

TOWN OF LOS ALTOS HILLS  
Staff Report to the City Council

February 20, 2020

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SUBJECT: ADOPTION (SECOND READING) OF ORDINANCE 589 AMENDING CHAPTER 1.6 (ENERGY CODE) OF TITLE 8 (BUILDING REGULATIONS) OF THE LOS ALTOS HILLS MUNICIPAL CODE AND ADOPTION BY REFERENCE LOCAL AMENDMENTS THAT REQUIRE THE ELECTRIFICATION OF SPACE AND WATER HEATING SYSTEMS IN NEW RESIDENTIAL BUILDINGS; FILE #MCA19-0005

FROM: Zachary Dahl, AICP, Planning Director *ZD*

APPROVED: Carl Cahill, City Manager *CC*

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RECOMMENDATION: That the City Council:

Waive further reading and adopt Ordinance 589 amending Chapter 1.6 of Title 8 of the Los Altos Hills Municipal Code (see Attachment 1).

BACKGROUND:

On January 16, 2020, the City Council voted 4-1 to introduce an ordinance to amend the Town's Building Code regulations to include "reach code" amendments to the 2019 California Energy Code requiring all-electric space and water heating systems in new residential buildings. Gas fueled cooking appliances, clothes dryers and fireplaces will continue to be permitted, but pre-wiring for these appliances will be required. The January 16, 2020 staff report is included under Attachment 2. The ordinance will become effective 30 days from February 20, 2020.

FISCAL IMPACT

Although there is no fiscal impact to the Town associated with adoption of the reach codes, the cost of construction will increase once the amendments are implemented.

CEQA REVIEW

The proposed ordinance and amendments are exempt from the California Environmental Quality Act (CEQA) pursuant to "general exemptions" described in Section 15061(b)(3) of the CEQA Guidelines, since the ordinance amendments would not have any significant effects on the environment.

ATTACHMENTS

1. Ordinance 589 Amending Chapter 1.6 of Title 8 of the LAHMC
2. January 16, 2020 Staff Report to the City Council (no attachments)

Staff report prepared by Steve Padovan, Principal Planner

**ORDINANCE 589****AN ORDINANCE OF THE TOWN OF LOS ALTOS HILLS AMENDING CHAPTER 1.6 (ENERGY CODE) OF TITLE 8 (BUILDING REGULATIONS) OF THE LOS ALTOS HILLS MUNICIPAL CODE AND ADOPT BY REFERENCE REGULATIONS THAT REQUIRE THE ELECTRIFICATION OF SPACE AND WATER HEATING SYSTEMS IN NEW RESIDENTIAL BUILDINGS BASED ON SPECIAL LOCAL CONDITIONS**

**WHEREAS**, California Health and Safety Code section 17958 requires that cities adopt building regulations that are substantially the same as those adopted by the California Building Standards Commission and contained in the California Code of Regulations – Title 24; and

**WHEREAS**, the 2019 California Energy Code is a part of the 2019 California Code of Regulations and implements minimum energy efficiency standards in buildings through mandatory requirements, prescriptive standards, and performances standards; and

**WHEREAS**, Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards (Standards) establish a process which allows local adoption of energy standards that are more stringent than the statewide Standards, provided that such local standards are cost effective and the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by the 2019 California Energy Code; and

**WHEREAS**, the California Statewide Codes and Standards Program led the development of a cost-effectiveness study for Energy Code reach codes that examined different performance-based approaches for new construction of specific building types and determined that such modifications will result in designs that consume less energy than they would under the 2019 State Energy Code; and

**WHEREAS**, the City Council of the Town of Los Altos Hills finds that the local amendments to the California Energy Code contained in this ordinance are cost effective and will require buildings to be designed to consume no more energy than permitted by the California Energy Code; and

**WHEREAS**, pursuant to California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5, the City Council of the Town of Los Altos Hills hereby finds that the modifications to the building standards contained in the California Code of Regulations are reasonably necessary based on the following local climatic, geological or topographical conditions:

1. Climatic: The Town is located in Climate Zone 3 as established in the 2019 California Energy Code. Climate Zone 3 incorporates communities near the coast from Marin County to southern Monterey County including Los Altos Hills. The Town experiences precipitation ranging from 18 to 22 inches per year with an average of approximately 20 inches per year. Ninety-five percent of precipitation falls during the months of November through April, leaving a dry period of approximately six months each year.

