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Project Title:	Local Ordinances Exceeding the 2019 Energy Code		
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Description:			
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RESOLUTION NO. 2020-127

A RESOLUTION OF THE ALBANY CITY COUNCIL TO ADOPT GREEN BUILDING MEASURES

WHEREAS, the City Council of the City of Albany adopted the Albany 2035 General Plan on April 18, 2016; and

WHEREAS, The City of Albany General Plan Policy *CON-6.1: Green Construction* directs the City towards development of standards and guidelines which support "green" construction and environmental leadership in the building industry; and

WHEREAS, Action CON-6.A requires that "new construction to meet or exceed California Green Building Code standards for energy and water efficiency," and that "Albany's building codes should be regularly reviewed and periodically amended to meet or exceed state requirements;" and

WHEREAS, The City of Albany Climate Action and Adaptation Plan (CAAP) established the objective of 70% greenhouse gas (GHG) emissions reductions by 2035, and net zero emissions by 2045; and

WHEREAS, The CAAP focuses on reducing emissions from the City's largest emissions sectors, including new and existing buildings. An estimated 40% of GHG emissions in Albany result from the building sector; and

WHEREAS, The CAAP Action 3.2.6 directs the City to "Adopt voluntary green building tiers;" and

WHEREAS, The City of Albany General Plan Policy *T-2.3: Low-Emission Vehicles* directs the City to "encourage the use of low emission or zero emission vehicles, along with the infrastructure to support such vehicles, such as electric vehicle charging stations;" and

WHEREAS, The CAAP established the goal that 98% of passenger vehicles in Albany be electric vehicles by 2050; and

WHEREAS, CAAP Action 1.2.2 directs the City to "adopt an electric vehicle readiness ordinance that would increase the charging requirements for new construction and renovations;" and

WHEREAS, The General Plan Policy *CON-4.3: Low Impact Development* directs the City to "support the use of pervious pavement" to "capture and filter rainwater and reduce runoff to local creeks and the Bay;" and

WHEREAS, Policy *CON-6.9: Reducing Water Usage* Partner with EBMUD, PG&E, Stopwaste.org and other organizations to achieve water efficiency and reduced usage and support indoor and outdoor conservation practices; and

WHEREAS, on June 24th, 2020 the City of Albany Planning and Zoning Commission received a presentation on the proposed green building measures and provided feedback to staff; and

WHEREAS, on September 16, 2020 the City of Albany Climate Action Committee recommended the proposed green building measures to the Albany City Council and on December 9th, 2020 the Planning and Zoning Commission recommended Planning & Zoning Resolution No. 2020-07 to the Albany City Council; and

WHEREAS, the California Health and Safety Code (HSC) Section 18941.5, with reference to HSC Section 17958.7, allows for more restrictive local amendments that are reasonably necessary because of local climatic, geological, or topographical conditions. California Code of Regulations, Title 24, Part 11, California Green Building Standards Code (CALGreen), Section 101.7.1, provides that local climatic, geological, or topographical conditions include environmental conditions established by the city, county, or city and county; 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 California Energy Code; and

WHEREAS, Cost effectiveness studies were prepared for the Statewide Code and Standards Program titled "2019 Cost Effectiveness Study: Low-Rise Residential New Construction, and "2019 Nonresidential New Construction Reach Code Cost Effectiveness Study" ("Studies"). The Studies analyzed the feasibility and cost effectiveness of requiring new construction to be all-electric for 16 different climate zones in California, including climate zone 3, within which the City of Albany is located. The Studies determined the efficiency standards in this ordinance will meet the Study's cost-effectiveness requirements in climate zone 3. Based on this, the City Council of the City of Albany hereby determines that the measures being adopted by the City are cost effective as documented in the Studies; and

WHEREAS, Section 12-6.4(p) of the Albany Municipal Code allows the City Council to establish, by resolution and periodically review and update, more-stringent voluntary measures contained in the California Green Building Standards Code appendixes to address local environmental conditions; and

WHEREAS, The City Council finds that this Resolution is exempt from the California Environmental Quality Act codified in California Public Resources Code section 21000 et seq. (CEQA), pursuant to Subdivision (b)(3) of Section 15061 of the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, because its standards are more stringent than the 2019 Energy Code, there are no reasonably foreseeable adverse impacts, and there is no possibility that the activity in question may have a significant impact on the environment; and

