



**City Council  
Hearing**

**Item 8 21-714**

**Confirmation of New  
Actions to Achieve the  
Interim Target of 2035 for  
Climate Action Plan Update**

**July 13, 2021**

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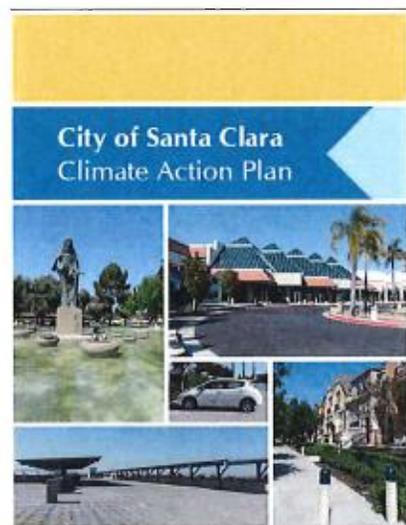


**City of  
Santa Clara**  
The Center of What's Possible

**Background**

**Purpose for the Update**

- Align CAP (adopted 2013) with City's General Plan Goals & Policies for sustainability and environmental quality
- Address new State requirements
- Extend City's Greenhouse Gas (GHG) reduction goals through 2030, consistent with AB32 targets
- Provide CEQA streamlining



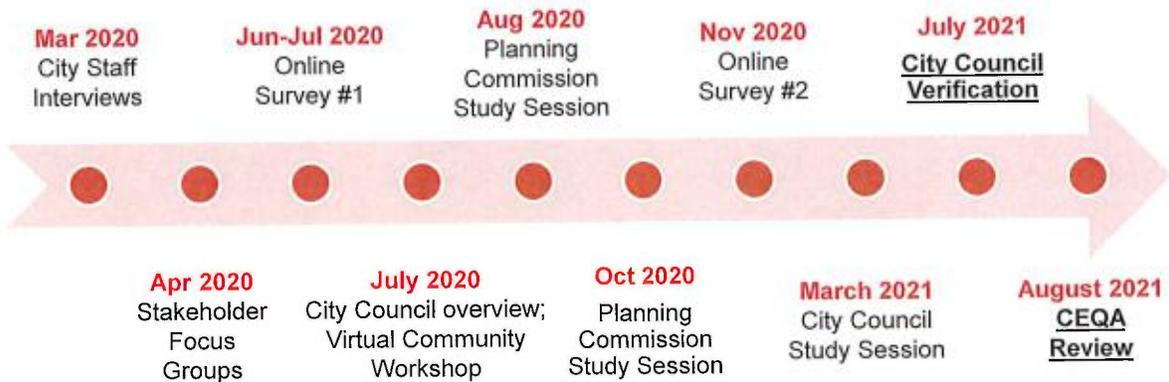
City of Santa Clara  
Climate Action Plan

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## Project Timeline



## Community Input

### Workshop, Stakeholder Interviews and Surveys

- Over 500 participants
- Prioritization of implementation measures
- Preference for voluntary measures

### Planning Commission

- Carbon neutrality no later than 2045 (Aligns with EO B-55-18)



## March 2021 Study Session

### City Council Direction

- Carbon neutrality no later than 2045 (Aligns with EO B-55-18)
- Include an intermediate target of 80% reduction by 2035
- Require a 25% Vehicle Miles Traveled (VMT) reduction from active Transportation Demand Management (TDM) measures
- Prepare an all-Electric Reach Code including a requirement for the provision of EV ready parking spaces in new development as 25% Level 2 and 75% Lite Level 2 at 3.8 Kw, using an automatic load management software to balance the loads

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## March 2021 Study Session

### City Council Direction

- Add a requirement for new development to include one secured bicycle parking spot for each multi-family residential unit with electrical outlets available in storage units
- Prepare a policy to replace natural gas furnaces and water heaters upon burnout with an electric equivalent at City facilities
- Implement a Climate Action Tracking Dashboard

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## Exploration of CAP Interim Target – 80% GHG reduction by 2035

