

# 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

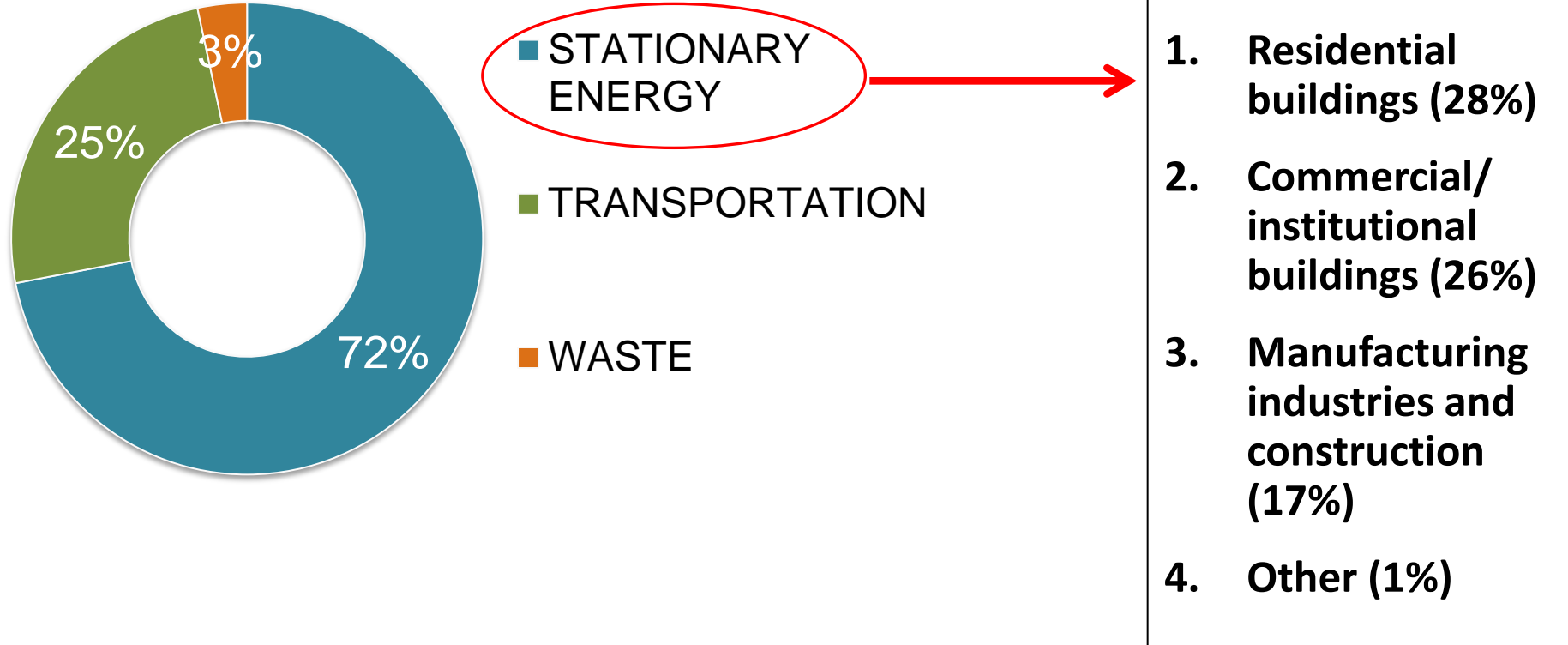
- **2008:** Release of the **Chicago Climate Action Plan**
  - 25% GHG reduction by 2020, 80% by 2050 (below 1990 levels)
- **2012-2016 :** Chicago develops the **Sustainable Chicago Action Agenda**
- **April 2017:** Mayor Emanuel commits that all public buildings will be powered by renewable energy by 2025
- **May 2017:** Mayor Emanuel creates the “Climate Change Is Real” website: [www.CityofChicago.org/ClimateChangeIsReal](http://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

