**RESOLUTION NO. _____**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS ADOPTING NEGATIVE DECLARATION AND CLIMATE ACTION PLAN**

**WHEREAS**, on February 15, 2011, the Climate Action Plan (CAP) project was initiated to streamline environmental review of future development projects in the City of Milpitas consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) and the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction target of 15% below 2005 emissions levels by 2020; and

**WHEREAS**, on March 20, 2013, the Planning Commission held a study session on the subject application, and considered evidence presented by City staff and other interested parties; and

**WHEREAS**, on April 10, 2013 the Planning Commission held a duly noticed public hearing on the Project at which time the Commission considered a written staff report as to the proposed application and its conformity with the requirements of Milpitas Municipal Code, the Negative Declaration, written and oral comments on the Negative Declaration and Climate Action Plan, and all other oral and written comments presented to it. Based on this evidence, the Planning Commission recommended that the City Council adopt the Climate Action Plan, adopt the proposed General Plan Text Amendments (GP13-0002), and adopt the Negative Declaration (Resolution No. 13-014); and

**WHEREAS**, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and the Planning Commission recommended that they City Council adopt the Negative Declaration; and

**WHEREAS**, consistent with the CAP, a General Plan Text Amendment is proposed, however, since there are limitations on the number of times any single element of the General Plan can be amended, these amendments will be presented for adoption at a later date, coupled with another General Plan amendment effort; and

**WHEREAS**, on May 7, 2013, the City Council held a duly noticed public hearing to consider adoption of the Negative Declaration, and approval of the Project.

**NOW, THEREFORE**, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The City Council further determines, finds and certifies as follows:

   A. Regarding the Project:

      i. The proposed project is consistent with the General Plan in that the Climate Action Plan supports the policies of the General Plan.

ii. The proposed project will not adversely affect the public health, safety, and welfare in that the Climate Action Plan is a strategic document that proposes reduction of greenhouse gas emissions.

B. Regarding the Negative Declaration:

i. On the basis of the whole record before it, there is no substantial evidence that the project will have a significant effect on the environment.

ii. The negative declaration reflects the lead agency's independent judgment and analysis.

iii. The custodian of the documents and other materials which constitute the record of proceedings for the Project is the City of Milpitas Planning Division located at City Hall, 455 East Calaveras Boulevard, Milpitas, California 95035.

3. The City Council hereby approves and adopts the Climate Action Plan with Negative Declaration.

PASSED AND ADOPTED this _____ day of _____ 2013, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

APPROVED:

_____

Mary Lavelle, City Clerk

_____

Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____

Michael J. Ogaz, City Attorney

2-B

# CLIMATE ACTION PLAN

## A QUALIFIED GREENHOUSE GAS REDUCTION STRATEGY

**Public Draft**

March 2013

# City of Milpitas

# CLIMATE ACTION PLAN AND QUALIFIED GREENHOUSE GAS REDUCTION STRATEGY

## Public Review Draft

March 1, 2013

**Prepared by:**

PMC™

500 12th Street Oakland, Suite 250

Oakland, CA 94607

www.pmcworld.com

**Supported by funding from:**

Santa Clara Valley Transportation Authority, Community Design & Transportation Program

# TABLE OF CONTENTS

## TABLE OF CONTENTS

**1. Introduction ..... 1-1**
Purpose and Scope ..... 1-1
California Legislative Framework ..... 1-1
Planning Process ..... 1-1
How to Use This Plan ..... 1-3
Relationship to the General Plan and California Environmental Quality Act ..... 1-4
Relationship to Bay Area Air Quality Management District CEQA Air Quality Guidelines ..... 1-5
**2. Inventorying and Forecasting Greenhouse Gas Emissions ..... 2-1**
Inventory Purpose and Background ..... 2-1
Emissions Sources ..... 2-1
2005 Baseline Inventory ..... 2-2
Greenhouse Gas Emissions Forecast ..... 2-4
Business-as-Usual Forecast ..... 2-4
Adjusted Business-as-Usual Forecast ..... 2-5
Impact of State Reduction Programs ..... 2-6
**3. Identifying a Greenhouse Gas Reduction Target ..... 3-1**
Purpose of the Greenhouse Gas Reduction Target ..... 3-1
Guidance for local targets ..... 3-1
Milpitas Target Greenhouse Gas Emissions Level ..... 3-2
**4. Reducing Greenhouse Gas Emissions ..... 4-1**
Greenhouse Gas Reduction Measures ..... 4-1
Related Terms ..... 4-1
Summary of Reductions ..... 4-2
Activities Since Baseline ..... 4-5
Measures and Actions ..... 4-6
Energy ..... 4-7
Water ..... 4-15
Transportation and Land Use ..... 4-16
Solid Waste ..... 4-28
Off-Road Equipment ..... 4-29

# TABLE OF CONTENTS

**5. Reviewing Projects ..... 5-1**
Applicability ..... 5-1
Development Checklist ..... 5-1
**6. Monitoring Progress ..... 6-1**
Monitoring Progress ..... 6-1
Assessing Implementation ..... 6-1
Implementation Programs ..... 6-1
Evaluating the Plan ..... 6-4
Implementation and Monitoring Tool ..... 6-10
**7. Glossary ..... 7-1**
**8. References ..... 8-1**
**Appendix A: Greenhouse Gas Inventory ..... A-1**
**Appendix B: Reduction Measure Methods and Sources ..... B-1**
**Appendix C: Development Checklist ..... C-1**
**Appendix D: City Council Resolution Adopting the CAP ..... D-1**

## LIST OF TABLES

Table 2-1: Baseline Greenhouse Gas Emissions By Sector ..... 2-2
Table 2-2: Jurisdictional Baseline Greenhouse Gas Emissions by Sector ..... 2-3
Table 2-3: Business-as-Usual Emissions Forecast, 2020 ..... 2-4
Table 2-4: Summary of Adjusted Business-as-Usual Emissions Forecast ..... 2-6
Table 3-1: Greenhouse Gas Emissions Target and Necessary Local Reduction ..... 3-2
Table 4-1: Summary of Total Greenhouse Gas Reductions and Progress Toward Target ..... 4-2
Table 4-2: Greenhouse Gas Reductions by Goal Topic ..... 4-3
Table 4-3: Greenhouse Gas Reduction Summary for Existing Activities, 2020 ..... 4-6
Table 6-1: Implementation Metrics ..... 6-4

# TABLE OF CONTENTS

## LIST OF FIGURES

Figure 1-1: California Regulatory Framework Summary ..... 1-2
Figure 2-1: Jurisdictional Baseline Emissions by Sector ..... 2-3
Figure 2-2: Business-as-Usual Emissions Forecast, 2020 ..... 2-5
Figure 3-1: Greenhouse Gas Emissions Target and Necessary Local Reduction ..... 3-2
Figure 4-1: Greenhouse Gas Reductions by Goal ..... 4-4
Figure 4-2: Total Reductions to Reach 2020 Reduction Target ..... 4-4
Figure 4-3: Goals, Measures, and Actions ..... 4-6

# ABBREVIATIONS

| Acronym | Term |
|---|---|
| AB | Assembly Bill |
| ABAG | Association of Bay Area Governments |
| BAAQMD | Bay Area Air Quality Management District |
| BAU | business-as-usual |
| BGR | Milpitas Green Building Regulations |
| BMP | Bikeways Master Plan |
| C&D | construction and demolition waste |
| CALGreen | California Green Building Standards |
| CAP | Climate Action Plan |
| CARB | California Air Resources Board |
| CBTP | Community Based Transportation Plan |
| CCR | Title 24 of the California Code of Regulations |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| $CH_4$ | methane |
| $CO_2$ | carbon dioxide |
| CSI | California Solar Initiative |
| EDP | Milpitas Economic Development Plan 2005 |
| EIR | environmental impact report |
| GBR | Milpitas Green Building Regulations |
| GHG | greenhouse gas |
| HE | General Plan Housing Element |
| HERS | Home Energy Rating System |
| kW | kilowatts |
| kWh | kilowatt-hours |
| LCFS | Low Carbon Fuel Standard |
| LEED | Leadership in Energy Efficiency and Design |

# ABBREVIATIONS

| Acronym | Term |
|---|---|
| LUE | General Plan Land Use Element |
| MPO | Metropolitan Planning Organization |
| MSP | Midtown Specific Plan |
| $MTCO_2e$ | metric tons of carbon dioxide equivalent |
| MTFM | Milpitas Travel Forecasting Model |
| $N_2O$ | nitrous oxide |
| OSECE | General Plan Open Space & Environmental Conservation Element |
| PG&E | Pacific Gas and Electric |
| Plant | San Jose/Santa Clara Water Pollution Control Plant |
| PPA | Power Purchase Agreement |
| RDA | Amended and Restated Redevelopment Plan for Project Area No. 1 |
| RIP | 2005–2010 Redevelopment Implementation Plan: Mid-Cycle Update |
| RPS | Renewables Portfolio Standard |
| SB | Senate Bill |
| SCS | Sustainable Communities Strategy |
| SFBAAB | San Francisco Bay Area Air Basin |
| SV-REP | Silicon Valley Collaborative Renewable Energy Procurement |
| TASP | Transit Area Specific Plan |
| TDM | Transportation Demand Management |
| TOD | transit-oriented development |
| VMT | vehicle miles traveled |
| VTA | Santa Clara Valley Transit Authority |
| ZEV | zero-emissions vehicle |

# 1. Introduction

## Purpose and Scope

This Climate Action Plan (CAP) is designed to streamline environmental review of future development projects in the City of Milpitas consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) and the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction target of 15% below 2005 emissions levels by 2020.

