CITY OF CHICAGO
ENERGY AND CLIMATE INITIATIVES

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Agenda

• Overview of Chicago’s Sustainability Strategy
• Chicago’s Energy Efficiency Initiatives
  – Retrofit Chicago
  – Energy Benchmarking Ordinance
  – Energy Rating System
  – PACE
• Q and A
Chicago’s Sustainability Strategy: A Timeline

- **2008**: Release of the Chicago Climate Action Plan
  - 25% GHG reduction by 2020, 80% by 2050 (below 1990 levels)
- **2012-2016**: Chicago develops the Sustainable Chicago Action Agenda
- **April 2017**: Mayor Emanuel commits that all public buildings will be powered by renewable energy by 2025
- **May 2017**: Mayor Emanuel creates the “Climate Change Is Real” website: www.CityofChicago.org/ClimateChangeIsReal
- **June 2017**: Mayor Emanuel signs executive order committing the City to meeting the guidelines of the Paris Agreement
- **August 2017**: Mayor Emanuel announced 11% reduction in Chicago’s 2015 GHG emissions from 2005 levels
- **December 2017**: Mayor Emanuel hosts the North American Climate Summit

“As the Trump administration pulls back we will push forward and reduce our fair share of carbon emissions in line with the Paris Accord. The world is depending on cities in the US to take up the mantle of leadership on climate change. Chicago is accepting that challenge.” – Mayor Emanuel
The City must reduce emissions from energy use in buildings in order to meet climate goals.

Chicago’s 2015 Greenhouse Gas Emissions, by Source

1. Residential buildings (28%)
2. Commercial/ institutional buildings (26%)
3. Manufacturing industries and construction (17%)
4. Other (1%)
The Retrofit Chicago Energy Challenge focuses on major energy performance improvements in existing properties

- **Objective:** Accelerate energy efficiency in the City’s largest private and non-profit buildings to save money, increase asset value, drive economic development, and reduce emissions

- **Commitment:** Chicago Energy Challenge participants voluntarily agree to:
  - Reduce energy usage in one or more buildings by 20+% in the next 5 years
  - Begin work within 6 months
  - Track progress and share successes

- **Impact:** Average energy savings of ~15%:
  - 22 properties have reduced energy by 20% or more
  - Energy cost reductions of $10.6 million/year
  - Currently includes 87 properties spanning over 55 million square feet
Additional Resources

Retrofit Chicago Energy Challenge

Summary of the Engineer Roundtables

Most Recent Program Press Release
(February 2018)
(Covers Retrofit Chicago and New Energy Rating System)

Summary of the Annual Awards Ceremony
(November 2017)

Retrofit Chicago Best Practices Report

Or, visit www.RetrofitChicago.net for detailed program information & resources
Chicago’s building energy benchmarking ordinance calls on the city’s largest buildings to track, verify, and report energy use

Chicago Energy Benchmarking Essentials

• The ordinance focuses on data accuracy & transparency:
  – Buildings larger than 50,000ft² are required to:
    1. Track whole-building energy use (annually)
    2. Verify data accuracy (every three years)
    3. Report to the City (annually)

• The City is authorized to make building-level energy performance data available to the public in the second year that a property reports

• Benchmarking includes reporting of whole-building energy use in ENERGY STAR Portfolio Manager

• Industrial and manufacturing properties are exempt
Overview of 2017 Report Findings:

- ~2,800 reporting buildings, representing 20% citywide carbon emissions
- ComEd information suggests that hundreds more buildings are benchmarking voluntarily
- 85% reporting rate, up from 80% in 2016
- Cumulative savings of $39 million supporting an estimated 900 jobs
- Energy performance improvement of 8% in just one year (5 point improvement in ENERGY STAR scores)
- GHG intensity down 19% over past 2 years
Additional Resources

