



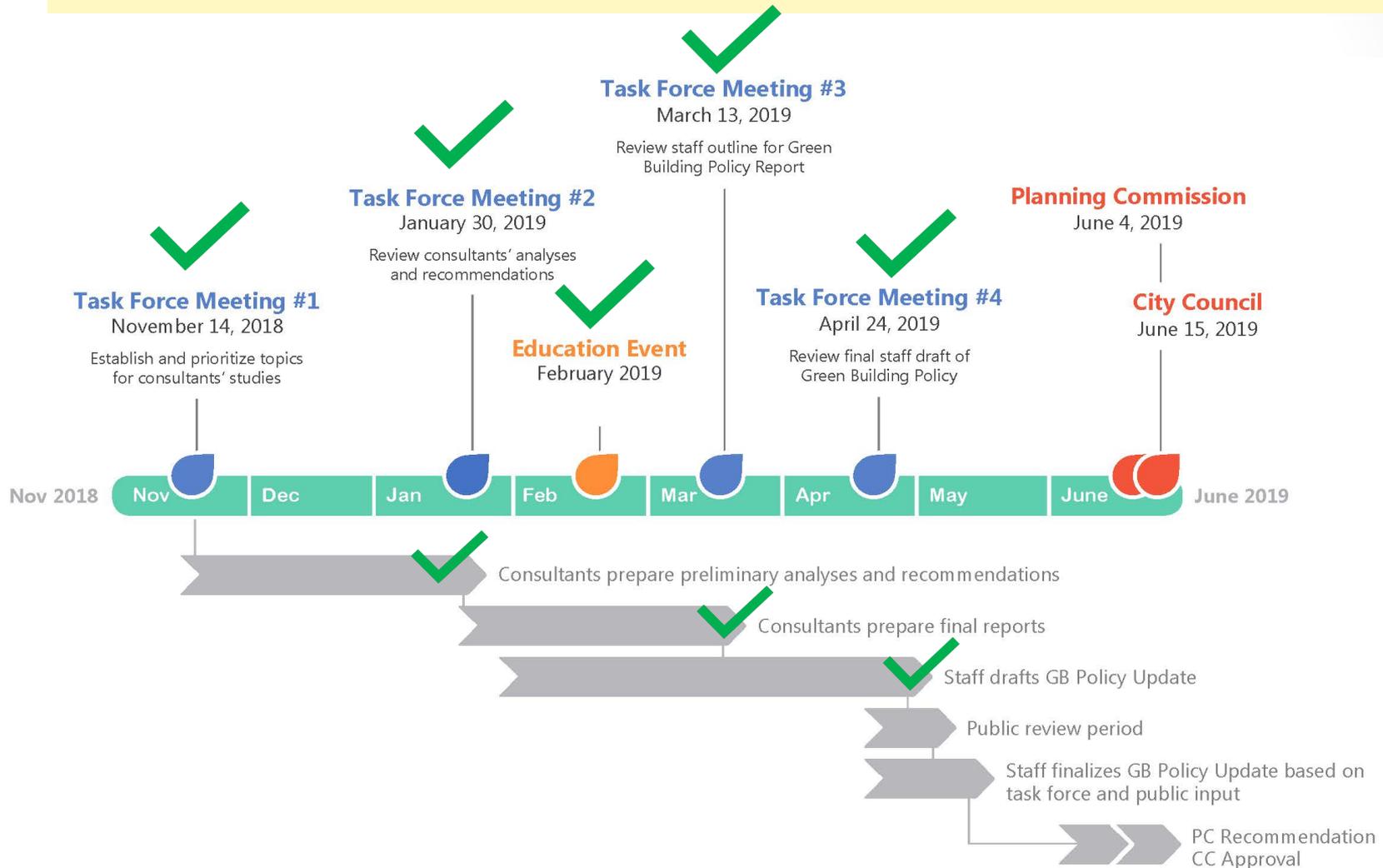
**Discussion Item:**  
**Green Building Policy Update**  
Department of Planning & Zoning

Planning Commission

May 7, 2019



# Green Building Policy Update *Workplan and Timeline*





*Two Initiatives:*

# Summary of Green Building Policy and EAP Phase 2 Actions

## Green Building Policy

Progressive and Cutting-edge Approach for DSP and DSUP projects:

- Elevating building certification rating systems
- Implementation of the directed-use approach, which requires achieving certification credits in the areas of energy, water, and indoor environmental quality
- Flexibility to choose certification through three leading green building third-certifiers: LEED, Green Globes and Earthcraft
- Consideration of Net-Zero energy standards for new public (City-owned) buildings



*Two Initiatives:*

## **Summary of Green Building Policy and EAP Phase 2 Actions**

### **EAP Phase 2 Actions 2019-2040**

- Support the implementation of the Green Building Policy 2019 update
- Advance the programming of the Green Building Policy through 2040
- Recommend advocating for related legislative authority

# Proposed Green Building Policy

## 1. Increase minimum level of green building certification for development projects

Public Development  
(City-owned property):

- LEED Gold
- Three Green Globes
- Earthcraft Light Commercial (TBD)