The City has a long-standing commitment to achieving environmental stewardship. The CAP allows City decision-makers and the broader community to understand the sources and magnitude of local GHG emissions, establish goals to reduce GHG emissions, and prioritize steps to achieve emissions reduction targets. The CAP establishes goals, measures, and actions in the energy, water, transportation, solid waste, and off-road equipment sectors. It also establishes implementation programs and a framework to monitor and report progress.

## California Legislative Framework

The State of California has addressed energy and climate issues for nearly 40 years, and recent legislation is a driving force behind the City's CAP. A summary of recent state legislation by topic is provided in **Figure 1-1**.

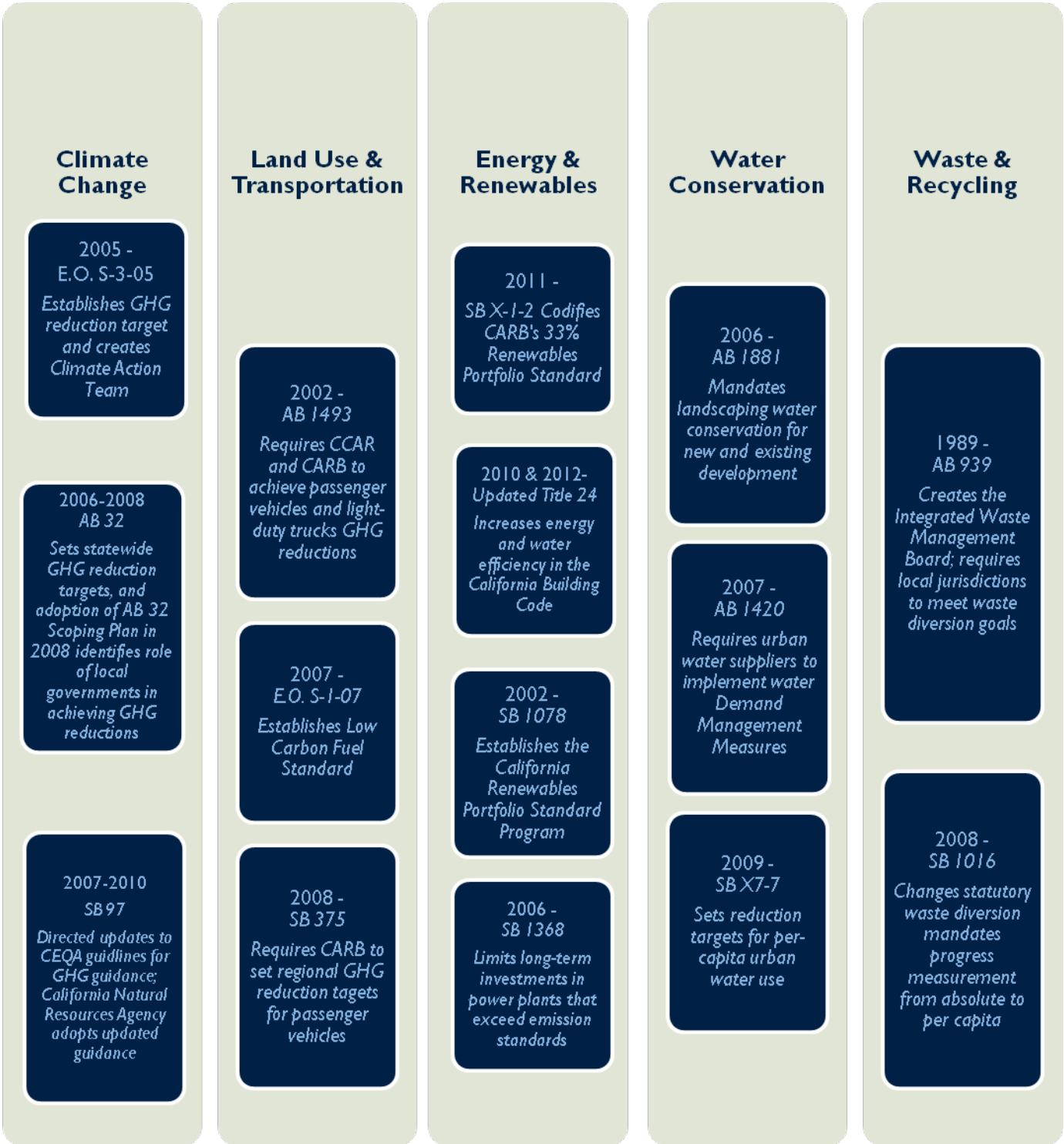
## Planning Process

The City used a highly collaborative process to develop the CAP. The City held a joint community workshop and Planning Commission work session on August 24, 2011, to identify key opportunities for the CAP. At the workshop, the City introduced the CAP to the community, discussed Milpitas's current sustainability initiatives, and identified sustainability priorities. The City also collected input on potential CAP measures and actions. The City and the consultant presented technical information, and reviewed and discussed a series of posters summarizing existing sustainability policies and programs in Milpitas. Workshop participants shared their vision for a more sustainable Milpitas and the challenges and strategies for achieving that vision. Key priorities identified by participants included the need for innovative renewable energy financing programs, expansion of recycled water use and tree planting in new development, and more energy efficient development. Participants also identified pedestrian-oriented development and more efficient land use patterns as important priorities.

Public Workshop, August 24, 2011

# 1. Introduction

**Figure 1-1: California Regulatory Framework Summary**



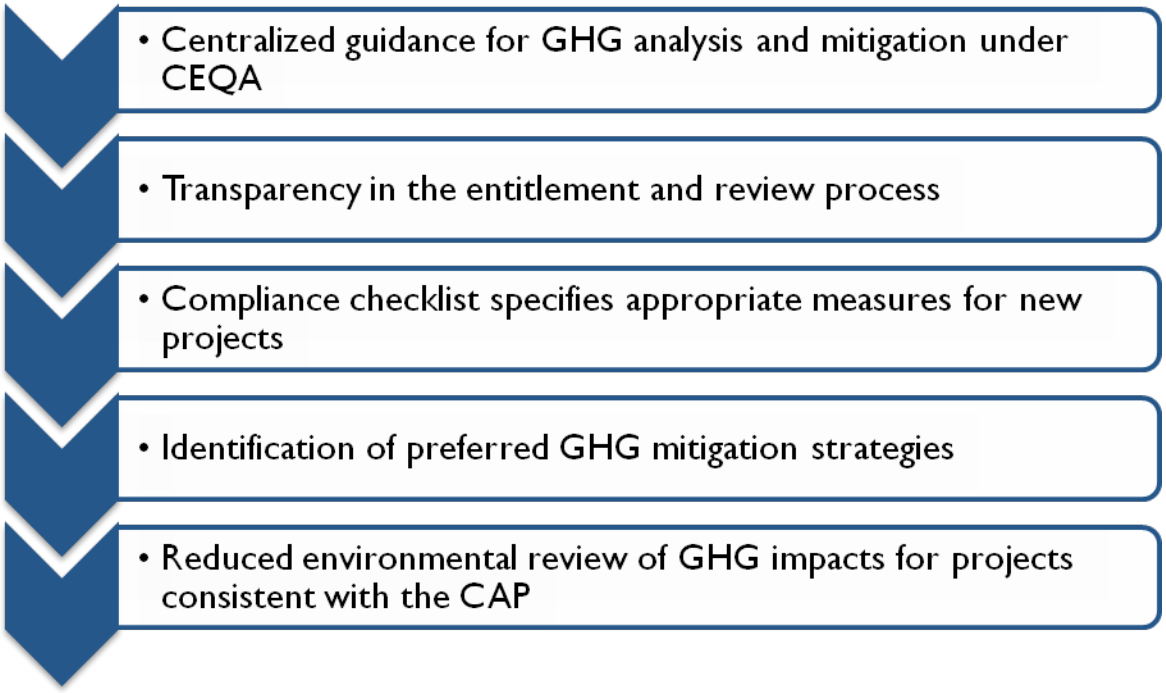
# 1. Introduction

## Climate Action Plan Benefits

The CAP provides a policy framework for the City to reduce community-wide GHG emissions, while also simplifying the environmental review process for new development. Through the CAP, the City establishes predictability regarding mitigation strategies to address climate change. The City has completed environmental review of this CAP in compliance with CEQA through an Initial Study/Negative Declaration (IS/ND). Based on this analysis, the City may determine that CEQA streamlining benefits are available for projects deemed consistent with the CAP. This CAP allows the City to identify measures from this CAP that are appropriate for each project, and will serve as the City's tool to determine project compliance.