WHEREAS, the State of California allows local jurisdictions to amend the California Building Standards Code where necessary to reasonably address adverse local conditions related to climate, geology, and/or topography, and thus the City Council makes the following findings regarding local conditions:

- a) Topography: the City of Albany is a dense built-out community with predominately older wood-frame commercial and residential structures that lack modern fire protection elements, are located on small lots with minimal setbacks that increase the potential for rapid fire spread, and are reached by narrow streets that often hamper emergency response;
- b) Furthermore, the eastern edge of the City of Albany is located less than two miles from the ridgeline of the East Bay Hills, in the path of "Diablo Winds," which could rapidly bring an wildland fire from the East Bay Hills into the City;
- c) Geology: The City of Albany is vulnerable to major earthquakes on the San Andreas, Hayward and Calaveras faults, which are expected to result in damage to aging underground infrastructure including natural gas lines and water lines needed for fire suppression;
- d) Furthermore, the City of Albany lacks access to secondary sources of water for fire suppression in the event of damage to primary water supply;
- e) Climate: The City of Albany is frequently is exposed to extremely high risk "red flag" fire conditions consisting of warm temperatures, low humidity, and strong winds that combine to produce an increased risk of fire danger. These conditions have worsened in recent years due to global warming; and
- f) Furthermore, climate conditions have resulted in Albany experiencing dangerous air quality for weeks, even from distant fires.

NOW, THEREFORE, THE ALBANY CITY COUNCIL RESOLVES AS FOLLOWS:.

Section 1: Applicability

The requirements of this resolution shall apply to applications subject to planning review submitted on or after 30 days after final action by the State of California for all buildings proposed to be located in whole or in part within the City. Buildings must comply with all measures that are applicable to the building type in question and to the specific areas of the building in which construction is occurring.

Section 2: Definitions

- A. Accessory Dwelling Unit (ADU) has the same meaning as defined in the California Building Code, Title 24, Part 11, Section 202.
- B. Addition means an extension or increase in floor area of an existing building or structure.
- C. Alteration means any construction or renovations to an existing structure other than repair or addition.
- D. All-Electric Building means a building in which all appliances are fueled only by electricity and natural gas is not used.
- E. Clean Air Vehicle means any vehicle certified to zero-emissions standards, high-efficiency vehicles bearing High-occupancy Vehicle (HOV) carpool lane stickers issued by the Department of Motor Vehicles, or carpool or van pool vehicles.
- F. Compliance Margin is a percentage that represents the degree to which a given nonresidential building exceeds the energy budget determined in the California Energy Code. The compliance margin is calculated by finding the difference between the energy budget of the building and the actual energy use of the building, both of which are determined by compliance software, and dividing that number by the energy budget. The higher the percentage, the lower the energy use of the building.

- G. Compliance Software is software that has been approved pursuant to Section 10-109 of Part 1 of the California Administrative Code, to demonstrate compliance with the performance approach of Part 6 of the California Building Code (energy code part 6 100.1).
- H. Energy Budget means the maximum energy consumption that a proposed building, or portion of a building can be designed to consume, calculated using compliance software. The Energy Budget of each building is determined using the Compliance Software certified by the California Energy Commission.
- I. Energy Design Rating (EDR) is a number between 0 and 100 that signifies the energy efficiency of a given residential building, with 0 being a zero-net energy building and 100 being equivalent to the energy efficiency of a 2006 International Energy Conservation Code (IECC) compliant building. The EDR of each building is determined using the Compliance Software certified by the California Energy Commission.
- J. EDR Margin means the difference between the EDR value that is required by the California Energy Code and the actual EDR value achieved by a given residential building. Both values are determined using the Compliance Software certified by the California Energy Commission.
- K. Efficiency Margin refers to an EDR Margin that is achieved only by increasing the energy efficiency of the structure itself, without the use of additional photovoltaics or energy storage batteries. This only applies to residential buildings.
- L. Electric Vehicle Charging Station (EVCS) shall have the same meaning as defined in the California Building Code, Title 24, Part 11, Section 202.
- M. Electric Vehicle-Ready Space shall mean a parking space for which construction documents indicate wiring schematics, raceway methods, the raceway termination point and proposed location of future EV spaces and EV chargers. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

