

June 8, 2017

Smart Buildings & Grid Modernization Roundtable Exercise

June 7, 2017 CHICAGO (WLS) --Mayor Rahm Emanuel formally announced Wednesday the city's support of the Paris climate agreement as Chicago welcomed mayors and leaders from around the world for a three-day conference about the global role of cities.

"The decisions we make in the next two to three years will determine what our cities look like in the next 20 to 30 years," Emanuel said as he toured Millennium Park with Toronto's Mayor John Tory.

"Finding and sharing solutions is now our highest priority," said Ivo Daalder, president of the Chicago Council on Global Affairs.

From victorious Table #3

Dear Mr. Mayor,

Over the next 2 – 3 years we need to make the following decisions. These decisions should result in the following critical actions within the next 36 months.

Decisions and actions:

1. Decision how will job training for FEJA be implemented? Action make this catalyst for wraparound services to reduce friction and rocket up the uptake. Include customer outreach, same-day response to inquiries (this is critical, get em while they are hot), expert installation by trained people of even small items, and followup with homeowners / business on O&M.
2. How will new PACE program that passed legislature be implemented? Action Make sure it can serve both commercial and residential, and draws on widest range of public/private financing sources (make it workable and practical).
3. How will all the great benchmarking data be used? Action make this the catalyst for culture change – YELP for building energy, social media buzz etc.
4. How will we shape our transportation policies to reduce GHG's from this sector? Will our taxes on gasoline/carbon/vehicles be weighted so as to discourage "gas guzzlers"? will we incentivize or require EV charging stations for zoning approvals? What (our most radical suggestion yet!) about free vanity plates for EV users (this was in my notes but I think it's a state action).
5. How will investments in public institutional buildings respond to mandate? All public buildings should EXCEED the target by 2025.
6. And finally, how will codes and regulations be used to meet the goals? One option is (like CA) all new buildings and all rehabs requiring permits to be net zero by 2020. But there are softer in-between approaches.

Table #3:

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City of Chicago 2015 Community-Scale Greenhouse Gas Emissions Inventory

2015 Community GHG Emissions Inventory Results

In 2015, stationary energy emissions were the largest contributor to the community inventory, accounting for 70 percent (21,735,703 MT CO₂e) of total emissions. Transportation emissions contributed an additional 26 percent (8,117,376 MT CO₂e), with the waste sector responsible for the remaining 4 percent (1,102,783 MT CO₂e) of community emissions.

The four sub-sectors that together generated over 85 percent of Chicago's 2015 total GHG emissions included residential buildings (28 percent), commercial and institutional buildings and facilities (25 percent), on-road transportation (17 percent), and manufacturing industries and construction (16 percent). Over half (54.5 percent) of Chicago's emissions are generated by fuel combustion within the city boundaries

(Scope 1 emissions), followed by emissions from electricity consumption (Scope 2), which comprised approximately 42 percent of emissions. Remaining emissions (Scope 3) resulting from treatment and disposal of solid waste and wastewater generated within the city contributed less than 4 percent of the total 2015 GHG emissions.

Over three-quarters of Scope 1 emissions were generated by just three subsectors: residential buildings (31 percent), on-road transportation (31 percent), and commercial and institutional buildings and facilities (16 percent). The majority of electricity-related emissions are generated in the Stationary Energy sector. More specifically, residential buildings (26 percent), commercial and institutional buildings and facilities (38 percent), and manufacturing industries and construction (33 percent) representing over 98 percent of the electricity