The CAP creates benefits for numerous community stakeholders, as summarized in **Figure 1-2**.

**Figure 1-2: Climate Action Plan Benefits**




## How to Use This Plan

The CAP is the City's Qualified GHG Reduction Strategy. The City will use the CAP to achieve GHG emissions reductions in a manner consistent with Assembly Bill (AB) 32 within discretionary projects on a project-by-project basis and through ongoing planning activities and programs. The CAP identifies the City's expectations for new development, simplifying the environmental review process. This approach allows the CAP to serve as the City's one-stop shop for GHG analysis and mitigation pursuant to CEQA.

However, the City can only achieve the goals established in this CAP through community partnerships. As a result, the CAP is also a resource for the community, providing transparent expectations and information describing opportunities to reduce GHG emissions. Community members can use the CAP to identify programs and opportunities or to learn about local conditions and priorities.

## RELATIONSHIP TO THE GENERAL PLAN AND CALIFORNIA ENVIRONMENTAL QUALITY ACT

The City has developed the CAP to serve as a strategic planning document. While achieving GHG reductions, the CAP also implements objectives of numerous local planning documents and statewide regulations. The CAP is a stand-alone policy and implementation item coordinated with the adopted General Plan. The City will adaptively manage the CAP over time, maintaining flexibility to update the CAP as opportunities shift and new resources emerge.

### Coordination with the General Plan

The Milpitas General Plan identifies energy efficiency, waste reduction, and efficient land use as priorities for the City. Numerous General Plan policies and recommendations in other planning documents would reduce GHG emissions. In turn, CAP measures, policies, and actions to reduce community-wide GHGs are aligned with General Plan goals and policies.

The CAP also supports Milpitas's specific and master plans. Through implementation of these plans, the City has already made significant progress to reduce future GHG emissions. The beneficial effects of these efforts are presented in both the City's emissions growth forecast in **Chapter 2** and in the existing measures section of **Chapter 4**.

**Related Planning Documents**

Transit Area Specific Plan
*Adopted June 2008*

Midtown Specific Plan
*Amended October 2008*

Bikeways Master Plan
*Adopted June 2009*

Trails Master Plan
*Adopted June 1997*

### Role of the Climate Action Plan in CEQA Implementation

Consistent with the State CEQA Guidelines, lead agencies may use adopted GHG reduction plans to assess the cumulative impacts of discretionary projects on climate change. In addition, the guidelines provide a mechanism to streamline development review of future projects.

Specifically, lead agencies may use adopted plans consistent with State CEQA Guidelines Section 15183.5 to analyze and mitigate the significant effects of greenhouse gases under CEQA at a programmatic level by adopting a plan for the reduction of GHG emissions. Later, as individual projects are proposed, project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review in their cumulative impacts analysis. Project-specific environmental documents prepared for projects consistent with the General Plan and the CAP may rely on the programmatic analysis of greenhouse gases contained in the CAP.

A project-specific environmental document that relies on this CAP for its cumulative impacts analysis must identify specific CAP measures applicable to the project and demonstrate the project's incorporation of the measures. Project applicants and City staff will identify specific measures applicable to each project during project review. If applicable measures are not otherwise binding and enforceable, they must be incorporated as mitigation measures for the project. If substantial evidence indicates that the GHG emissions of a proposed project may be cumulatively considerable, notwithstanding the

project's compliance with specific measures in this CAP, an environmental impact report (EIR) must be prepared for the project.

### Relationship to Bay Area Air Quality Management District CEQA Air Quality Guidelines

The BAAQMD has direct and indirect regulatory authority over sources of air pollution in the San Francisco Bay Area Air Basin (SFBAAB), of which Milpitas is a part. As described in Section 4 of the BAAQMD Air Quality CEQA Guidelines, a lead agency may prepare a Qualified GHG Reduction Strategy that is consistent with Assembly Bill (AB) 32 goals. The BAAQMD encourages such planning efforts and recognizes that careful early planning by local agencies is invaluable to achieving the state's GHG reduction goals. If a project is consistent with an adopted Qualified GHG Reduction Strategy that addresses the project's GHG emissions, it can be presumed that the project will not have significant greenhouse gas emissions under CEQA.

Milpitas's CAP and accompanying environmental documentation meet the standards of a Qualified GHG Reduction Plan (which parallel and elaborate upon criteria established in State CEQA Guidelines Section 15183.5(b)(1)), as presented in the chapters referenced below.

A. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area (see **Chapter 2**).

B. Establish a level, based on substantial evidence, below which the contribution of GHG emissions from activities covered by the plan would not be cumulatively considerable (see **Chapter 3**).

C. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area (see **Chapter 2**).

D. Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level (see **Chapter 4**).

E. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specific levels (see **Chapter 5** and **Chapter 6**).

F. Adopt the GHG Reduction Strategy in a public process following environmental review (see City Council resolution in **Appendix D**).

# 2. Inventorying and Forecasting Greenhouse Gas Emissions

This chapter presents quantified GHG emissions for existing and future activities within the city pursuant to Sections 15183.5(b)(1)(A) and 15183.5(b)(1)(C) of the State CEQA Guidelines and Sections 1 and 2 of the BAAQMD GHG Plan Level Quantification Guidance. For purposes of the CAP, this chapter assesses GHG emissions for the calendar years 2005 and 2020.

## Inventory Purpose and Background

A GHG emissions inventory (Inventory) lays the groundwork for the entire CAP planning process. This Inventory catalogues GHG emissions for 2005 and projects emissions levels for 2020. To comply with state guidance, the CAP identifies an emissions reduction target for the forecast year (see **Chapter 3**). The difference between the emissions projection and the reduction target represents the necessary reduction in the amount of GHG emissions and sets the focus for the reduction measures presented in **Chapter 4**. Additional information on the Inventory is provided in **Appendix A**.

## Emissions Sources

The Inventory includes all major sources of GHGs caused by activities in the Milpitas community and is consistent with methodologies recommended by the California Air Resources Board (CARB), ICLEI-Local Governments for Sustainability, and the BAAQMD. The Inventory analyzes the following emissions sources:

- **Transportation** – vehicle miles traveled (VMT) to and/or from the city in 2005
- **Energy** – electricity and natural gas used in the built environment in 2005
- **Stationary Sources** – direct emissions from the Newby Island Resource Recovery Park; stationary sources permitted by the BAAQMD
- **Solid Waste** – methane emissions from community waste sent to landfills in 2005
- **Off-road Equipment** – emissions from construction and from lawn and garden equipment/vehicles
- **Water and Wastewater** – energy required to extract, filter, move, and treat water consumed and/or treated in 2005
- **Light Rail** – electricity used by the Santa Clara Valley Transit Authority for commuters utilizing Milpitas light rail stops
- **Direct Wastewater** – Milpitas's share of fugitive emissions from the San Jose/Santa Clara Water Pollution Control Plant

# 2. Inventorying and Forecasting Greenhouse Gas Emissions

## 2005 Baseline Inventory

In 2005, the Milpitas community emitted approximately 744,150 $MTCO_2e$. **Table 2-1** reports these emissions by sector and ranks the sectors from highest to lowest.

**Table 2-1: Baseline Greenhouse Gas Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 43% |
| Nonresidential | 183,800 | 25% |
| Residential | 64,230 | 9% |
| Stationary Sources | 101,480 | 14% |
| Solid Waste | 54,410 | 7% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |
| Direct Wastewater | 620 | <1% |
| Total* | 744,150 | 100% |

** Due to rounding, the total may not equal the sum of component parts.*

**Table 2-1** reports stationary source emissions, which include those from the Newby Island Resource Recovery Park, and direct wastewater emissions. Stationary sources are fixed emitters of air pollutants, such as power plants, stationary generators, petrochemical plants, and other heavy industrial sources. Since stationary source emissions are influenced by market forces beyond the City's local influence and are best regulated by the BAAQMD or through federal and state programs, they are reported in this Inventory for informational purposes only. Similarly, the City has limited control over the operation of the Newby Island Resource Recovery Park and the San Jose/Santa Clara Water Pollution Control Plant (Plant) and is unable to directly affect the emissions generated from previously generated waste and Milpitas's relatively small contribution to total direct wastewater emissions.

