City Energy Project – San José
Examining policy structure and strategies, reporting process, and compliance

Date: May 16, 2018
Time: 9:00 AM—12:00 PM
Location: Environmental Innovation Center
             1608 Las Plumas Ave., San José

Agenda:

---

1) Welcome and Introductions - **Ariel Carpenter, City of San José**

2) Meeting Recap - **Walker Wells, Global Green**
   a. Kick Off
      i. Benchmarking Overview
      ii. Initial Characterization of Building Stock
   b. Meeting 2
      i. In-depth Analysis of Building Stock Coverage and Thresholds
      ii. Introduction to EPA ENERGYSTAR Portfolio Manager
   c. Meeting 3
      i. Reporting Process through ENERGYSTAR Portfolio Manager
      ii. Levels of Transparency
      iii. Responded to outstanding questions on data centers when coupled with other building use types (e.g. an office building that also has a portion that is a data center): financial implications of including this use in covered buildings, as some buildings can afford to submeter out equipment, while others may not. Need to further discuss with technical experts how to properly account for this use type

3) Policy Design Options
   a. Annual Benchmarking and Reporting
      i. Examples of coverage thresholds and reporting deadlines
         • Gradual phase-in vs. one-time rollout
   b. Transparency
      i. Phased-in Data Transparency
         • No public transparency for the first year
         • Not all reported fields to be made public
      ii. Online
         • Data table
         • Summary report
         • Interactive map has competition value

- Custom City of San José Scorecard
  - iii. On-Site display
- c. Performance Standards - **Jayson Antonoff, Institute for Market Transformation**
  - i. Demonstrate compliance through basic performance standards that require no further action:
    - LEED EBOM Certification or Minimum ENERGYSTAR Score
      - a. EX) Los Angeles
        - i. ENERGYSTAR Score of 75
        - ii. Meet Plumbing Code
    - Demonstrated Improvement
      - a. EX) Los Angeles
        - i. Reduce EUI by 15%
        - ii. Reduce WUI by 20%
- d. Prescriptive Measures
  - i. Further action is required if basic performance standards are not met, for example
    - Energy and/or Water Audits
    - Retrocommissioning (RCx)
    - Retrofits

4) Ensuring Data Quality
   - a. Portfolio Manager data quality checks (by submitter)
   - b. Additional automated data error checks (by City)
   - c. Automated uploads of utility meter data
   - d. Certification for benchmarking and audit professionals
   - e. Third party verification (annual or periodic)
   - f. Robust help center and training offerings

5) Policy Examples
   - a. Los Angeles, CA
     - i. Annual benchmarking
     - ii. 5-year compliance cycle with performance or prescriptive path
       - Performance path
         - a. Energy
           - i. ENERGYSTAR certification OR reduce EUI by 15%
         - b. Water
           - i. Water audit OR meet plumbing code OR reduce water use by 20%
       - Prescriptive path
         - a. RCx AND either an Energy/Water audit OR simple building retrofits
   - b. New York, NY
     - i. Local Law (LL) 84: NYC Benchmarking Law
     - ii. Local Law (LL) 87: Requires that buildings over 50,000 ft^2 undergo energy audit and RCx measures every 10 years
     - iii. Audit exemptions allowed if 6 out of 7 prescriptive measures are met
       - Individual heating control

- Common area/exterior lighting
- Low flow faucets
- Pipe insulation
- Domestic hot water
- Washing machine (front loading)
- Cool Roof

    c. Orlando, FL
- i. Orlando's Building Energy and Water Efficiency Strategy (BEWES) says all buildings over 50,000 ft^2 must
  - Benchmark energy and water use annually with ENERGYSTAR Portfolio Manager
  - Share benchmarking score with the City of Orlando starting in August 2018
  - Buildings with an ENERGYSTAR Score below 50 are required to either perform an audit or RCx once every five years

    d. Boulder, CO
- i. Commercial and Industrial buildings must
  - Annually rate and report building energy use
  - Perform energy assessments every ten years
  - Perform building tune-ups every ten years and implement 'cost-effective' measures within two years of the study
  - Implement one-time lighting upgrades
- ii. High performance buildings are exempt from the required energy assessments and efficiency measures

6) Why Go Beyond Benchmarking?
    a. DOE estimates 10-20% whole buildings savings associated with RCx
- i. Savings persist for 3-5 years
- ii. Identifies RCx as the 'single most cost-effective strategy for reducing energy costs and GHG emissions'

    b. Energy audits of over 800 buildings in San Francisco revealed $60.6 million in opportunities for cost-effective energy efficiency investments
- i. Net Present Value of $170 million
- ii. Potential to cut annual electricity use by 150 GWh
- iii. Potential to save 1.4 million therms of natural gas annually
- iv. Portfolio-wide payback in 3 years

    c. Remote or virtual audits
- i. Ability to see snapshots in real-time of how buildings perform and where deficiencies may be without a traditional audit with an auditor on-site
- ii. May allow buildings to determine whether an on-site audit or RCx would be more effective

    d. Other Benefits of RCx
- i. Identifying energy system deficiencies
- ii. Energy and non-energy benefits
  - Equipment life
  - Thermal comfort
  - Indoor air quality

7) Task Force Timeline and Next Steps
   a. **Meeting 5:** Implementation and Enforcement   June 14, 2018
   b. **Meeting 6:** Review Draft Ordinance   July 18, 2018

8) Discussion
   a. **Questions about the material covered or information presented?**
      i. How much electricity consumption are we saving as we move down from 20,000 ft2 to 10,000 ft2? The City should perform analysis on the efficiency trends across different building sizes to inform the ordinance threshold.
      ii. Data Transparency
         - What aspects of different dashboards are proven to be effective? City to report back.
         - Can we use 'open comment fields' within portfolio manager to allow building owners to explain individual aspects of their performance and how it may have impacted their score or rating? City to report back.
   b. **What policy elements should be incorporated/required for San José?**
      i. Consensus around 20,000 ft2 threshold for benchmarking with a procedural provision to reconvene stakeholders to engage on sliding down to 10,000 ft2.
      ii. One "special case" building type is parking garages, but should be included somehow, based on their high frequency in San José
      iii. Consensus that the City needs a help/technical resource center to support building owners
   c. **What should the timeline look like for reporting? For transparency?**
   d. **Should there be additional requirements? How long should the compliance cycle be?**
      i. Consensus around the value and benefits of RCx
      ii. What is the baseline for efficiency and performance improvement?
         - Critical upgrades from the last 2-3 years could be counted towards compliance.
      iii. City should identify potential regulatory synergies and dovetail with a process that already exists, like having building inspection staff collect information or identify energy efficiency upgrade opportunities.
   e. **Other feedback?**
      i. Multifamily building owners may face new requirements in the coming years, like seismic retrofits and rent control. Can PBCE and other departments work together to discount fees or streamline compliance processes that will lessen the burden on building owners – especially lower tier buildings?
      ii. City can use data automation to generate scorecards and reports, customized for different audiences i.e. building owners, city staff, ESCOs Chicago and NY are both working on this currently.