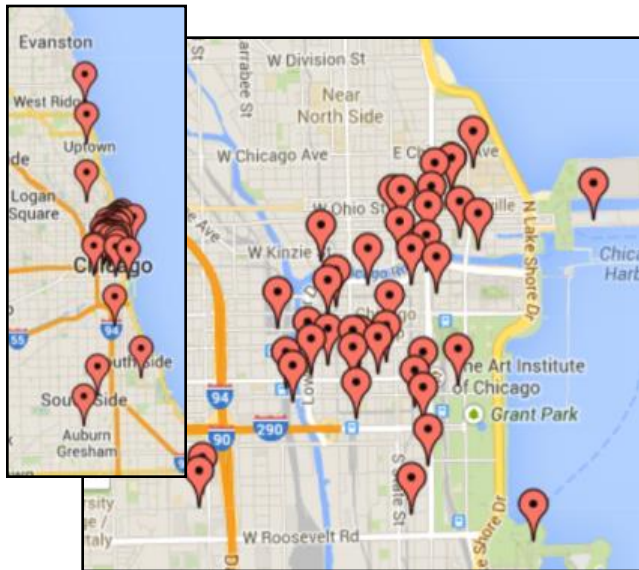
Chicago's 2015 Greenhouse Gas Emissions, by Source



# The Retrofit Chicago Energy Challenge focuses on major energy performance improvements in existing properties



*Rafael Emanuel*



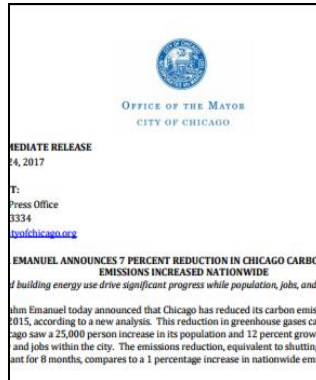
- **Objective:** Accelerate energy efficiency in the City's largest private and non-profit buildings to save money, increase asset value, drive economic development, and reduce emissions
- **Commitment:** Chicago Energy Challenge participants voluntarily agree to:
  - Reduce energy usage in one or more 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](http://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*



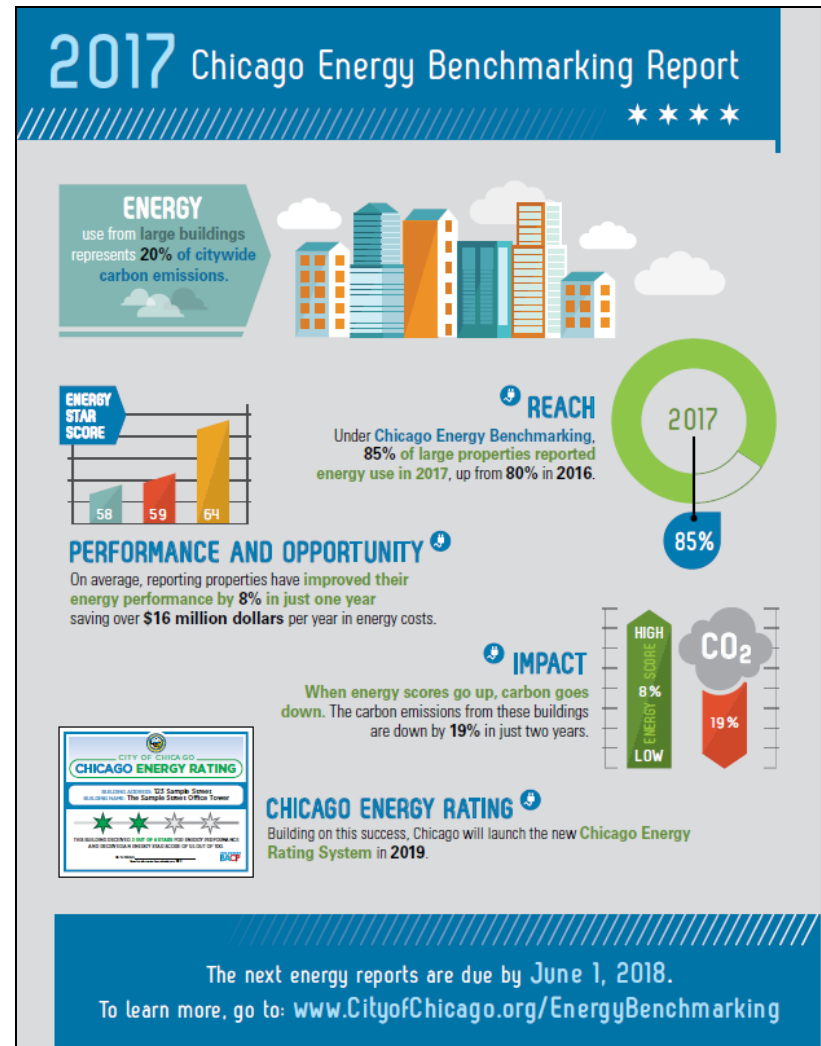
- **The ordinance focuses on data accuracy & transparency:**
  - Buildings larger than 50,000ft<sup>2</sup> are required to:
    1. Track whole-building energy use (annually)
    2. Verify data accuracy (every three years)
    3. Report to the City (annually)
- **The City is authorized to make building-level 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**