The baseline inventory guides future local policy decisions that relate to emissions within the City's influence; therefore, stationary sources, direct landfill emissions, and direct wastewater emissions are excluded from further discussion. **Table 2-2** and **Figure 2-1** reflect Milpitas's jurisdictional baseline of 642,050 $MTCO_2e$. Transportation was the largest sector (320,990 $MTCO_2e$), contributing about 50% of total emissions. Energy use was the second largest sector (248,030 $MTCO_2e$, 39%). Of these emissions, nonresidential energy use (183,800 $MTCO_2e$, 29%) comprised a greater percentage than residential energy use (64,230 $MTCO_2e$, 10%). The remaining 11% of emissions came from solid waste (54,410 $MTCO_2e$, 8%), water and wastewater (2,410 $MTCO_2e$, less than 1%), and light rail (1,070 $MTCO_2e$, less than 1%).

**Carbon dioxide equivalent ($CO_2e$):**

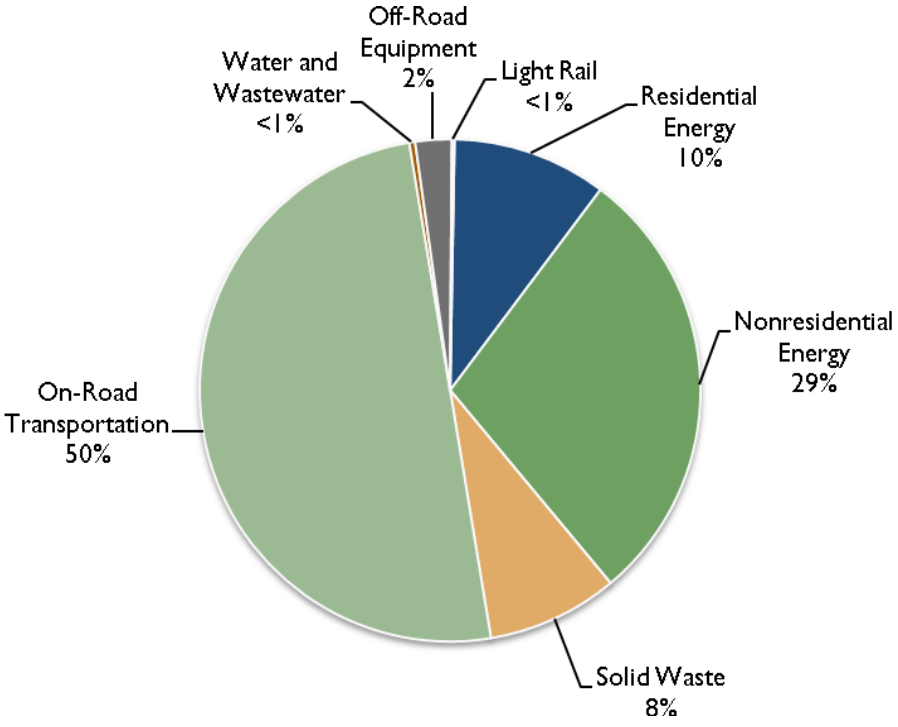
Represents the three main GHGs (carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$)) in comparable terms, since all three gases trap heat in the atmosphere differently.

**Table 2-2: Jurisdictional Baseline Greenhouse Gas Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 50% |
| Nonresidential Energy | 183,800 | 29% |
| Residential Energy | 64,230 | 10% |
| Solid Waste | 54,410 | 8% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |
| Total* | 642,050 | 100% |

** Due to rounding, the total may not equal the sum of component parts.*

**Figure 2-1: Jurisdictional Baseline Emissions by Sector**



## GREENHOUSE GAS EMISSIONS FORECAST

A GHG emissions forecast is an estimate of future GHG emissions based on anticipated changes in population, jobs, households, commercial activity, and driving patterns in the community. This forecast of community-wide emissions addresses 2020, the AB 32 horizon year. Two versions of the forecast are presented below—a business-as-usual (BAU) and a State-adjusted BAU (adjusted BAU) scenario.

### BUSINESS-AS-USUAL FORECAST

The BAU forecast estimates how emissions would grow over time without influence from state, regional, and local GHG reduction efforts. This BAU forecast assumes 2005 energy consumption and energy efficiency rates and incorporates demographic information from the Association of Bay Area Governments (ABAG) 2009 regional population, household, and employment forecasts.

Increases in VMT in 2020 are derived from the Milpitas Travel Forecasting Model (MTFM), a transportation planning tool developed by Hexagon Transportation Consultants, Inc. The MTFM evaluates the traffic impacts anticipated to occur in the future as a result of additional planned development in Milpitas, considering the effects of the City's planning efforts, including policies and programs found in the Transit Area Specific Plan (adopted June 2008) and the Midtown Specific Plan (adopted March 2002, amended October 2008). Significant VMT reductions from future BART ridership based on extending the BART system through Milpitas to San Jose are integrated within the MTFM. In order to highlight the many local benefits of this new ridership, the VMT reductions associated with BART have been removed from the model and are included in CAP Measure 6.1. For further explanation of this modification, see **Appendix B**.

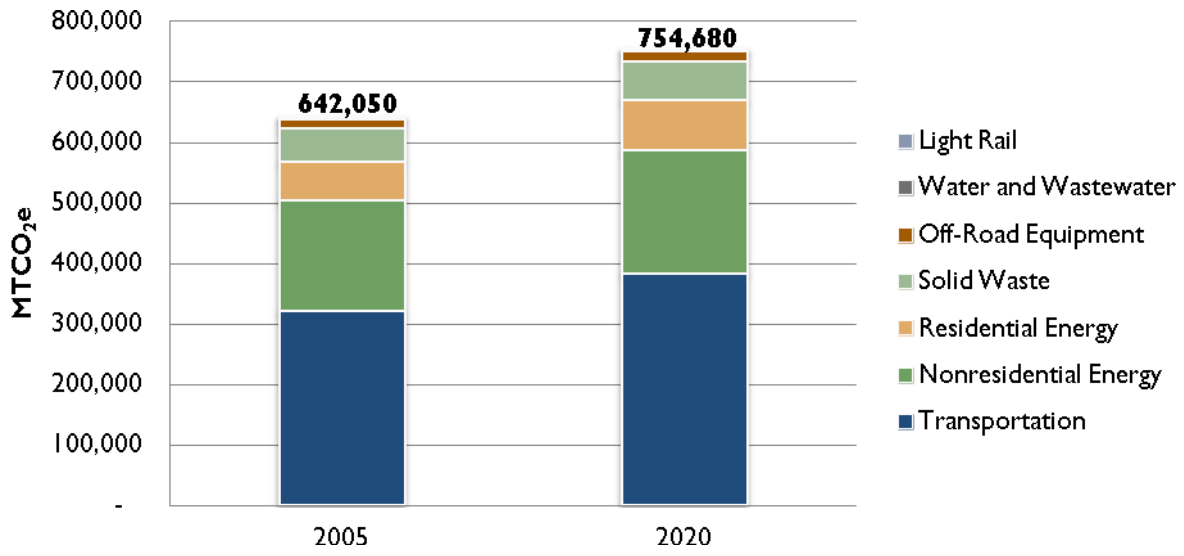
As shown in **Table 2-3** and **Figure 2-2**, without state or local action, emissions would grow 18% from 2005 to 2020. Energy emissions would grow the most among the sectors (39%). The next largest sector would be light rail, followed by transportation, solid waste, and water and wastewater, all of which are expected to increase 20%. Many of these increases result from planned residential development in coming years.

**Table 2-3: Business-as-Usual Emissions Forecast, 2020**

| | 2005 $MTCO_2e$ | 2020 $MTCO_2e$ | Percentage Change |
|---|---|---|---|
| Transportation | 320,990 | 383,630 | 20% |
| Nonresidential Energy | 183,800 | 203,000 | 10% |
| Residential Energy | 64,230 | 83,090 | 29% |
| Solid Waste | 54,410 | 65,290 | 20% |
| Off-Road Equipment | 15,140 | 15,460 | 2% |
| Water and Wastewater | 2,410 | 2,890 | 20% |
| Light Rail | 1,070 | 1,320 | 23% |
| Total* | 642,050 | 754,680 | 18% |

** Due to rounding, the total may not equal the sum of component parts.*

**Figure 2-2: Business-as-Usual Emissions Forecast, 2020**




### ADJUSTED BUSINESS-AS-USUAL FORECAST

The adjusted business-as-usual (adjusted BAU) forecast estimates how state renewable energy, building energy efficiency, low-GHG transportation fuels, and vehicle fuel efficiency actions will reduce emissions in Milpitas. This adjustment creates a more realistic estimate of the city's future emissions since the reductions will require little to no effort on behalf of the City, yet count toward a locally established GHG emissions reduction target. A general overview of these state reduction programs is presented below. A more in-depth discussion is provided in **Appendix B**.