### Up to 79% GHG reduction achievable through

- Adoption of All-Electric Reach Code
- Significant new energy measures:
  - SVP provides 100% carbon-neutral electricity by 2035

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## Exploration of CAP Interim Target – 80% GHG reduction by 2035

### SVP provides 100% carbon-neutral electricity by 2035

- Achieves up to 79% City GHG reduction
- SVP would purchase 130% of demand and sell excess at loss
- 45%-55% rate increase above the typical 3% yearly rate increase required in order to meet a combined renewable electricity purchase and time-shifting storage program (does not factor in other costs such as transmission upgrades, resource adequacy, grid stability, or future technology changes)

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## Exploration of CAP Interim Target – 80% GHG reduction by 2035

### Mandatory electrification of existing large commercial and multifamily

- Achieves 83% GHG reduction (in combination with SVP measure)
- 62% of large commercial and multifamily electrified by 2035

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## Exploration of CAP Interim Target – 80% GHG reduction by 2035

### Summary of findings:

- 100% carbon-neutral energy PLUS all-electric reach codes could achieve up to 79% GHG reductions by 2035
- No means of achieving 80% reduction without SVP providing 100% carbon-neutral electricity
- Next Integrated Resource Plan due to Council in late 2023
- SVP action (79% reduction) could be considered sufficient given other unknown factors between now and 2035; otherwise building retrofit mandates are also required

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## Exploration of VMT Reduction Target

### 25% Reduction Through Active TDM Measures

- Survey of other cities indicates a variety of approaches; none of the surveyed cities require 25% VMT reduction through Active TDM
- City of Santa Clara already has low VMT per capita
  - Lowest per capita residential VMT in County
  - Second lowest per capita employee VMT in County

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## Exploration of VMT Reduction – Residential

### 25% Reduction Through Active TDM Measures

- 25% Reduction for residential projects could be achieved by restricting parking (e.g. cap at 25% less than demand)
- A residential TDM program could be further explored by hiring a consultant to develop a list of mandatory (codified) measures applicable to all residential projects
  - A 25% reduction may not be possible for residential projects through this approach

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## Exploration of VMT Reduction – Large Employer

### 25% Reduction Through Active TDM Measures

- 25% Reduction is feasible for commercial projects
- Use of telecommuting, provision of private shuttles, transit passes, bicycle lockers, shower facilities, and other measures, are significantly effective at reducing single trips for employment purposes
  - In combination can result in a 25% reduction in VMT

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## VMT Reduction – Options

### 25% Reduction Through Active TDM Measures

- Council could provide direction to retain the 25% reduction target for larger employment nonresidential projects
- A TDM program could be created with the guidance of a TDM consultant for residential and/or commercial projects
- A TDM program based on specific measures rather than a percentage reduction, creates consistent and transparent City requirements that are more easily verifiable

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## CAP Update & Sustainability Program

### Next Steps



## CAP Update & Sustainability Program

### Recommendation

Adopt the following measures to achieve the required GHG emissions reductions and develop an interim 2035 target:

- a) SVP to achieve 70% carbon neutrality by 2030 for the City to meet the SB32 emissions reduction target
- b) Set a new 2035 interim CAP GHG emissions reduction target based on IRP results
- c) Establish a VMT reduction approach that identifies specific interim active TDM measures for new residential development and large employment projects until a TDM consultant can provide recommendations on specific measures to incorporate in a TDM Program



## **CAP Update & Sustainability Program**

### **Recommendation (Continued)**

- d) Adopt an all-electric reach code, with exceptions
- e) Set the All-Electric Reach Code requirement for the provision of EV ready parking spaces in new development to 25% Level 2 and 75% Lite Level 2 at 3.8 Kw using automatic load management software to balance loads
- f) Add a requirement for new development to include one secured bicycle parking spot for each multi-family residential unit with electrical outlets available in storage units
- g) Prepare a policy to replace natural gas furnaces and water heaters at City facilities upon burnout with an electric equivalent
- h) Implement a Climate Action Tracking Dashboard

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