

Environmental Quality Commission



REGULAR MEETING AGENDA

Date: 6/20/2018
Time: 6:30 p.m.
City Hall - "Downtown" Conference Room
701 Laurel St., Menlo Park, CA 94025

A. Call to Order

B. Roll Call – Dickerson, Kabat, Chair London, Marshall, Vice Chair Martin, Payne, Price

C. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

D. Regular Business

- D1. Select new commission chair and vice chair for the Environmental Quality Commission.
- D2. Consider updates to the Environmental Quality Commission 2018-2020 work plan and amendments to the Climate Action Plan ([Attachment](#)).
- D3. Review and discuss green building code integration to the Downtown Specific Plan ([Attachment](#)).
- D4. Approve the May 16, 2018, Environmental Quality Commission meeting minutes ([Attachment](#)).
- D5. Consider requests for future agenda items.

E. Reports and Announcements

- E1. Commission reports and announcements
- E2. Staff update and announcements

F. Adjournment

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

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MEMORANDUM

Date: 6/11/2018

To: Environmental Quality Commission

From: Environmental Quality Commission Work Plan Subcommittee: Deb Martin, Ryann Price, and James Payne

Re: Consider updates to the Environmental Quality Commission 2018-2020 work plan and amendments to the Climate Action Plan

The Environmental Quality Commission is in the process of developing the two-year work plan for the period covering 2018-2020. A work plan subcommittee was assembled to prepare suggested focus areas for consideration during the upcoming Environmental Quality Commission meeting on June 20, 2018. The work plan will be discussed in further detail with all commissioners. The subcommittee is proposing the following areas for consideration that will be discussed during the first drafting session of the two-year work plan during the meeting on June 20, 2018. These priority areas are also in line with the 2018 Menlo Park City Priorities.

1. **Climate Action Plan** – The Climate Action Plan is a focus area for the City and should be further supported by the Environmental Quality Commission. The two-year work plan should focus on setting new targets beyond 2025 while also supporting current priority areas under the 2020 plan. The three priority areas include:
 - **2025 CAP goals** – Work with city staff to develop new 2025 goals and a strategy for greenhouse gas reduction targets;
 - **Sustainable development** – Ensure the sustainability of this City's planning, zoning, and building code regulations are consistent with the Environmental Quality Commission's mission and City Council priorities outlined in the March 21, 2018 staff report:
<https://www.menlopark.org/DocumentCenter/View/16971/D2---Climate-Action-Plan-amendment>
 - Extending the ConnectMenlo General Plan Update's green design standards;
 - Improve energy efficiency in existing buildings;
 - **Advancing Electric Vehicle adoption** – Developing an electric vehicle charging station infrastructure master plan, charging stations, and support new goals for necessary retrofits. Incorporate electric vehicle charging stations in the downtown garage project and identify potential opportunities for solar installations.
2. **Urban Canopy Preservation** – The development of a comprehensive urban canopy strategy for Menlo Park remains an area of focus for the Environmental Quality Commission:
 - **Heritage Tree Ordinance Update** – Provide guidance and feedback on the new heritage tree ordinance and tree appeal process;
 - **Urban Canopy Inventory** – Investigate tools to inventorize the complete Menlo Park canopy, including both city and private residence trees. Utilize the tool to help develop a strategy for healthy turnover of the urban canopy to ensure our citizens understand how they can contribute to this goal. Consider a study session with the city arborist to explore inventory options and tools.
3. **Zero Waste** – Support the city's zero waste policy and identify key areas where there are gaps that we can help address. The following are potential areas of focus:

- **Circular Economy** – Strategies to promote a circular economy and develop single-use item reduction strategies to lower incoming waste volumes, examples include:
 - <http://vancouver.ca/green-vancouver/single-use-items.aspx>
 - http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2015/012-5834_DraftStrategy.pdf
 - <https://www.ellenmacarthurfoundation.org/assets/downloads/Cities-in-the-Circular-Economy-The-Role-of-Digital-Tech.pdf>
- **Improving waste reduction targets in the Zero Waste Plan** – Work with city staff to prioritize the areas of focus to help achieve Menlo Park's Zero Waste Plan. Evaluate strategies to improve waste reduction from building materials and enforcement of the city's policy.

Potential Ad Hoc Subcommittee Issues:

- San Francisquito Creek;
- Downtown parking garage;
- Water system master plan;
- Parks and Recreation master plan

Additional Links:

- Refer to one of Chair London's more recent memos: <https://www.menlopark.org/DocumentCenter/View/16762/D1---20180215-Memo-from-Janelle-London>
- Climate Action Plan: <https://www.menlopark.org/DocumentCenter/View/17639/H2---Climate-Action-Plan-Update>.
- Community Zero Waste Plan: <https://www.menlopark.org/DocumentCenter/View/17480/Community-Zero-Waste-Plan>
- Electric Vehicle Study by ICCT: <https://www.theicct.org/publications/california-electric-vehicle-2018>

MEMORANDUM**Date: 6/20/2018****To: Environmental Quality Commission****From: Tom Kabat****Re: Review and discuss green building code integration to the Downtown Specific Plan**

2016 General Plan Land Use Program 7E states, "Develop a Greenhouse Gas (GHG) standard for development projects that would help reduce communitywide GHG emissions to meet City and Statewide reduction goals."