**California Renewables Portfolio Standard (RPS):** Senate Bill (SB) 1078 (signed September 2002) and SBX 1-2 (signed April 2011) mandate that 33% of electricity delivered in California be generated by renewable sources like solar, wind, and geothermal by 2020.

**Pavley Vehicle Standards:** AB 1493 (Pavley, 2002) requires new passenger vehicles to reduce tailpipe GHGs by about 18% by 2020 through improvements in fuel efficiency.

**Low Carbon Fuel Standard (LCFS):** Executive Order S-01-07 (2007) established the LCFS to reduce the GHG intensity of transportation fuels 10% by 2020. According to the May 2011 Updated BAAQMD CEQA Air Quality Guidelines, the LCFS is likely to reduce emissions locally by only 7.2%, due to the exclusion of up-stream emissions and reductions. LCFS reductions apply to both on-road transportation and off-road equipment.

**Title 24, Energy Efficiency Standards:** Title 24 of the California Code of Regulations (CCR) mandates how new homes and businesses are built in California. The adjusted BAU forecast accounts for improvements in energy efficiency and green design in new buildings in Milpitas associated with baseline implementation of the 2010 California Green Building Standards Code (CALGreen).

**California Solar Initiative (CSI):** The CSI provides cash rebates for residents and businesses installing electric solar panel systems. The program is estimated to deplete its funding reserves in 2016.

**Medium- and Heavy-Duty Vehicle Efficiency Standards:** Fuel efficiency improvements are also anticipated for medium- and heavy-duty vehicles that are not covered by the Pavley standards. Guidance for quantifying these reductions comes from the December 2009 BAAQMD Proposed Thresholds of Significance.

### Impact of State Reduction Programs

As shown in **Table 2-4**, implementation of the above-listed state programs would reduce BAU emissions by 128,980 $MTCO_2e$ in 2020. Most of these reductions come from the Pavley standards and cleaner Pacific Gas and Electric (PG&E) energy pursuant to the RPS. Compared to the BAU scenario, 2020 emissions with state reduction measures would be 3% below baseline 2005 levels, rather than 18% above. **Appendix B** provides a detailed look at the how each state GHG reduction program affects the individual inventory sectors.

**Table 2-4: Summary of Adjusted Business-as-Usual Emissions Forecast**

| State Reduction Summary | | 2020 $MTCO_2e$ Reduction |
|---|---|---|
| BAU Emissions Forecast | | 754,680 |
| State Reductions | Pavley Vehicle Standards | -63,570 |
| | Low Carbon Fuel Standard | -28,730 |
| | Medium/Heavy-Duty Vehicle Efficiency | -840 |
| | Renewables Portfolio Standard | -27,360 |
| | California Solar Initiative | -360 |
| | Title 24 | -7,830 |
| Total State Reductions | | -128,980 |
| Adjusted BAU Emissions Forecast | | 625,520 |

# 3. Identifying a Greenhouse Gas Reduction Target

This chapter establishes a GHG reduction target for the City of Milpitas, consistent with Section 15183.5(b) of the State CEQA Guidelines and Section 4.3(B) of the BAAQMD CEQA Air Quality Guidelines.

## Purpose of the Greenhouse Gas Reduction Target

The GHG reduction target is the overarching goal of the CAP and an objective way to measure the success of the Qualified GHG Reduction Strategy. The purpose of the reduction target is to identify a level of community GHG emissions below which emissions would not be cumulatively considerable under the State and BAAQMD CEQA Guidelines.

## Guidance for Local Targets

The State CEQA Guidelines provide general direction that a CAP or similar GHG reduction document should set an emissions reduction target. Lead agencies are responsible for setting targets for future years. For jurisdictions in the Bay Area, the June 2010 BAAQMD CEQA Air Quality Guidelines identify several GHG emissions reduction targets based on consistency with AB 32 that could be used by Bay Area jurisdictions.[1] The BAAQMD presents these targets as thresholds, which are quantitative targets used in the environmental review process to determine if a plan's or a project's GHG emissions are significant. Based on technical assessment for conditions in the Bay Area, the BAAQMD identified three thresholds for plan-level GHG analysis:

- Reduce emissions to 1990 levels by 2020;
- Reduce emissions 15% below baseline (2008 or earlier) emission levels by 2020; or
- Meet the plan efficiency threshold of 6.6 $MTCO_2e$ per service population.[2] Additionally, the BAAQMD CEQA Guidelines identify an efficiency threshold for land use projects of 4.6 $MTCO_2e$ per service population

These guidelines provide certainty for lead agencies working to achieve consistency with AB 32, the Global Warming Solutions Act of 2006. The AB 32 Climate Change Scoping Plan identifies a State-recommended reduction target for local governments to achieve 1990 emissions levels by 2020, which the Scoping Plan equates to an approximate 15% reduction below existing emissions. Nothing in the

[1] The BAAQMD June 2010 adopted thresholds of significance were challenged in a lawsuit. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the district had failed to comply with CEQA when it adopted the thresholds and ordered the BAAQMD to examine whether the thresholds would have a significant impact on the environment under CEQA before recommending their use. The court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits. The court issued a writ of mandate ordering the district to set aside the thresholds and cease dissemination of them until the district had complied with CEQA. As the court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits, the City can continue to rely on the substantial evidence based on data and analysis relative to AB 32 that underlies the June 2010 BAAQMD thresholds in making an independent determination of significance of plan-level GHG impacts pursuant to State CEQA Guidelines Section 15064.7(c).

[2] Service population equals the sum of residents and employees within the community.

# 3. Identifying a Greenhouse Gas Reduction Target

State CEQA Guidelines, the BAAQMD Air Quality Guidelines, or the AB 32 Scoping Plan identifies 15% as a minimum or fair-share level of reductions for local agencies.

## Milpitas Target Greenhouse Gas Emissions Level

This CAP establishes a local GHG reduction target of 15% below baseline 2005 emissions levels by 2020. Both the AB 32 Climate Change Scoping Plan and the June 2010 BAAQMD CEQA Air Quality Guidelines provide substantial evidence supporting use of this target by the City of Milpitas.

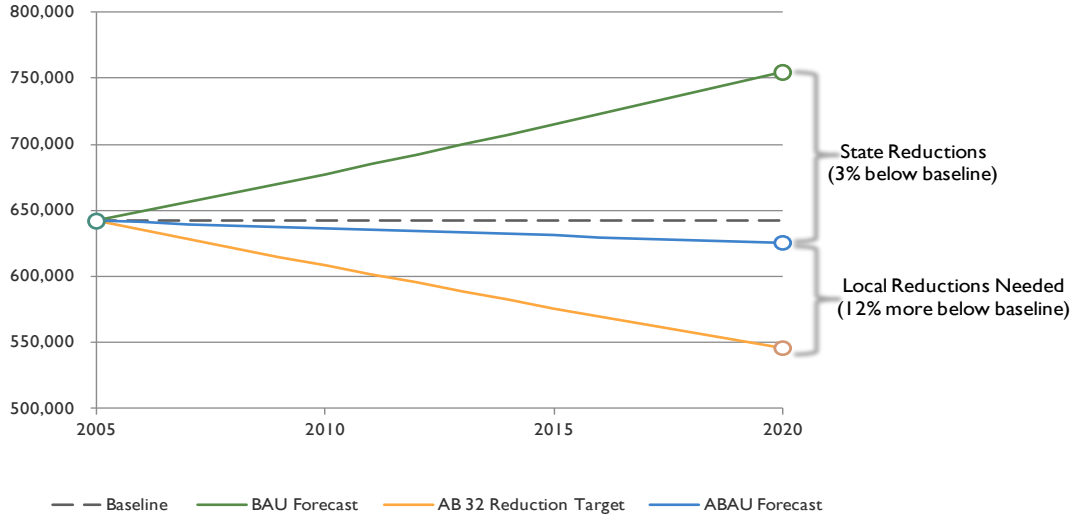
This target serves as the City's cumulative level of significance for community-wide GHG emissions through 2020. The reduction target equates to a 96,300 $MTCO_2e$ reduction in community-wide GHGs from baseline 2005 levels by 2020. It will require a reduction of 79,780 $MTCO_2e$ from 2020 adjusted BAU forecast levels.

The CAP provides a road map to achieve this target in the context of planned growth and development. The City will close the gap between forecast emissions and the reduction target by implementing measures and actions identified in **Chapter 4**. **Table 3-1** and **Figure 3-1** identify the 3% reduction from baseline emissions anticipated with implementation of state policies and programs, and the 12% gap that local GHG reduction measures will address to achieve the 15% reduction target.