- N. Mixed-fuel Building means a building that is fueled by both natural gas and electricity.
- O. Natural Gas shall have the same meaning as "Fuel Gas" as defined in California Plumbing Code and Mechanical Code.
- P. Newly Constructed Building shall be defined as a building that has never before been used or occupied for any purpose.
- Q. Nonresidential Building means all buildings that are not classified in Occupancy Group R-2, R-3, or R-4, as defined in the 2019 California Building Code, Title 24, Part 2, Section 310.
- R. Multi-family Building means a residential building that contains more than two dwelling units, excluding accessory dwelling units.
- S. Office Building means a building which is classified in Occupancy Group B, as defined by the 2019 California Building Code, Title 24, Part 2, Section 304.1
- T. Permeable Paving means paving using materials and techniques which allow the movement of water around the paving material and allow precipitation to percolate through the paving surface to the soil below.
- U. Single-family Building means a structure that contains one or two dwelling units. An accessory dwelling unit may also be located in or associated with a single-family dwelling and may be attached or detached.
- V. Residential Building means a structure arranged, designed, and intended to be occupied as a primary residence. This includes all buildings of Occupancy Group R-2, R-3, or R-4, as defined in the 2019 California Building Code, Title 24, Part 2, Section 310, including any associated ADU's.
- W. Repair means reconstruction or renewal of any part of an existing building for the purposes of maintenance or damage correction.
- X. Retail Building means a building which is classified in Occupancy Group M, as defined by the 2019 California Building Code, Title 24, Part 2, Section 309.1
- Y. Resilient Flooring has the same meaning as defined in the California Building Code,Title 24, Part 11, Section 202.

- Z. Solar Zone has the same meaning as defined in 2019 California Energy Code, Title24, Part 6, Section 100.1 and Section 110.10.
- AA. Volatile Organic Chemicals, or "VOC" has the same meaning as defined in the California Building Code, Title 24, Part 11, Section 202.

Section 3: Green Building Requirements

- A. Newly constructed residential buildings, excluding Accessory Dwelling Units (ADUs) shall be required to meet or exceed the Energy Design Rating (EDR) Margins listed in Appendix A.
- B. All new construction, alterations, and additions of residential buildings shall be required to comply with all applicable measures listed in Appendix B.
- C. Twenty percent (20%) of the parking spaces in newly constructed multi-family buildings, rounded to the nearest whole number, shall be Electric Vehicle Charging Stations. The remainder of the parking spaces shall be Electric Vehicle-Ready. Branch circuit panelboard(s) shall be installed that contain the physical space to accommodate the future installation a minimum of one 40-ampere dedicated branch circuit and overcurrent protective device per EV-Ready space and have sufficient electrical capacity to deliver a minimum 40 amperes at 208 or 240 volts multiplied by 20% of the total number of parking spaces. The service panel and/or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.
- D. Newly constructed retail and office buildings shall be required to meet or exceed the Compliance Margins described in Appendix C.
- E. All newly constructed nonresidential buildings shall install solar panels on the entire Solar Zone of the roof.
 - a. Exception: If installing solar panels on the entire Solar Zone will result in more electricity production annually than the modeled electricity usage of the building, as determined by compliance software, the building will not be

required to fill the entire solar zone. Instead, the number of solar panels installed must be sufficient to produce at least as much electricity (kWh) annually as the modeled electricity usage of the building.

F. All new construction, alterations, and additions of nonresidential buildings shall be required to comply with the all applicable measures listed in Appendix D.

Section 4: Exemptions

- A. The requirements of this section shall not apply to:
 - 1. Projects that have an active planning review application submitted on or before 30 days after final action by the State of California.
 - 2. Projects that are determined by the Community Development Director to be exempt from planning review.