Private Development:

- LEED Silver
- Two Green Globes
- Earthcraft Multifamily Gold  
Earthcraft Light Commercial (TBD)



# Proposed Green Building Policy

## 2. Certification with Priority Points

(equated across rating systems)

### Energy Use

- EUI reduction
- Renewable Energy
- Advanced Metering  
*(public and private commercial excluding hotels)*
- Enhanced Commissioning  
*(public only)*

### Water Efficiency

- Indoor Water Use Reduction
- Outdoor Water Use Reduction

### Indoor Environmental Quality

- Low-emitting/low-VOC materials
- Daylighting  
*(public only)*
- Thermal Comfort
- Indoor Air Quality



# Proposed Green Building Policy

## 3. Higher Public Development Standards than Private Development (DSP, DSUP)

- Level of Certification: LEED Gold, 3 Green Globes, Earthcraft (TBD)
- Performance Points: More points in EUI reduction and Energy Use; Water Efficiency (same as private); and additional credits in Indoor Environmental Quality

### -PLUS-

Public developments will meet the following criteria unless it is technically infeasible, not cost effective, and situationally inappropriate:

|                        |  |
|------------------------|--|
| <b>STORMWATER</b>      | 100% of the required stormwater treatment through green infrastructure.                        |
| <b>NET ZERO ENERGY</b> | Net zero energy (NZE) through a combination of energy efficiency and renewable energy systems. |



# Proposed Green Building Policy

## 3. Existing Public Building Renovations

(non-DSP/DSUP)

City will apply LEED Interior Design and Construction (ID+C) and LEED Operations and Maintenance (O&M) rating systems as a guideline for interior design and construction projects and targeted renovations of individual building systems (e.g.; HVAC, carpeting, roof, windows, plumbing). Actual third-party certification may be pursued when technically and financially feasible.



# Proposed Green Building Policy

## Flexibility

- Flexibility from the Green Building Policy will be considered on a case-by-case basis
- The Director of Planning and Zoning will determine if the request is justified based upon the information provided with the development application
- The City will use the data collected from this process over time to establish consistent criteria and thresholds for alternatives to compliance with the Green Building Policy

## Evaluation

- No change to current development plan review time
- Updates to plan preparation checklists and standard development conditions to coincide with new Policy (proposed as EAP Short-term actions)
- Public developments will submit an evaluation form to measure/track the feasibility of the additional criteria for stormwater, net zero energy and existing building renovations



# Estimated Impacts and Benefits of Green Building Policy Update

## Reduction in Energy Use and Greenhouse Gas Emissions (GHGs)

- Total energy use of projected future development will be reduced by 20% compared to if those buildings were built to the City's current 2009 Green Building Policy standards
- Equates to more than 63,000 metric tons of greenhouse gas emissions per year, or a 3% reduction of GHGs City-wide

## Reducing Potable Water Use

- Potable water use of projected future development will be reduced by at least 421 million gallons of water per year, or a 29% reduction in water use from new construction

## Improving Human Health and Quality of Life

- Significant decreases in multiple indoor exposures/pollutants and is shown to result in fewer reports of mold and inadequate ventilation
- Improved health outcomes and work and learning productivity among participants who occupy green buildings suggests the potential to improve long-term health and quality of life



# Environmental Action Plan Items

Items that require additional program development and staffing resources.

## City-owned Buildings:

- Make public building performance data readily available to the public via the City's website (short-term action proposed in EAP Implementation/Education and Outreach chapter)
- Start a pilot program to construct at least one net zero energy public building (short-term action)
- Investigate the feasibility of performance-based procurement for net zero construction. (mid-term action)
- Complete a pilot program to construct at least one net zero energy public building. (mid-term action)
- Establish a standardized process for net zero energy public buildings city-wide. (mid-term action)
- Complete a study of feasibility and methods to achieve net zero energy in existing building renovations. (mid-term action)