**Table 3-1: Greenhouse Gas Emissions Target and Necessary Local Reduction**

| | 2020 $MTCO_2e$ |
|---|---|
| Reduction Target (15% below baseline) | 545,740 |
| Adjusted Business-as-Usual Forecast | 625,520 |
| Local Reduction Needed to Reach Target | -79,780 |

**Figure 3-1: Greenhouse Gas Emissions Target and Necessary Local Reduction**



# 4. Reducing Greenhouse Gas Emissions

This chapter presents a GHG reduction strategy for activities within Milpitas consistent with Section 15183.5(b)(1)(D) of the State CEQA Guidelines and Section 2.1 of the BAAQMD GHG Plan Level Guidance. The measures and actions presented in this chapter include specified performance standards. With anticipated growth, development, and implementation of these performance standards on a project-by-project basis, the City will collectively achieve the GHG reduction target of 15% below 2005 emissions by 2020. Documentation and methods provided in **Appendix B** provide substantial evidence supporting quantification of these emissions reductions.

## Greenhouse Gas Reduction Measures

Two categories of GHG reduction policies are presented in this CAP: (1) existing activities and (2) CAP measures and actions. Existing activities include projects or programs enacted since the 2005 baseline year, which will result in future GHG reductions and which existed before the creation of this CAP in 2013. Such projects include municipal solar and tree planting efforts, as well as existing requirements for energy efficiency in new development. CAP measures and actions were created for this document through a collaborative planning process. The City will implement these measures and actions through new and existing programs, standards for new development, and programs that improve the efficiency of existing development.

### Related Terms

To ensure successful implementation and evaluation, each GHG reduction measure included in this CAP identifies the following, in either the measure description or the associated implementation matrix (**Chapter 6**).

- **GHG Reductions ($MTCO_2e$)** are estimated and reported for 2020, and evaluated against the adjusted BAU forecast and 2020 reduction target.
- **Responsible Department** identifies the City department responsible for implementing each measure, including securing funding, reporting on annual progress, and coordinating with supporting agencies and community partners.
- **Performance Metrics** describing the percentage participation rate and the number of participants emphasize efforts necessary to implement each measure.
- **Regional Partners** can assist the City to implement the measures and actions necessary to achieve each reduction.
- **Additional Resources** describe the nuances of each measure and action using case studies, example ordinances, and other similar information.
- **Co-Benefits** identify additional advantages of implementing a measure beyond reducing GHG emissions. For example, the public health benefits of a bicycle outreach and education program cannot be quantified but can be represented as a co-benefit. In this document, co-benefits are defined as follows:

# 4. Reducing Greenhouse Gas Emissions

## Summary of Reductions

**Table 4-1** summarizes anticipated $MTCO_2e$ reductions in 2020 from existing activities and CAP measures, illustrating how statewide policies in the adjusted BAU forecast and these local actions will reduce GHGs by 16.2% (87,450 $MTCO_2e$) from baseline 2005 emission levels, exceeding the 15% reduction target by 2020.

**Table 4-1: Summary of Total Greenhouse Gas Reductions and Progress Toward Target**

| | 2020 $MTCO_2e$ |
|---|---|
| Local Reductions Needed to Achieve 15% Target | -79,780 |
| Reductions Achieved (Existing + CAP Measures) | -87,450 |
| Percentage Below Baseline | -16.2% |

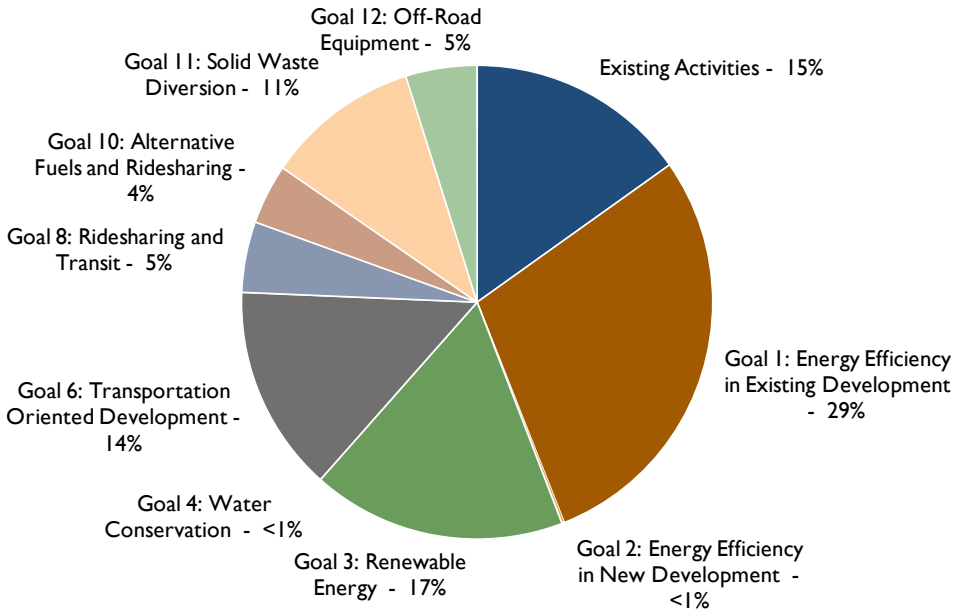
**Table 4-2** summarizes how the existing measures, each CAP goal topic, and individual reduction measures contribute to the 87,450 $MTCO_2e$ of GHG reductions in 2020. Energy measures are the largest contributor to GHG reductions, representing nearly half (40,580 $MTCO_2e$, 46%) of the anticipated reductions. Transportation and land use measures comprise 23% (20,170 $MTCO_2e$) of the anticipated reductions. Existing measures are the third largest reduction category, comprising about 15% (13,240 $MTCO_2e$) of the anticipated reductions. Solid waste measures (9,200 $MTCO_2e$, 11%) and off-road equipment measures (4,260, 5%) make up the remaining reductions.

**Table 4-2: Greenhouse Gas Reductions by Goal Topic**

| Topic | Goals/Category | 2020 $MTCO_2e$ by Goal | 2020 $MTCO_2e$ by Goal Topic |
|---|---|---|---|
| Existing Activities | Existing Activities | -13,240 | -13,240 |
| Energy | Goal 1: Energy Efficiency in Existing Development | -25,240 | -40,580 |
| | Goal 2: Energy Efficiency in New Development | -150 | |
| | Goal 3: Renewable Energy | -15,200 | |
| Water | Goal 4: Water Conservation | <-10 | <-10 |
| Transportation & Land Use | Goal 5: Mixed-Use Development | Supportive | -20,170 |
| | Goal 6: Transportation-Oriented Development | -12,350 | |
| | Goal 7: Bicycle- and Pedestrian-Oriented Development | Supportive | |
| | Goal 8: Ridesharing and Transit | -4,230 | |
| | Goal 9: Parking | Supportive | |
| | Goal 10: Alternative Fuels and Ridesharing | -3,590 | |
| Solid Waste | Goal 11: Solid Waste Diversion | -9,200 | -9,200 |
| Off-Road Equipment | Goal 12: Off-Road Equipment | -4,260 | -4,260 |
| Total Reductions | | | -87,450 |

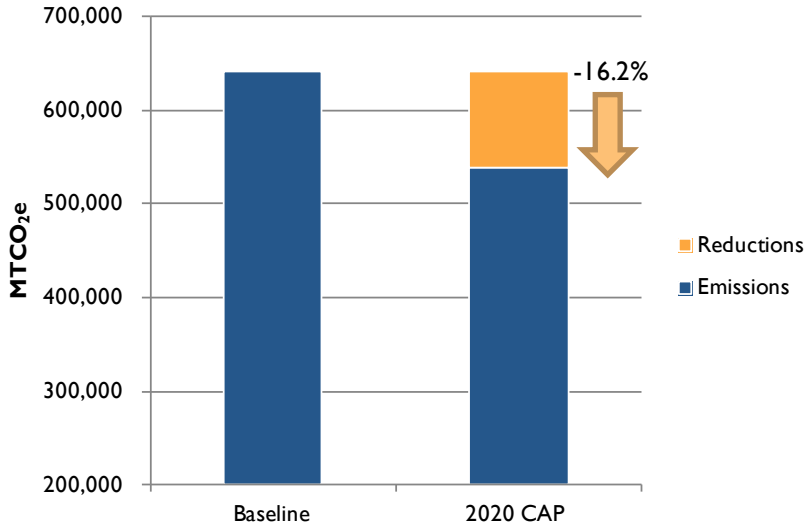
**Figure 4-1** summarizes quantified GHG reductions by goal. This presentation enables the City to focus implementation on those goals and measures that will have the greatest effect on Milpitas's future emissions.

**Figure 4-1: Greenhouse Gas Reductions by Goal**




As shown in **Figure 4-2**, with implementation of the CAP and anticipated growth in Milpitas, community-wide GHG emissions would decrease by 16.5% from baseline 2005 levels in 2020.

**Figure 4-2: Total Reductions to Reach 2020 Reduction Target**



# 4. Reducing Greenhouse Gas Emissions

## Activities Since Baseline

The City of Milpitas has a proven history of developing and implementing GHG reduction activities. Emissions reductions from these activities will take place regardless of the development of the CAP. They are included in this plan because the City has not previously quantified them, and they count toward achievement of the GHG emissions reduction target. These measures also highlight how proposed CAP measures build upon existing efforts.