Relative humidity remains moderate most of the time and temperatures average 80 degrees the mid-50s in winter. These climatic conditions along with the greenhouse emissions generated from residential structures requires exceeding the energy standards for building construction established in the 2019 California Building Standards Code. The Town's City Council also adopted a Climate Action Plan that has a goal of reducing greenhouse gas emissions below 1990 levels by the year 2030. In order to achieve and maintain this goal, the Town needs to adopt policies and regulations that reduce the use of fossil fuels that contribute to climate change, such as natural gas in buildings.

2. **Geologic:** The Town of Los Altos Hills is subject to earthquake hazard caused by its proximity to San Andreas fault. This fault runs from Hollister, through the Santa Cruz Mountains, epicenter of the 1989 Loma Prieta Earthquake, up the San Francisco Peninsula eventually moving offshore at Daly City near Mussel Rock. This fault system is considered a major Northern California earthquake faults which may experience rupture at any time. Thus, because the City is within a seismic area which includes these earthquake faults, the modifications and changes cited herein are designed to better limit property damage as a result of seismic activity.
3. **Topographic:** The Town of Los Altos Hills consists of ridgelines, rolling foothills and deep wooded canyons that affect climate conditions resulting in increased use of heating and cooling systems and the trapping of potential greenhouse gases in the valley floors.

**WHEREAS**, in accordance with Health and Safety Code section 17958.7, the City Council hereby finds that each of the above findings is applicable to each of the modifications to the 2019 Edition of the California Energy Code described in this ordinance; and

**WHEREAS**, the City Council of the Town of Los Altos Hills finds that this project is exempt from the provisions of the California Environmental Quality Act ("CEQA"), pursuant to Section 15061(b)(3) of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the ordinance will have a significant effect on the environment.

**NOW, THEREFORE**, the City Council of the Town of Los Altos Hills does hereby further **ORDAIN** as follows:

1. Title 8, Chapter 1.6, "Energy Code," of the Los Altos Hills Municipal Code is hereby amended to add Section 8-1.6.02, with additions in underline and deletions in strikethrough to reflect local amendments. Sections not affected by this amendment are not included below and shall remain in full force and effect.

### **Chapter 1.6 CALIFORNIA ENERGY CODE**

#### **8-1.6.02 Amended sections of adopted code.**

Notwithstanding the provisions of Section 8-1.6.01, the Energy Code is amended as follows:

A. Section 100.0 **Scope** under subsection (e) 2. D. **Low-rise residential buildings** is amended to read as follows:

i. **Sections applicable.** Sections 150.0 through 150.1 apply to newly constructed low-rise residential buildings. In addition, all newly constructed residences, newly constructed detached accessory dwelling units, and other newly constructed detached habitable structures shall be electrically heated mixed-fuel buildings as defined in Section 100.1(b).

B. Section 100.1(b) **Definitions** is amended by adding or amending the following definitions to read:

**All-electric building** is a building that has no natural gas or propane plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating, cooking appliances, and clothes drying appliances.

**Certified energy analyst** is a person registered as a Certified Energy Analyst with the California Association of Building Energy Consultants as of the date of submission of a Certificate of Compliance as required under Section 10.103.

**Electrically heated mixed-fuel building** is a mixed-fuel building that uses electricity as the source of energy for its space heating and water heating appliances.