Why focus on the Building Code now?

As a global leader in fighting climate change, California and its leading cities face a situation that has a newly evolved understanding including the following:

1. The electricity available in our area is much cleaner than ever before and getting even cleaner as the default-provider's default-product transitions from 85% greenhouse gas free now to 100% greenhouse gas free in 3 years.
2. Natural gas is being discovered to be much more problematic than when the building code energy sections (Title 24) were first developed in the 1970's:
 1. The gas production system is now found to leak gas from the well in addition to treatment and transmission processes, seasonal storage and local distribution processes, as well as normal incomplete combustion in our buildings. These leaks total more than 5% of the gas our buildings use;
 2. The Global Warming Potential of leaked methane (the only active ingredient in "natural gas") was recently found to be 84-95 times as potent as CO2 on a 20-year timeframe for crippling the ability of the earth to shed its accumulating heat;
 3. The concentration of leaked methane in the atmosphere is rising dramatically and is addressable only by decisive action;
 4. The gas system leakiness and the high Global Warming Potential (described in 1 and 2 above) compound to make new uses of natural gas responsible for at least 3 times the Global Warming Potential of their combustion stack emissions alone.
3. There are now more economic, cleaner, safer, and healthier alternatives to natural gas use in buildings including Heat Pump Space Conditioning. Heat Pump Space Conditioning acts as a reversible air conditioner that can heat or cool a building and even heat some areas with warmth pulled from other areas that are being cooled (Heat Pump Water Heaters use 1 unit of electricity to gather about 2 units of ambient heat and provide all 3 units of heat energy to the water tank), and induction cooking has proven to be faster, more controllable, provides better cooking, and offers a safer and less health damaging alternative to gas cooking.
4. California is getting more serious in its greenhouse gas reductions as it starts to pursue the 40% reduction by year 2030 from 1990 levels as envisioned in Senate Bill 32. As this is pursued, the efforts will be many, including retrofitting of then

- existing buildings to remove environmentally obsolete equipment and replace it with heat pumps.
5. Developers make most equipment selections and system selections in Menlo Park. They are motivated to maximize profit (per unit of effort while avoiding perceived risk) within whatever constraints are deemed necessary by the community. Most developers (being human) will tend to do the “safe for them” thing they did last year if they are allowed to do it again this year. Their contractors and sub contractors also tend to repeat prior decisions unless the community requires progress.
 6. It is much cheaper to put in the new equipment appropriate for the coming decades during a new construction or remodel project than it is to wait 10 years and have to schedule all of the trades needed to upgrade systems while suffering delay related outages. We can also avoid the emissions that occur in those first 10 years.

Since we see where the world, California, and more specifically Menlo Park have to be heading to combat the rapidly growing problem of climate change, it makes sense for policy makers to prevent the mistake of letting developers and contractors install environmentally obsolete equipment in new projects and remodels. It makes sense to lead the state in mistake prevention. The following ideas are proposed for consideration as building code adjustments to be further explored by the Environmental Quality Commission, city staff, and recommended to City Council.

Ideas:

- 1) Require natural gas free (no gas line allowed) new construction. This is the full prudent recommendation to avoid letting applicants strand new gas assets in the community that have to be retrofitted out at higher expense later.
- 2) Require gas free (no gas line allowed) on all areas of remodel of any size. This is the full prudent recommendation to avoid letting applicants strand new gas assets in the community that have to be retrofitted out at higher expense later.
- 3) Require any construction or remodel activity crossing the following triggers to result in the permit-associated **elimination of gas water heating and replacement with electric water heating**:
 - a) New or Replacement water heater;
 - b) New or Expanded solar electric system;
 - c) New solar thermal system for water or space heat;
 - d) Remodels exceeding 200 square feet regardless of whether any other plumbing is permit associated.
- 4) Require any construction or remodel activity crossing the following triggers to result in the permit-associated **elimination of gas space heating and replacement with electric heat pump space conditioning**:
 - a) New or Replacement heater, heating system, furnace or boiler;
 - b) Remodels exceeding 200 square feet regardless of whether any other plumbing is permit associated.
- 5) Exploration of Variable Refrigerant Flow heat pumps for New Commercial construction larger than 2,000 square feet. Variable Refrigerant Flow heat pumps are a

newly available technology in the United States that allows heat to be removed from some zones of a building and simultaneously delivered to other zones very efficiently. For new commercial buildings in excess of 2,000 square feet and existing commercial buildings seeking mechanical permits, **applicants shall submit a plan and energy calculations for variable refrigerant flow heat pumps with zones connected on opposite faces of the buildings** (This allows the system to cool the south side and simultaneously use the extracted heat to heat the north side, and similar for the east and west faces, and for the core and the north). At this time, only the plan is required, the systems will be required in 2023.

