CITY OF PALO ALTO’S REACH CODE AND GREEN BUILDING REQUIREMENTS

EXISTING CODE REQUIREMENTS (to be extended)

1. Continue to require Tier I and Tier II CALGreen provisions (that are optional under State code) for new construction, with city-specific exceptions
   Link: CHAPTER 3 GREEN BUILDING, 2019 California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)
2. Require all-electric new home construction (both single-family and multi-family).
   Link: 16.17.100 Subchapter 7 - Low-rise residential buildings - mandatory features and devices. (amlegal.com)
3. Continue to require 100% of residential parking spaces in multifamily building to be Level 2 EV ready or have EVSE installed
   16.14.440 Expedited permitting process for electric vehicle charging stations. (amlegal.com)
4. Continue to require a 20% reduction in indoor water use from the CALGreen baseline for nonresidential new construction projects
   Link: APPENDIX A5 NONRESIDENTIAL VOLUNTARY MEASURES, 2019 California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)
5. Continue to require dual plumbing for new nonresidential projects > 10,000 sf if recycled water service is available and new nonresidential projects > 50,000 sf if recycled water is not available
   Link: 16.14.300 (amlegal.com)
6. Continue to require 80% diversion rate in construction waste for projects exceeding $25,000 and 65% diversion rate for projects less than $25,000
7. Require minimum MERV 13 air filtration media in new nonresidential buildings
   Link: CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES, 2019 California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)

PROPOSED NEW CODE REQUIREMENTS (becoming effective Jan 2023, pending CPA adoption)

1. Require covers for all new pools and spas (no exceptions)
2. Require newly constructed cooling towers to achieve maximum number of cycles to optimize process water use
3. Adopt low-carbon concrete standards for all new construction projects
4. Require new detached Accessory Dwelling Unit (ADU) to be all-electric
5. Require all new, non-residential construction to be all-electric
6. Require heat pump water heaters when water heaters are replaced as part of a residential addition and/or alteration project
7. Prohibit new gas infrastructure for outdoor equipment such as pools, spas, and grills in existing residential buildings
8. Expand the City’s EV charging infrastructure requirements for new construction above the State minimum requirements
9. Adopt a definition for substantial remodel that will trigger Green Building requirements for new construction projects

CONSIDERED BUT NOT RECOMMENDED AT THIS TIME

1. Demand Hot Water Recirculation System with Manual Control
   Reasoning: Limited water savings

2. Drain Water Heat Recovery
   Reasoning: Limited water savings

3. Graywater Dual Drainage plumbing in renovations
   Reasoning: Requires additional system elements to functional

4. Use of recycled water for landscape
   Reasoning: Potential high costs for infrastructure. Unknown timeline of recycled water availability

5. Greater than MERV 13 filtration
   Reasoning: Limited air quality benefits, higher energy demands for fans, difficult to achieve

6. MERV 13 filtration for residential buildings
   Reasoning: Variation in system types prevents universal applicability. Room units may be more cost effective.

7. Require graywater valve when laundry room is renovated
   Reasoning: Benefits conditional on user behavior and landscape water demands.

8. Higher efficiency indoor water fixtures
   Reasoning: Efficiency goals managed through a percent reduction target rather than prescriptive measures. Limited options of lower flow fixtures (beyond CALGreen baseline)

9. HERS Verified Energy Measures (beyond those already required by code)
   Reasoning: Requires a cost-effectiveness study

10. Battery Storage
    Reasoning: 2022 State Code beginning to address this. Would require cost-effectiveness

11. Life Cycle Assessment Modeling
    Reasoning: Expensive and very uncommon currently. Would not produce any savings, just estimates.
12. Efficiency & electrification requirements for alterations/addition of existing single-family homes
   Reasoning: Cost-effectiveness of energy efficiency measures is dependent on the building vintage and whether prior upgrades have been made (based on the cost effectiveness study for existing single family residential building upgrade completed in August 2021.) Most electrification measures remain not cost effective. If the City adopts an efficiency upgrade ordinance for single family homes, there will be many exceptions which makes enforcement challenging.