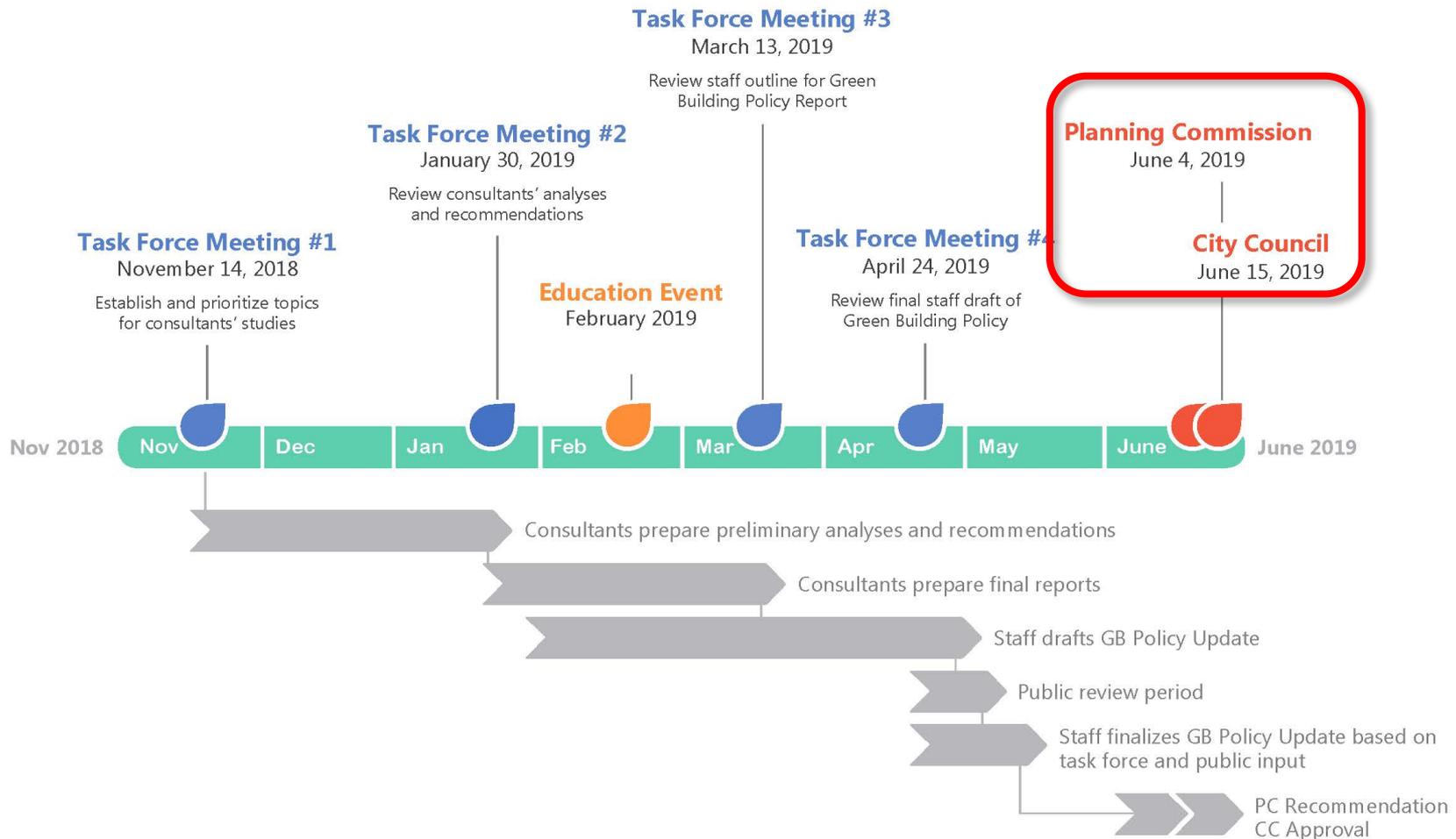
## Private Buildings:

- Existing and New, Small Buildings:
  - Implement C-PACE and Green Lease Leaders Program. (short-term action)
  - Create a Green Building Resource Guide for new small buildings and renovations not subject to a DSP/DSUP (short-term action proposed in EAP Implementation/Education and Outreach chapter)
- Evaluate regulatory incentives to encourage green building such as passive design, bonus density, etc. (mid-term action)
- Establish a performance monitoring program for private development. (mid-term action)
- Advocate for additional state-enabling legislation for enhanced municipal authority. (mid-term action)



# Green Building Policy Update

## Next Steps







# Proposed Policy Outline Review

## *Environmental Action Plan (EAP) Short-Term Action implemented by the Green Building Task Force*

**\*Strategy A:** Increasing LEED or equivalent third-party green building certification standards for private development.

**\*Strategy B:** Establishing a green building standard for new public development at a higher level than required for private development. Evaluating the feasibility of a net zero standard for new public development, including schools.

**\*Strategy C:** Establishing incentives for private development participation in green building certifications.

**\*Strategy D:** Prioritizing specific green building standards in private development projects.

**\*Strategy E:** Introducing mandatory and/or voluntary green building practices for existing buildings not subject to site plan review.

**Strategy F:** Instituting a building performance monitoring program.

**Strategy G:** Establishing a Green Zone in the City.

**\*Additional Task Force Strategies:** Establish a Green Building Code, include Health and Wellness certification



# Five Priority Green Building Strategies for consultant review

## Task Force Meeting #1:

**Strategy A:** Increase LEED or equivalent third-party green building certification standards for private development.

**Strategy B:** Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

**Strategy C:** Establish incentives for private development participation in green building certifications.

**Strategy D:** Prioritizing specific green building elements in private development projects.

**Strategy E:** Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review.

## Integral Group (Recommendations):

**Strategy A (A+D Combined):** Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

**Strategy B:** Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

**Strategy C (Partial E):** Introduce voluntary green building practices for small buildings not subject to review.

**Strategy D (Partial E):** Introduce voluntary green building practices for existing buildings (including historic).

**Strategy E (Former C):** Establish incentives for private development participation in green building certifications.

## WSP (Cost Analysis):

**Strategy A (A+D Combined):** Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

**Strategy B:** Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

**Strategy C:** Establish incentives for private development participation in green building certifications.

**Strategy E:** Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review.