**Free standing accessory dwelling unit** is a detached building that is not intended for sale separate from the primary residence, on a lot that is zoned for single-family or multi-family use, located on the same lot as an existing dwelling, and does not exceed 1,200 square feet of total living area.

**Mixed-fuel building** is a building that is plumbed for the use of natural gas or propane as fuel for space heating, water heating, cooking appliances and/or clothes drying appliances.

C. Section 150.0 **Mandatory Features and Devices** is amended to read as follows:  
Low-rise residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(s).

NOTE: The requirements of Sections 150.0(a) through 150.0(s) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(s) also apply to additions or alterations.

D. Section 150.0(h) **Space-conditioning equipment** is amended by adding the following:  
5. Systems using gas or propane space heating equipment to serve new residences, new detached accessory dwelling units, and new detached habitable structures are not permitted.

- E. Section 150.0(n) **Water heating system** is amended by adding the following:
1. Systems using gas or propane water heaters to serve new residences, new detached accessory dwelling units, and new detached habitable structures are not permitted.
- F. Section 150.0(s) is added to read as follows:
- (s) **Clothes Drying and Cooking.** Buildings plumbed for natural gas or propane clothes drying or cooking equipment shall include the following components for each gas terminal or stub out:
1. **Clothes Drying.**
    - A. A dedicated 208/240-volt, 30-amp or greater electrical receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;
    - B. Both ends of the unused conductor shall be labeled with the words "For Future Electric Clothes Dryer" and be electrically isolated;
    - C. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Clothes Dryer;" and
    - D. Other electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.
  2. **Cooktop.**
    - A. A dedicated 208/240-volt, 50-amp or greater electrical receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;
    - B. Both ends of the unused conductor shall be labeled with the words "For Future Electric Range" and be electrically isolated;
    - C. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Range;" and
    - D. Other electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.
  3. **Stand Alone Cooking Oven.**
    - A. A dedicated 208/240-volt, 20-amp or greater or greater receptacle within 3 feet of the appliance and accessible with no obstructions;
    - B. Both ends of the unused conductor shall be labeled with the words "For Future Electric Oven" and be electrically isolated;
    - C. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Oven;" and
    - D. Other electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.
2. **Severability.** If any provision of this ordinance or the application thereof to any person or circumstance is held invalid or unconstitutional, the remainder of this ordinance, including the application of such part or provision to other persons or circumstances shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this ordinance are severable. The City Council of the Town of Los Altos Hills hereby declares

that it would have passed each section, subsection, subdivision, paragraph, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases be held unconstitutional, invalid, or unenforceable.

3. **Effective Date; Publication.** This ordinance shall take effect thirty (30) days after adoption. Within fifteen days after the passage of this ordinance the City Clerk shall cause this ordinance or a summary thereof to be published once, with the names of those City Councilmembers voting for or against it in a newspaper of general circulation in the Town of Los Altos Hills, as required by law. Prior to the effective date of this ordinance, the City Clerk shall further file a copy of the ordinance, with the California Building Standards Commission.

INTRODUCED: January 16, 2020

PASSED: February 20, 2020

AYES:

NOES:

ABSTENTIONS: None

ABSENT: None

BY: \_\_\_\_\_  
Michelle Wu, Mayor

ATTEST:

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Deborah Padovan, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Steve Mattas, City Attorney

TOWN OF LOS ALTOS HILLS  
Staff Report to the City Council

January 16, 2020

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**SUBJECT:** INTRODUCTION OF AN ORDINANCE OF THE TOWN OF LOS ALTOS HILLS AMENDING CHAPTER 1.6 (ENERGY CODE) OF TITLE 8 (BUILDING REGULATIONS) OF THE LOS ALTOS HILLS MUNICIPAL CODE AND ADOPT BY REFERENCE LOCAL AMENDMENTS THAT REQUIRE THE ELECTRIFICATION OF SPACE AND WATER HEATING SYSTEMS IN NEW RESIDENTIAL BUILDINGS; FILE #MCA19-0005

**FROM:** Zachary Dahl, AICP, Planning Director

**APPROVED:** Carl Cahill, City Manager

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**RECOMMENDATION:** That the City Council:

Waive reading and introduce the Ordinance (Attachment 1) to amend Chapter 1.6 (Energy Code) of Title 8 of the Los Altos Hills Municipal Code and adopt by reference local amendments that require the electrification of space and water heating in new residential buildings based on special local conditions.