The CAP accounts for GHG reductions since baseline year 2005 attributable to the following programs:

- **Waste reduction.** The CAP quantifies efforts of regional and local recycling and composting programs used by Milpitas residents and businesses since 2005.

- **New multi-family development.** According to adopted General Plan assumptions contained within the MTFM, 80% of future residential development in Milpitas will be multi-family. Multi-family development typically uses less energy, particularly heating energy.

- **Bikeways Master Plan.** GHG reductions in the CAP follow the tiered implementation schedule found in the Milpitas Bikeways Master Plan, assuming full implementation of all Tier I and Tier II measures within the Bikeways Master Plan by 2020. The reductions are associated with commuter mode shifts from personal vehicles to bicycles.

- **Municipal solar power purchase agreement.** The City entered into a solar power purchase agreement (PPA) with EcoPlexus Solar Solutions, supporting total generation of 1,227 kilowatts (kW). The City is currently installing three solar electric systems at the sewer pumping station, the Gibraltar pumping station, and the Milpitas Sports Center.

- **Water conservation.** According to the City's 2010 Urban Water Management Plan, homes and businesses in the community will reduce water use 20% from 2005 levels by 2020 to comply with state water conservation requirements. About half of the associated energy use reductions are attributed to the City's existing activities since these reductions took place between the baseline year and the publication of this CAP.

- **Recycled water.** The City has achieved energy reductions through increased use of recycled water throughout the community. Using recycled water for landscaping reduces the amount of potable drinking water used for this purpose.

- **Green building program.** The City's community green building program utilizes the Build It Green and Leadership in Energy Efficiency and Design (LEED) programs. Energy reductions achieved from the existing green building program are not calculated because the information needed to quantify the program is unavailable.

**Table 4-3** summarizes anticipated GHG reductions in 2020 from these existing efforts. Nearly two-thirds of these reductions are attributed to the City's waste reduction efforts (8,740 $MTCO_2e$), and more than a quarter result from the large amount of planned multi-family development (3,440 $MTCO_2e$). The Bikeways Master Plan is expected to reduce GHG emissions by 590 $MTCO_2e$, and the City's solar PPA will reduce emissions by 270 $MTCO_2e$ in 2020.

**Table 4-3: Greenhouse Gas Reduction Summary for Existing Activities, 2020**

| | 2020 $MTCO_2e$ |
|---|---|
| Waste reduction | -8,740 |
| New multi-family development | -3,440 |
| Bikeways Master Plan | -590 |
| Municipal solar power purchase agreement | -270 |
| Water conservation | -190 |
| Recycled water | -10 |
| Total* | -13,240 |

** Due to rounding, the total may not equal the sum of component parts.*

## Measures and Actions

The following section presents goals, measures, and actions for each of the following reduction topics: energy, water, transportation and land use, solid waste, and off-road equipment. Goals serve to guide reduction measures that outline specific and measurable actions. In turn, actions are specific steps the City must take in order to properly implement each reduction measure and achieve the goals. The relationship between goals, measures and actions is presented in **Figure 4-3**.

**Figure 4-3: Goals, Measures, and Actions**

Participation metrics are presented for quantified measures and represent both the number of participants and the percentage of the total or subtotal category presented. For example, Measure 1.1 has a participation metric of 6,030 homes built before 1980 (25%). In other words, to achieve the stated GHG reduction, 25% of homes built before 1980, or 6,030 homes, must participate in the listed actions over the life of the plan by 2020. For all nonresidential energy measures, it is assumed that there were 5,900 businesses in Milpitas in 2005.

# 4. Reducing Greenhouse Gas Emissions

## Energy

## Goal 1: Increase energy efficiency and conservation in the city's existing building stock.

### Measure 1.1: Residential Energy Audits in Older Homes

Facilitate energy audits of 40% of the city's existing housing stock by 2015 and 60% by 2020 through City-supported incentives.

Actions

A. Relying on regional funds and utility-sponsored efforts, develop a local incentive audit program to identify representative housing types for building audits that can be used to recommend audits for other homes with similar characteristics.

B. Create a plan to prioritize older neighborhoods for audits that leverage regional and utility programs for affordable housing, allowing the City to maximize energy efficiency resources and rely on regional or state funding programs.

C. Pursue grant funding for energy audits.

D. Pursue regional collaboration and partnerships for grants or other funding opportunities.

E. Connect businesses and residents with voluntary programs that provide free or low-cost energy efficiency audits.

**Measure 1.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -3,930

**Participation Metrics:** 6,030 existing homes built before 1,980 (25%)

### Measure 1.2: Energy Upgrade California

Connect homeowners to financing options, such as Energy Upgrade California, for energy efficiency retrofits.

Actions

A. Continue City involvement in Energy Upgrade California.

B. Designate a City staff representative to track and promote energy efficiency opportunities.

C. Continue partnerships with Joint Venture Silicon Valley, nonprofits, and other jurisdictions to leverage knowledge and resources for retrofit opportunities.

D. Provide information to homeowners regarding financing opportunities for retrofits.

**Measure 1.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -10,360

**Participation Metrics:** 3,260 (25%) existing single-family and 630 (15%) existing multi-family homes

### Measure 1.3: Discretionary Project Review

Apply the City's Climate Action Plan Development Checklist (Appendix C) as Part of the City's discretionary project review process.

Actions

A. Update the City's general residential and commercial project checklists to include provisions identified in **Appendix C** for use during plan review and building permit review of remodels.

B. Update the City's discretionary review guidance to encourage energy efficiency improvements in remodels and other projects exempt from the City's Green Building Code.

| Measure 1.3: Implementation Metrics |
|---|
| **2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated |
| **Participation Metrics:** Supportive Measure – Not Applicable |

C. Work with utility providers to provide a packet of residential and nonresidential energy efficiency financing information during pre-application meetings and plan review.

D. Work with regional, real estate, building owner, and commercial developer organizations to encourage green mortgage financing that increases the resale value of property.

### Measure 1.4: Energy Benchmarking

Encourage energy benchmarking in the existing residential and nonresidential building stock, building on regulatory benchmarking programs and existing green building standards to help close the energy efficiency information gap.

Actions

A. Leverage the efforts of regional partners, including the Bay Area Regional Energy Network (REN), to promote regional Energy Star Portfolio Manager and energy benchmarking training for City staff and for nonresidential building owners.

B. During the annual CAP progress report (as identified in **Chapter 6**), use reports from PG&E to summarize community trends and refine energy efficiency reduction measures.

C. Encourage participation in the voluntary Home Energy Rating System (HERS) ratings for homes.

D. Promote energy and green building labeling as a tool to prepare for retrofits.

| Measure 1.4: Implementation Metrics |
|---|
| **2020 GHG Reduction ($MTCO_2e$):** -8,260 |
| **Participation Metrics:** |
| 4,560 existing sold homes (50%) benchmarked |
| 1,140 existing sold homes audited and retrofitted (25%) |
| 2,960 existing sold/leased nonresidential buildings (50%) benchmarked |
| 740 existing sold/leased nonresidential buildings (25%) audited and retrofitted |

E. Work with homeowner and realtor groups to promote the benefits of home energy labeling as a tool to increase appreciation value.

### Measure 1.5: Urban Cooling

Achieve urban cooling through voluntary and mandatory standards for new development and additions.

#### Actions

A. Amend the Zoning Code to create tree planting standards for new and renovated development, to require the planting of two trees in single-family development in the front, side, or rear yard as feasible, and to create lineal landscaping standards for commercial development that identify a minimum number of tree plantings based on lineal frontage length.

B. Support outreach and education describing benefits of cooling strategies, including promotion of the Cool California website and resources on the City website and at City Hall.

C. Encourage remodels to comply with CALGreen cool roof requirements by promoting available resources on the City website, through plan review, and at community events, as appropriate.

D. Continue to promote passive solar design (supports Housing Element Policy F-1.2).

E. Reduce heat gain from surface parking lots in new development for a minimum of 50% of the site's hardscape. Develop standards to provide shade from the existing tree canopy or from appropriately selected new trees that complement site characteristics and maximize drought tolerance. Where feasible, use open-grid pavement systems (at least 50% pervious, which would also satisfy the stormwater Low Impact Development requirement).

**Measure 1.5: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -950

**Participation Metrics:**

890 remodeled homes and 2,920 new homes (100%) comply with tree planting standards (2 trees each)

450 existing homes (3%) participate in passive cooling outreach programs

220 remodeled homes (1%) install cool roofs and 730 new homes (25%) install passive solar

### Measure 1.6: Smart Grid Integration

Phase in requirements for the use of smart-grid-integrated appliances and energy monitors in all new development by 2018 as such appliances become commercially available and economically feasible.