# Background: The Chicago Energy Benchmarking Ordinance is the foundation of the new Energy Rating System

## Overview of 2017 Report Findings:

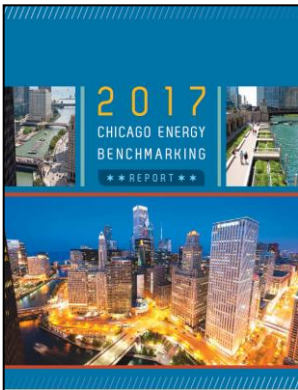
- ~2,800 reporting buildings, representing 20% citywide carbon emissions
- ComEd information suggests that **hundreds more buildings are benchmarking voluntarily**
- 85% reporting rate, up from 80% in 2016
- Cumulative savings of \$39 million supporting an estimated 900 jobs
- Energy performance improvement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



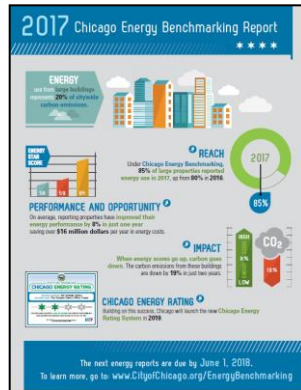


# Additional Resources

## 2017 Chicago Energy Benchmarking Analysis & Data:



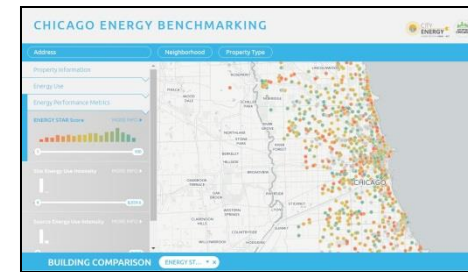
[2017 Chicago Energy Benchmarking Report](#)



[2017 Chicago Energy Benchmarking Infographic](#)