**BACKGROUND**

Reach code amendments to the 2019 California Energy Code are designed to de-carbonize new building construction in the state by encouraging the electrification of appliances in all new buildings which reduces overall carbon emissions, improves indoor air quality, and reduces fire risk. Many local jurisdictions have adopted, or are in the process of adopting, various iterations of these reach codes, including the outright banning of natural gas and propane appliances.

On December 4, 2019, staff presented three reach code options to the City Council (see Attachment 2). The three options were as follows:

**Option 1** – Require electric prewiring for heat-pump space heating systems, heat-pump water heating, appliances.

**Option 2** – Require heat-pump space heating, heat-pump water heating and clothes dryers to be electric but allows for cooking appliances and fireplaces to be gas fueled. In addition, it requires pre-wiring for all appliances.

**Option 3** – Require all-electric buildings by banning all new indoor gas infrastructure.

Following public comment, the City Council discussed the three options and voted 4-1 to direct staff to prepare a draft ordinance that would implement Option #2 and allow for gas clothes dryers along with gas cooking appliances and fireplaces.

## PROPOSED ORDINANCE

The proposed ordinance (Attachment 1) modifies language in sections of the Energy Code related to low-rise residential buildings. No code changes are proposed for non-residential buildings since this is not applicable to Los Altos Hills.

The ordinance language contains the following:

- Outlines the sections in the Energy Code that are applicable to the new regulations;
- Provides definitions for specific building types;
- Prohibits gas or propane space heating and water heating equipment in newly constructed residences, detached accessory dwelling units, and detached habitable structures;
- Requires that new buildings plumbed for gas or propane clothes dryers or cooking equipment require rewiring for each appliance;

The text in the ordinance includes the following format types:

- No formatting – This language is in the existing 2019 Energy Code;
- Text in ~~strikeout~~ format – Existing Energy Code language to be deleted;
- Text in underline format – Proposed additions to the Energy Code.

## DISCUSSION

The draft ordinance language was developed by staff using code language adopted by the City of Menlo Park and the model reach code language developed by Silicon Valley Clean Energy. The regulations ban new gas and propane space and water heating systems in new residential buildings and detached habitable structures and requires rewiring for future electric appliances when gas plumbing is proposed. It should be noted that the language outlined in Option 2 originally identified only heat-pump space and water heating equipment be permitted in place of gas fired equipment. Instead of specifically requiring only heat-pump technology, staff has chosen to modify the language to state “electrically heated” equipment in order to retain flexibility in the regulations with regard to future new technologies that may emerge as a result of these regulations. Regardless of the type electric technology used, all space and water heating systems must still meet the state’s strict efficiency standards.

## PUBLIC COMMENT

A public notice was placed in the Town Crier and posted in three public locations throughout the Town. Previous e-mails from residents that were received on the topic at the last meeting are included in Attachment 3.

## FISCAL IMPACT

Although there is no fiscal impact to the Town associated with adoption of the reach codes, the cost of construction would increase with the implementation of these energy code amendments.

### CEQA STATUS

The proposed ordinance amendments are exempt from California Environmental Quality Act (CEQA) pursuant to "general exemptions" described in Section 15061(b)(3) of the CEQA Guidelines, since the ordinance amendments would not have any significant effects on the environment.

### ATTACHMENTS

1. Draft Ordinance
2. December 4, 2019 Staff Report to the City Council on Energy Reach Codes
3. Public Comments

Staff report prepared by Steve Padovan, Principal Planner