Commercial Building Efficiency Advisory Committee

Meeting 3: Policy Design
City of Ann Arbor Staff Introductions
Thea Yagerlener, Energy Analyst
Zach Waas Smith, Community Engagement Specialist
Agenda

1. Welcome and Introductions
2. Establishing Ground Rules and Expectations
3. Benchmarking 101 Review
4. Energy Efficiency Case Studies
5. Covered Building Sizes
6. Exemptions
7. Closeout
Round Table Introductions

• Name, Pronouns, Organization and Role
Ground Rules

- Stay engaged
  - Minimize distractions
  - Grab something to write with, a drink, a snack
- Chatham House Rules
  - Share the information, not the person
- Practice democracy of time
- Constructive mindset: Deliberation should be positive and future-directed
Expectations of City Staff

• We will look to you for advice and innovation in formulating a solution and will incorporate your advice and recommendations into the decisions to the maximum extent possible.

• Ensure this time serves the stakeholders in the room

• Be available to answer questions and address concerns

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  Tyagerlener@a2gov.org
  ZWaasSmith@a2gov.org
Expectations of Task Force

• Provide your expertise and lived experience
• Leverage networks to represent a larger group of voices
• Final Product: Co-creating policy recommendations

What do you need to be successful?
## Decision Process and Timeline

<table>
<thead>
<tr>
<th>Q4 2020</th>
<th>Q1 2021</th>
<th>Q2 2021</th>
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<tbody>
<tr>
<td><strong>Stakeholder Task Force</strong></td>
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<td><strong>Public Input</strong></td>
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<td>City of Ann Arbor</td>
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<tr>
<td>Open Public Feedback</td>
<td>Public Comment Period</td>
<td>Ordinance Approval Process</td>
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<td></td>
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<td>Implementation</td>
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Suite of Programs

Public, Commercial and Multifamily

Rentals

Single Family Housing
Meeting 2 Recap: Benchmarking Policy Review
What is benchmarking?

**Benchmarking:** An established program to understand how a building is performing compared to itself and similar buildings

**Transparency:** Sharing information with the market to value energy efficiency and drive market transformation
**Typical Process**

- **Local Jurisdiction**
  - Submits data to local jurisdiction
  - Provides space use data

- **Building Owner/Manager**
  - Provides whole building data
  - Fast and easy process, takes 4–8 hours once a year
  - Free and web-based tool, no out of pocket costs to comply

- **Utilities**
  - Provides space use data

**Benchmarking Process**

- BENCHMARKING: Ongoing review of building energy performance compared to itself as well as other buildings of similar size

- **Performance Metrics and Report**
  - Individualized and actionable info
  - Identify underperformers in your portfolio and set priorities for staff time and investment capital

- **Local Jurisdiction Data Management System**

- **Financing Programs and Energy Service Providers**

**REPORTING**: Submitting a building's energy and water use to the City annually

**TRANSPARENCY**: Public disclosure of specific pieces of benchmarking data
Typical Timeline

- Policy Design + Stakeholder Engagement
- Program Implementation
- Establish Data Access
- Municipal Buildings Benchmark
- Largest Commercial Properties Benchmark
- Large Commercial & Multifamily Properties Benchmark

Pilot program and lead by example
Why a Policy?

Current landscape has barriers to energy efficiency
- Building owner access to whole-building utility data
- Lack of market awareness of building performance

Participation from entire building population, not just voluntary benchmarking and transparency
- City Goal: 90% compliance
- Achieve widespread efficiency (3-8%) and financial results ($2.4 MM savings/year)
Ann Arbor Composition

- Multifamily: 49%
- Office: 18%
- Retail: 12%
- Hotel: 6%
- Industrial: 4%
- Service: 2%
- Other: 9%
Energy Efficiency Investment Case Studies
Energy Efficiency Process

Benchmarking
Energy Audit
1. Retro-commission
2. Reduce lighting loads
3. Reduce supplement loads (equipment, behavior, windows, insulation)
4. Improve air distribution systems
5. Upgrade heating and cooling equipment

Onsite renewable energy, etc.

ENERGY STAR Building Manual
Goodyear Building

**Property:** ~21,000 SF, 1867

**Financing:** A2 PACE, 1 of 4 buildings for combined $500,000

**Savings:** Positive cash flow required for approval

**Energy Reduction Measures:** HVAC replacement (boilers and A/C), lighting upgrades

**GHG Reductions:** 8% reduction

2011 – 2018: 6% reduction in energy use

Energy Star Score Improvement: 77 to 82
New Amadore Apartments, Saginaw

**Property:** 63 units, 6 stories, 1929

**Financed:** MI PACE, ~$300,000

**20 Year Savings:** $610,000

**Energy Conservation Measures:** Replacing 88-year old windows with high efficiency

**Energy Reduction:** 250,000 kWh, 18,500 MCF

*Improved tenant comfort / reduced turnover*

**GHG Reduction:** 2,300 metric tons
Cambridge Court Apartments, Greenville

**Property:** 32-unit, 2 story, affordable housing community

**Financing:** MI PACE: $118,000 + REAP grant

**Energy Conservation Measures:** Efficient boilers, mechanical controls, LED lighting, 20 kW solar, low-flow water fixtures, Energy Star appliances

**Savings:** 40% reductions in electricity and natural gas consumption, 29% reduction in water use

*Tenants save on utility bills, update to important community asset*
Using Energy Star Portfolio Manager

- **FREE ONLINE TOOL & TRAINING**
- First Time: Training (2 hours)
- First Time: Add a Property (1 – 2 hours)
  - Building Type
  - No. of Buildings Making Up Property
  - Construction Status
  - Location, Year Built, Gross Floor Area
  - Use Details Depending on Building Type
- Annually: Add Energy Data
  - 2030 District Piloting Automatic Data Upload
Benchmarking Policy Elements

• Covered Market Sectors
• Covered Building Size
• Benchmarking and Transparency Exemptions
• Party responsible for reporting
• Schedule for initial benchmarking and transparency
• Data verification
• Transparency approach
  ➢ Beyond benchmarking
  ➢ Implementation
Benchmarking Policy Elements

- Covered Market Sectors
- **Covered Building Size**
- Benchmarking and Transparency Exemptions
- Party responsible for reporting
- **Schedule for initial benchmarking and transparency**
- Data verification
- Transparency approach
  - Beyond benchmarking
  - Implementation
### Ann Arbor Building Stock

<table>
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<tr>
<th>SF Threshold</th>
<th># of Buildings</th>
<th>% Buildings Covered</th>
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*SF based on property assessed area. Currently excludes tax exempt buildings*

![Graph showing % Buildings Covered and % SF Covered](chart.png)
Policy Variable: Exemptions

Benchmarking vs Transparency

- Residential buildings with less than 5 units
- Standard Industrial Classification
- Properties owned by government bodies not subject to the authority of the City
- Buildings facing financial hardship
- Unoccupied/vacant: No permit, less than 50% occupied
- Planned to be demolished
- Does not receive energy/water utility
- Not in the public interest
Next Meetings

➢ **Friday, Jan. 8 (11 AM):** Policy Design Cont.

➢ **ADDITIONAL MEETING:** TBD January

➢ Open to public comment

➢ Final Meeting (TBD): Responding to public comment and finalize recommendations
Thank You for Your Time!

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