2017 Chicago Energy Benchmarking Analysis & Data:

- [2017 Chicago Energy Benchmarking Report](#)
- [2017 Chicago Energy Benchmarking Infographic](#)
- [Chicago Data Portal & Map](#) (Individual building data for ~2,700 properties)
- [2017 Chicago Energy Performance Map](#) (City Energy Project data visualization)

Or, visit [www.CityofChicago.org/EnergyBenchmarking](http://www.CityofChicago.org/EnergyBenchmarking) for links to all reports & resources
Chicago Energy Rating System: Rate buildings and increase public transparency of information

Goal: Make ENERGY STAR scores simpler to understand and increase transparency of energy performance to the average person

- Provide a star rating to buildings based on currently existing 1-100 ENERGY STAR scores
  - Chicago’s rating is a four-star system (modeled on the Chicago flag)
  - Buildings will receive from zero to four stars
  - Buildings can earn one extra star for improving their score by at least 10 points in the past 3 years

- Buildings not eligible to receive an ENERGY STAR score will receive a rating based on energy use per square foot in comparison to national medians
  - Approximately 10-15% of Chicago’s reporting buildings are not eligible to receive a score
Chicago Energy Rating System: The Rating System Includes Consideration of the Recent Chicago Energy Benchmarking Results

**CHICAGO ENERGY RATING SYSTEM (WITH HALF-STARS)**

- **4 Stars:** Score of 81-100 or score of 61-80 and 10 point improvement in the past 2 years*
- **3.5 Stars:** Score of 71-80
- **3 Stars:** Score of 61-70 or score of 41-60 and 10 point improvement in past 2 years
- **2.5 Stars:** Score of 51-60
- **2 Stars:** Score of 41-50 or score of 11-40 and 10 point improvement in past 2 years
- **1.5 Stars:** Score of 31-40
- **1 Star:** Score of 1-30
- **0 Star:** Did not submit required benchmarking information

*Note: Any building with ENERGY STAR certification also receives four stars.*
Chicago Energy Rating System: Rate buildings and increase public transparency of information

Goal: Make ENERGY STAR scores simpler to understand and increase transparency of energy performance to the average person

- Require Posting/Display of the new ratings
  - Post the new ratings to the Chicago Data Portal
  - Buildings are required to post the rating publicly in a prominent location
  - Building owners would also provide their rating or their score at time of listing for sale or lease, similar to currently existing Residential Energy Data Disclosure
  - Providing information at time of listing for sale or lease helps protect consumers and make more informed decisions about utility costs

Note: Does not require buildings to make improvements or reach a certain score
Example Energy Rating Placard (Buildings without ENERGY STAR Certification)
PACE is a new energy financing program proposed for the City of Chicago

**PACE = Property Assessed Clean Energy**

- **What**: VOLUNTARY, opt-in program for private-sector property owners to finance energy efficiency, renewable energy, and/or water conservation projects.

- **How**: Property owners receive long-term (10-20 year) financing for energy projects that is paid back through a special assessment attached to the property tax. Can be considered “off balance sheet” and transferred to new owner in case the property is sold.

- **Who**: Available to industrial, commercial/institutional, and apartment building owners, including non-profits

- **Status / Timing**: Proposed and under consideration by City Council. Could possibly be launched later this year, if approved.
1. **Eligible Properties:**
   a. Existing buildings, including commercial, industrial, agricultural, or multi-family (5 units or more)
   b. Exceptions: No condo buildings

2. **Eligible Projects:**
   a. Energy efficiency, renewable energy, water conservation, or EV charging

3. **Qualifying Property Owner Criteria:**
   a. No delinquent assessments, taxes, involuntary liens, or notices of default
   b. No bankruptcy in the past 2 years
   c. Must be current on mortgage

4. **Qualifying Financial Criteria:**
   a. Project cost cannot exceed 25% of assessed property value
   b. Savings from energy measures must equal or exceed the project cost (Savings to Investment Ratio of 1 or greater)
   c. Requires mortgage holder’s consent
Questions?

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