6) Require all new construction of any size and all remodels exceeding 1,000 square feet to use electric heat pumps for space conditioning and water heating.

7) Require electric clothes drying circuit (110 V 30 Amps) installed in laundry area. This is the type of circuit suitable for electric resistance dryers. Modern Heat Pump vent-less dryers can operate on 110 V 20 Amp circuits.

8) Require a 220 Volt 20 Amp circuit to a NEMA 6-50 Plug located within 6 feet of residential garage door openings. This is the type of plug suitable for 20 Amp Level 2 EVSE.

9) Have library lend (check out) electric induction cooking devices (cost ~\$70 each) so developers and community members can experience modern controlled clean air cooking.

Below are watered-down partial solutions that still allow applicants to strand new polluting assets in the community:

a) If a project wants a gas connection, the applicants need to apply for an air pollution permit and the project would need to install the conduits, circuits, and main panel electrical capacity to enable the eventual conversion of space conditioning, water heating, and cooking to electric powered alternatives;

b) Require methane free kitchens. As a transition measure, Menlo Park would still allow use of propane for flames in projects applying before January 1, 2025.

Tonight's meeting should include time for discussion of these ideas and additional ideas that the Environmental Quality Commission may want to have staff explore further for development of recommendations to City Council to avoid the new stranding of environmentally obsolete assets in the community.

Environmental Quality Commission



REGULAR MEETING MINUTES - DRAFT

Date: 4/18/2018
Time: 6:30 p.m.
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Chair London called the meeting to order at 6:35 p.m.

B. Roll Call

Present: Kabat, Chair London, Marshall, Vice Chair Martin, Payne, Price
Absent: Dickerson
Staff: Sustainability Manager Rebecca Lucky and Sustainability Administrative Assistant Hannah Guenther

C. Public Comment

No public comment was received.

D. Regular Business

D1. Welcome new Environmental Quality Commission commissioners and select new commission chair and vice chair

Chair London introduced the item.

Commission came to a consensus to discuss chairmanship at next month's meeting scheduled for June 20, 2018

D2. Review and discuss the City Council work plan and Environmental Quality Commission 2018-2020 work plan updates (Staff Report #18-007-EQC)

Rebecca Lucky introduced the item.

ACTION: Motion and second (London/Marshall) to form a subcommittee with Vice Chair Martin, Commissioner Payne, and Commissioner Price to lead discussions during scheduled meetings regarding the Environmental Quality Commission 2018-2020 Work Plan. The motion passed (5-0-1; Dickerson absent).

Vice Chair Martin excused herself from the duration of the meeting at 7:25 pm.

D3. Nominate a commissioner to serve on the Heritage Tree Community Taskforce (Staff Report #18-008-EQC)

Rebecca Lucky introduced the item.

ACTION: Motion and second (London/Kabat) to nominate Commissioner Marshall to serve on the

Heritage Tree Community Taskforce. The motion passed (5-0-2; Martin and Dickerson absent).

- D4. Review and discuss the Environmental Quality Commission's quarterly report to the City Council (Attachment)

Chair London introduced the item.

Commission came to a consensus to support the proposed quarterly report and presentation with minor modifications.

- D5. Discuss and consider Environmental Quality Commission meeting cancellation for the months of July, August, and December of 2018

Rebecca Lucky introduced the item.

ACTION: Motion and second (Marshall/London) to approve the cancellation of July and December Environmental Quality Commission meetings. The motion passed (5-0-2; Martin and Dickerson absent).

- D6. Approve the April 18, 2018, Environmental Quality Commission meeting minutes (Attachment)

Rebecca Lucky introduced the item.

ACTION: Motion and second (Marshall/London) to approve the April 18, 2018, meeting minutes passed (5-0-2; London and Martin absent).

- D7. Consider request for future agenda items

The Commission identified the following as future agenda items:

1. Select new Environmental Quality Commission chair and vice chair positions;
2. Downtown Parking Garage update;
3. Discuss 2018-2020 work plan lead by Environmental Quality Commission Work Plan subcommittee;
4. Commissioner Kabat to report on green building code recommendations;
5. Form applicable subcommittees to provide support for large-scale agenda items

E. Reports and Announcements

- E1. Subcommittee reports

There were no subcommittee reports.

- E2. Individual commissioner reports

There were no commissioner reports.

- E3. Staff update and announcements

Sustainability Manager Rebecca Lucky provided a verbal report on the Climate Action Plan amendments and mentioned the upcoming Planning Commission meeting on Electric Vehicle

Charging Station policy meeting scheduled for June 4, 2018.

F. Adjournment

Chair London adjourned the meeting at 9:07 p.m.

Minutes prepared by Hannah Guenther.