Section 5: Hardship or Infeasibility Exemption

- A. If an applicant for a nonexempt project believes that circumstances exist that make it a hardship or infeasible to meet the requirements of this resolution they may apply for an exemption or reduction in requirements as set forth below. In applying for an exemption, the burden is on the applicant to show financial hardship or physical infeasibility.
- B. Application. If an applicant for a nonexempt project believes such circumstances exist, the applicant may apply for an exemption at the time of planning application submittal.
- C. Granting of Exemption. The granting of an exemption shall be made by the overall project decision-making authority. If an exemption is granted, the applicant shall be required to comply with this Chapter in all other respects.
- D. Denial of Exemption. If the decision-making authority determines that it is possible for the applicant to fully meet the requirements of this Chapter, they shall so notify the applicant.

1	Section 6: Effective Date
2	The requirements of this Resolution shall be effective 30 days after final action by the State of
3 4	California.
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6	
7	QUESTA.
8	GE'NELL GARY, MAYOR
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12	Attachments:
13	Appendix A: Energy Design Rating Margin (Residential) Appendix B: Residential Non-Energy Measures
14	Appendix C: Compliance Margin (Non-Residential)
15	Appendix D: Non-Residential Non-Energy Measures
16	Appendix D. Non-Residential Non-Energy Weasures
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1	Appendix A: Energy Design Rating Margin (Residential)
2	Single family mixed-fuel buildings: 10 EDR Margin
3	Single family all-electric buildings: 4.7 Efficiency EDR Margin
456	Multi-family mixed fuel buildings: 10.3 EDR Margin Multi-family Electric buildings: 0 EDR Margin (no additional requirement)
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Measure

Newly installed paving shall meet the Tier 2 requirements of the 2019 California Green Building Standards Code, Title 24, Part 11, Section A4.106.4.	New construction, alterations, and additions	Multi-family, Single family, and ADU's
In each unit where a dishwasher or clothes-washer is being installed, at least one dishwasher or clothes-washer shall be Energy Star approved.	New construction, alterations, and additions	Multi-family, Single family, and ADU's
Kitchen faucets shall have a maximum flow rate of no more than 1.5 gallons per minute.	New construction, alterations, and additions	Multi-family, Single family, and ADU's
The cement content of all concrete shall be reduced by at least 25%. The cement shall be replaced by fly ash, slag, silica fume, rice hull ash, or another suitable material.	New construction, alterations, and additions	Multi-family, Single family, and ADU's
Outdoor lighting systems shall meet the requirements of the 2019 California Green Building Standards Code, Title 24, Part 11, Section A4.106.10.	New construction, alterations, and additions	Multi-family only
At least 90% of the total area of resilient flooring installed shall comply with the VOC-emissions limits set forth in the 2019 California Green Building Standards Code, Title 24, Part 11, Section A4.504.2	New construction, alterations, and additions	Multi-family, Single family, and ADU's

Construction type

Building type

Appendix D: Non-Residential Non-Energy Measures

Measure	Construction Type
Designated parking spaces for clean air vehicles shall make up 12% of the parking spaces constructed, rounding to the nearest whole number. Parking spaces shall be marked as described in 2019 California Green Building Standards Code, Title 24, Part 11, Section A5.106.4.1.3.	New construction, alterations, and additions
Outdoor lighting shall comply with 2019 California Green Building Standards Code, Title 24, Part 11, Section A5.203.1.1.1	New construction, alterations, and additions
A 12% reduction in potable water use within the building will be achieved by complying with 2019 California Green Building Standards Code, Title 24, Part 11, Section A5.303.2.3.1	New construction only
Concrete shall comply with 2019 California Green Building Standards Code, Title 24, Part 11, Sections A5.405.2.1 and A5.405.2.1.1	New construction, alterations, and additions
At least 90% of the total area of resilient flooring installed shall comply with the VOC-emissions limits set forth in the 2019 California Green Building Standards Code, Title 24, Part 11, Section A4.504.4.7	New construction, alterations, and additions

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City of Albany

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RESOLUTION NO. 2020-127

PASSED AND APPROVED BY THE COUNCIL OF THE CITY OF ALBANY,

The 19th day of January, 2021, by the following votes:

AYES: Council Members Jordan, McQuaid, Nason, Tiedemann and Mayor Gary

NOES: none

ABSENT: none

ABSTAINED: none

RECUSED: none

WITNESS MY HAND AND THE SEAL OF THE CITY OF ALBANY, this

20th day of January, 2021.

Anne Hsu

CITY CLERK

Am