Eligibility requirements for Accelerate Performance

- Applicable to new construction and major renovation
- Commercial, industrial or multifamily buildings
- Projects must be in the pre-planning phase to participate (before the design team is under contract)
- 35-70% energy reduction goals
Current Projects

- Multifamily
- Affordable housing
- Industrial
- Dormitory
- Education
- Healthcare
- Public
- Lab
- Office
- Retail
Partner Structure

- DEVELOPER
- BUILDING OWNER
- UTILITY
Why Accelerate Performance - Utilities

Top motivations:
• New codes present an opportunity instead of limitations
  • Portfolio savings goals are increasing
  • Support deep energy saving projects
• Deemed vs actual savings
  • Prepare programs for outcome based codes
• Directly support owners (customer service)
• Develop an industry leading program
Since 2009
580 buildings
110 million ft²

- completed
- pipeline
## New Construction Program Benchmarking

### Program Design Comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>ComEd</th>
<th>Xcel MN</th>
<th>Xcel CO</th>
<th>Focus on Energy</th>
<th>MidAm</th>
<th>NGrid</th>
<th>ETO</th>
<th>SBD</th>
<th>NYSERDA</th>
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</table>

[SEVENTHWAVE.ORG/accelerateperformance](SEVENTHWAVE.ORG/accelerateperformance)
Incentives Linked to Engagement

Higher $/kWh earned for earlier engagement

- **$0.14/kWh**
  - **Accelerate Performance**

- **$0.10/kWh**
  - **Comprehensive New Construction**

- **$0.07/kWh**
  - **Expedited Assistance**

- **$0.00**
  - **Too Late for NC Incentives**

**PROJECT DELIVERY**
Why Accelerate Performance – Developers/Owners

**Top motivations:**
- Due diligence in the design and construction
  - Keep design and contractor team focused on clear, measurable goals
  - Disappointed with performance of new buildings
- Process to meet performance goals
  - Desire to reach campus/portfolio carbon reduction goals
  - Wants to achieve net zero but needs a process to get there
- Realize actual operations savings and ensure return on investment
Chicago construction boom

Mapping the 44 High-rises Under Construction in Chicago Right Now

January 12th 2017

Chicago.curbed.com
### Project energy goals

<table>
<thead>
<tr>
<th></th>
<th>Sustainable building</th>
<th>Lack of clarity with unbounded interpretation. Rating schemes help resolve this, but do not drive a certain metric.</th>
<th>Same budget</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>30% savings over energy code</td>
<td>Often this is a comparison between simulated results. There is very little opportunity to verify actual savings.</td>
<td>Same budget</td>
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<td>B</td>
<td>An annual energy use intensity (EUI) of 45 kBtu/sq ft/year</td>
<td>This is a measurable target; requires up-front research to establish a realistic benchmark.</td>
<td>Same budget</td>
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</table>
CITY OF CHICAGO ENERGY BENCHMARKING

EUI
ENERGY USE INTENSITY
TOTAL ENERGY CONSUMPTION OF A BUILDING

NATURAL GAS + ELECTRICITY - RENEWABLES = EUI
GROSS BUILDING AREA

kBTU/SF/YR

CHICAGO MEDIAN

Range of Median ENERGY STAR Scores for Six Cities

Healthcare
Lodging
K-12 School
Other
Multifamily Housing
Retail
Office
Multifamily Buildings 2000-2014

Chicago Median EUI 81
DATA PLOT

INDUSTRY BENCHMARKS
- Code
- AIA 2030
- Energy Star

DATA SELECTION
13 databases
> 25,000 Buildings

FILTERS
CBECS Nomenclature

BUILDING TYPES
RFP and contract language

PROJECT GOAL LIST: Project goals help design teams prioritize their focus on the MEP and building performance design. Goals are categorized in three main sections:

Mission critical goals—required by contract and critical to success
Highly desirable goals—not required by contract and have influence on the recommended design
If possible goals—influence recommended design and are considered highly beneficial if included in the solution

MISSION CRITICAL

• Maximum energy target of 65 KBTU/gsf annually; lower is preferred
• LEED NC Silver Certification
• Superior occupant comfort
• EnergyStar certified building

HIGHLY DESIRABLE

• Maximum energy target of 55 kBtu/gsf annually; lower is preferred
• Passive design strategies (i.e. daylighting, passive solar heating, etc.)
• Ease of maintenance
• Visual displays of current energy efficiency
• Exceed LEED NC version 4, Silver Certification

IF POSSIBLE

• Living Building full certification
• Net Zero Energy Design
Track and verify from design through operation

**PERFORMANCE-BASED PROCUREMENT**

- **RFP**: Send out RFP
- **SD**: Specify contractual energy requirement
- **DD**: Set a firm price
- **CD**: Confirm energy requirement is met

**OPERATIONS**

- Design team
- Contractor
- Capital project team
- Operations staff

**VERIFY PERFORMANCE**

SEVENTHWAVE.ORG/accelerateperformance
Thank you

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