleveland Climate Action Plan*
Adaptation Goals

**Purpose:** addresses the risks and vulnerabilities identified in the CRVA and sets the path for adaptation actions

**Process:** developed based on CRVA results, informs adaptation actions

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**Goal 1**

» Reduce vulnerability to building energy supply disruptions

**Goal 2**

» Preserve ability of health care providers to provide utilities during extreme heat events

» Enhance and preserve existing urban forest resources

*Source: City and County of Denver Climate Adaptation Plan, 2014*
Climate Mitigation and Adaptation Actions

**Purpose:** allows for the development of a roadmap to achieve the mitigation and adaptation goals

**Process:** developing and prioritizing actions based on inventory and CRVA findings, identify responsible agencies, costs, and implementation timelines for easily achievable actions

### Table: Mitigation and Adaptation Actions

<table>
<thead>
<tr>
<th>ACTION</th>
<th>LEAD</th>
<th>GHG REDUCTIONS</th>
<th>CITY INVESTMENT</th>
<th>NON-CITY INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement long-term energy intensity requirements in existing buildings</td>
<td>MOS</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>Accelerate deep energy retrofits to achieve a 20% deeper reduction in energy consumption in City-owned buildings by 2025</td>
<td>DCAS</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>Continue progress toward New York City Housing Authority’s (NYCHA) climate commitments, including 20% reduction of energy use per square foot by 2025, installing 25 Megawatts (MW) of solar capacity by 2025, and 30% reduction of GHG emissions by 2027</td>
<td>NYCHA</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>Advocate for more stringent efficiency standards for appliances and vehicles at the regional and national levels</td>
<td>MOS</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>not assessed</td>
</tr>
<tr>
<td>Advocate for Incentives to support deep energy retrofits focusing on preserving affordability</td>
<td>MOS</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>not assessed</td>
</tr>
<tr>
<td>Implement advanced energy codes for new buildings in 2019, and achieve very low energy design targets in all new buildings and major renovations in subsequent code cycles</td>
<td>MOS &amp; DOB</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

*Source: NYC 1.5°C Plan*
## Project Timeline

<table>
<thead>
<tr>
<th>Climate Action Plan Development Timeline</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td></td>
<td>9 10</td>
<td>11 12</td>
</tr>
<tr>
<td>Regional GHG Inventory and BAU Projections</td>
<td>W</td>
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</tr>
<tr>
<td>Mitigation Targets and Low-Carbon Scenarios</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Climate Risk and Vulnerability Assessment</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Climate Mitigation and Adaptation Actions</td>
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<td>W</td>
</tr>
</tbody>
</table>

W = Workshops
MARC Region
Climate Action Plan Region
Climate Resilience Strategy

THE GUIDING PRINCIPLES

- Triple bottom-line, with an unblinking social equity lens.
- Mitigation, adaptation and resilience go hand in hand.
- Integrated, systems-based, collaborative approach.
- Leadership: top-down, bottom-up and middle-in.
- Institutional solutions must match the scale of the problem.
- Resilience builds from existing successes.
- Do no harm.
Climate Resilience Strategy

**ACTION**

- Energy efficiency
- Trees and green infrastructure
- Local food production
- Coordination and collaboration
- Education and engagement

**PLANNING**

- Vulnerability & risk analysis
- Integrated planning
- Build from Success
Climate Resilience Strategy: Risks & Implications

RISKS
• Annual average precipitation increases: (38.8 to 44.6 inches/year)
• Max. consecutive dry days increase by 8.6 days
• Annual average temperature increases (56.5°F to 64.4°F)
• No. of days over 105° increases by 21.2 days

IMPLICATIONS
• Stress on water supply systems, wastewater and stormwater management systems, and flood control efforts
• Increased demand for summertime cooling
• Degradation of local air quality
• Increased violent crime – 5.3%
• Increased energy demand – 8-19%
• Decreased productivity – 2.3%
• Significant impact on agriculture
• Impact disadvantaged communities in a disproportionate manner
Next Steps

Climate Action Plan
- Including a greenhouse emissions inventory

Public Policy
- Develop annual legislative platforms
- Policy playbook for elected officials

Climate Summit
- September 14, 2019
- Johnson County Community College
Previous CRVA-related work in the Kansas City Metro Region

- Natural Hazard Mitigation Plan (2010)
- Regional Multi-Hazard Mitigation Plan (2015)
- 2020 Hazard Mitigation Plan – in progress
Building Blocks

- Regional Hazard Mitigation Plans – 2020 plan in progress
- Regional Transportation Plan
- Local Climate Action Plans
- Existing solutions, programs, initiatives
Thank you.

Questions?