Date Year	Property Name	Address	ZIP Code
2014	St. Rita of Casia High School	750 South Western Avenue	60602
2014	158405 200 South Wacker Drive	200 South Wacker Drive	60609
2014	297135 Corner Children's Hospital	8721 S. Mayland Ave.	60627
2014	180006 Evangelical Lutheran Church in America	8703 N. Higgins Road	60631
2014	250048 James College-CPS	800 S. Dear St.	60603
2014	250038 Brooks Cole-CPS	200 E. 111th St.	60629
2014	158008 Orman Plaza II	8703 N. Higgins Road	60631
2014	101094 Cardinal Building	111 N. Dearborn Avenue	60602
2014	102331 Dewar/Hagler-CPS	4140 N. Kenzie Dr.	60613
2014	102170 CH2 Group Inc	333 South LaSalle	60604
2014	250009 Van Swaalen-CPS	8028 N. WINDMILL AVE	60623
2014	180028 Reuter Building	400 N. Dearborn Ave.	60611
2014	101972 150 North Wacker Drive	150 North Wacker Drive	60606
2014	102266 Lela View III-CPS	4015 N. Ashland Ave	60613
2014	167362 Lincoln Park-CPS	2015 N. Ordway	60614
2014	100816 Morgan Park-CPS	1740 N. Taylor Ave.	60643

[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

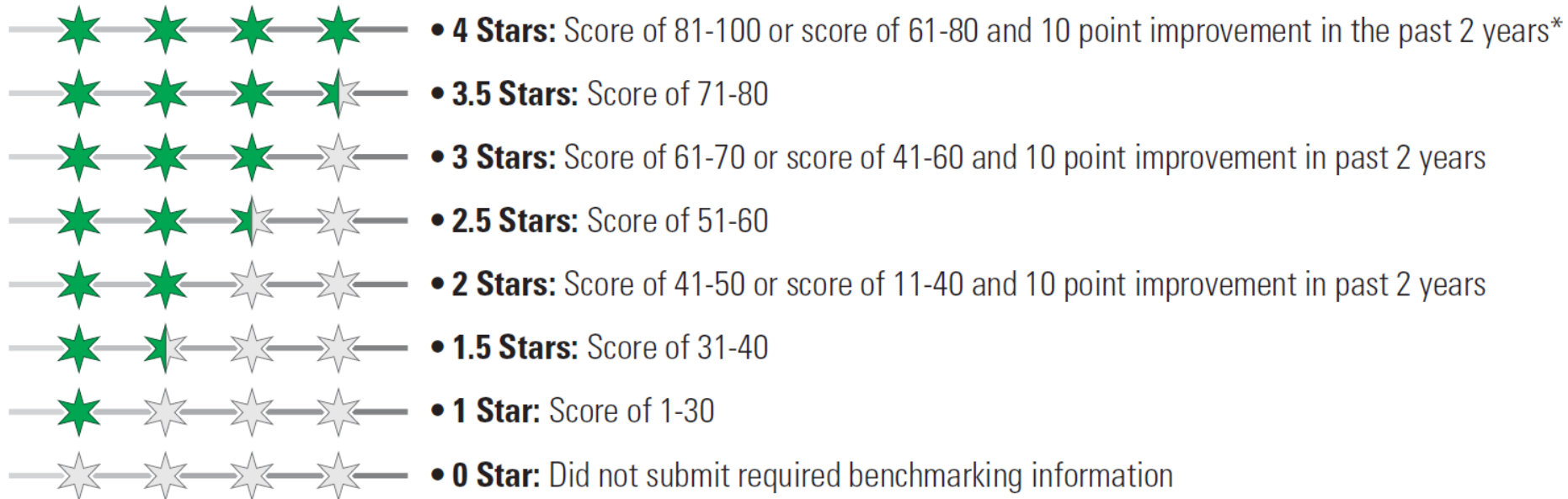
# Chicago Energy Rating System: Rate buildings and increase public transparency of information

***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)



\*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)




CITY OF CHICAGO  
**CHICAGO ENERGY RATING**

BUILDING ADDRESS: **123 Sample Street**  
BUILDING NAME: **The Sample Street Office Tower**

★ ★ ☆ ☆

THIS PROPERTY RECEIVED **2 OUT OF 4 STARS** FOR ENERGY PERFORMANCE.  
**U.S. EPA ENERGY STAR Score: 45 out of 100**

DATE ISSUED: \_\_\_\_\_  
Based on information from calendar year 20XX.



# 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.

# Additional Details (State Requirements for PACE Projects)

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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