#### Actions

A. Adopt new development standards to encourage the integration of smart-grid appliances.

**Measure 1.6: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -180

**Participation Metrics:**

840 (95%) new homes between 2018 and 2020

100 (95%) new businesses between 2018 and 2020

### Measure 1.7: Appliance Upgrades

Use partnerships to promote appliance trade-in and upgrades.

#### Actions

A. Provide educational materials about energy-efficient appliances to the community, on the City website, and at City Hall, including publications produced by state and regional partners such as Energy Star and the California Energy Commission.

B. Promote the use of appliance rebates from PG&E and the Santa Clara Valley Water District as funding is available, including using PG&E's online portal for appliance rebates.

**Measure 1.7: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -1,560

**Participation Metrics:**

3,260 existing single-family homes (25%)

1,960 existing multi-family homes (15%)

880 existing businesses (15%)

### Measure 1.8: Online Energy Monitoring

Encourage participation in online energy monitoring programs as utilities develop and deploy online systems.

#### Actions

A. Encourage the use of smart-grid and Energy Star appliances.

B. Provide educational information on the use of smart-grid-integrated appliances through the City's website and the distribution of appliance information from PG&E.

**Measure 1.8: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

## GOAL 2: IMPLEMENT INNOVATIVE BUILDING STANDARDS TO SET THE PATH TOWARD ZERO NET ENERGY IN NEW DEVELOPMENT.

Residential and nonresidential buildings in Milpitas depend on electricity and natural gas for lighting, heating, cooling, and running appliances. Energy efficiency is a key component of any strategy that seeks to reduce energy use and greenhouse gases. As Milpitas is a high-growth community expected to add 5,240 households and 4,970 jobs from 2005 to 2020, energy efficiency in new development will be an essential element of the City's plan to reach its GHG reduction target. The City of Milpitas adopted Green Building Regulations in June 2009, which apply to most new building construction projects. Depending on the size and end-use, projects are required to achieve either LEED certification, LEED silver, or Build It Green Rated status.

**GOING BEYOND TITLE 24**

Several programs exist that can help new and existing development go beyond minimum building standards. These include the City's Green Building Regulations (adopted in June 2009), CALGreen, LEED, Build It Green, and Energy Star-rated homes and businesses.

New development can benefit from new building standards in numerous ways, including lower building operation costs that can attract tenants, marketing potential of a more sustainable design, and benefits from streamlined environmental review. Various programs are available to help homes and businesses go beyond the savings prescribed in the California Building Code. New residential development can meet CALGreen, LEED, Build It Green, or Energy Star standards. New nonresidential buildings can meet CALGreen, LEED, and Energy Star building standards. The City can amend and modify existing Green Building Regulations for greater energy savings in new development.

### MEASURE 2.1: ENERGY EFFICIENCY IN NEW DEVELOPMENT

ENCOURAGE NEW DEVELOPMENT AND REMODELS TO EXCEED MINIMUM BUILDING STANDARDS FOR ENERGY EFFICIENCY AND CONTINUE IMPLEMENTATION OF THE ADOPTED GREEN BUILDING ORDINANCE.

**Measure 2.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -150

**Participation Metrics:**

60 new single-family (10%) and 350 new multi-family homes (15%)

30 new average-size businesses (10%)

Actions

A. Incentivize new development to exceed minimum building standards through permit fee reductions.

B. Consider the development of an equipment lease-to-own program to offset the cost of energy-efficient equipment purchases.

C. Continue to require new multi-family buildings to complete a LEED or Green Point Rated checklist [Milpitas Municipal Code (MMC) II-20-3.01(a)].

D. In addition to CALGreen Tier I energy efficiency requirements, new nonresidential construction between 25,000 and 49,999 gross square feet must still obtain LEED certification (with verification) (MMC II-20-3.01(b)). New nonresidential construction or renovations greater than or equal to 50,000 gross square feet must be verified as LEED silver (MMC II-20-3.01(c)). Construction or renovations of municipal buildings greater than or equal to 50,000 square feet must be LEED silver (MMC II-20-3.01(d)).

## Goal 3: Maximize the provision of local energy needs from renewable energy use in new and existing uses.

The City's developed urban landscape and high-growth future provide diverse opportunities for use of renewable energy resources. The intent of this goal is to shift a portion of energy consumption away from traditional electricity and natural gas (i.e., fossil fuels) to renewable energy sources. Both natural gas and electricity can be offset by renewable sources that are profitable, yield cost savings to users, and spur local energy independence. Through this goal, the City will reduce GHG emissions from traditional electricity production and natural gas by promoting the production of local, on-site renewable energy for both residential and nonresidential uses. Through these measures, the City will continue to lead the region by example through its innovative use of alternative and renewable energy sources that save money. For all measures in Goal 3, the assumed average size of solar electric systems is 3.5 kilowatts (kW) for residential systems and 25 kW for nonresidential systems.

### Measure 3.1: Renewable Energy in New Development

Adopt new standards to require renewable energy in new development and encourage renewable energy facilities through the discretionary process.

Actions

A. Encourage through the discretionary process all new nonresidential development to meet energy needs with renewable energy sources.

B. Require all new single-family and multi-family residential development to comply with the Homebuyer Solar Option, either to provide pre-wiring for photovoltaic roof systems or to provide an in-lieu fee for off-site solar facilities, building on current standards of the Transit Area Specific Plan.

| Measure 3.1: Implementation Metrics |
| --- |
| **2020 GHG Reduction ($MTCO_2e$):** -1,360 |
| **Participation Metrics:** 200 new nonresidential facilities (5%) and 1,210 new residential homes (60%) pre-wired for solar installation |

C. Promote voluntary solar installations by providing solar installation resources at City Hall and online. Advertise resources such as the CEC's Go Solar California website, and work with PG&E's Pacific Energy Center to offer classes or seminars in the community.

D. Provide a list of regional solar installation companies on the City website and at City Hall. Include each company's available financing, leasing, and purchase options.

### Measure 3.2: Group Purchasing of Renewable Energy

Build off the success of regional SunShares programs and encourage the development of large-scale cooperative programs for a group buy or discounts to provide clean energy.

Actions

A. Work with regional partners to create a large-scale cooperative program for group-buy discounts or funding off-site renewable energy that is credited to the homeowner's bill, such as the City of San Jose SunShares program.

B. Identify opportunities for regional group buy or bulk purchasing for renewables, such as the Bay Area Climate Collaborative Green Towns SunShares program.

**Measure 3.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -7,290

**Participation Metrics:** 3,260 single-family homes (25%) and 630 multi-family homes (15%) participate in financing and bulk purchasing programs

### Measure 3.3: Voluntary Renewable Energy

Promote voluntary renewable energy projects through education and incentives.

Actions

A. Develop an online application system for solar with minimum turnaround review times.

B. Revise zoning regulations to simplify renewable energy systems.

C. Work with regional partners to promote state rebates and other funding opportunities for renewable energy.

D. Create guidelines for installation of renewables on historic buildings.

E. Create a cohesive outreach and education campaign.

F. Hold a solar education fair to provide an overview of the process from permitting to installation, in collaboration with local contractors.

**Measure 3.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -2,600

**Participation Metrics:** 2,450 single-family homes (19%) and 320 multi-family homes (7.5%) install solar systems

### Measure 3.4: Municipal Best Practices in Renewable Energy

The City will lead by example and support renewable energy in municipal facilities.

Actions

A. Promote the City's solar PPA program that provides renewable energy at several City facilities.

**Measure 3.4: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 3.5: Model Power Purchase Agreement

Encourage development of model regional programs to provide a community-wide model for PPAs that would be available to businesses in the City, such as the Silicon Valley Collaborative Renewable Energy Procurement (SV-REP) project.

Actions

A. Work with partners to identify options for regional programs that could provide necessary financial arrangements to facilitate private use of PPAs.

B. Work with the Milpitas Chamber of Commerce to promote financing and rebate opportunities for renewable energy at local businesses.

C. Provide available advice and resources to participants using the lessons learned through the City's municipal PPA program.

**Measure 3.5: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -3,950

**Participation Metrics:** 590 average-size nonresidential buildings (10%) participate in PPAs

### Water

## Goal 4: Demonstrate leadership in water conservation.

Water consumption requires energy to pump, treat, distribute, collect, and discharge water as it is used in the community, which results in GHG emissions. Conservation and the more efficient use of water are both important strategies to reduce GHG emissions from water use. Water reductions also prepare the City to adapt to the reduced water availability that may occur due to a changing climate. This goal identifies opportunities to reduce energy-intensive water consumption from both new construction projects and existing development. Implementing water efficiency measures and increasing use of recycled water can reduce the need to procure additional future water sources.

### Measure 4.1: Tiered Water Rates

Continue water conservation efforts outlined in the Urban Water Management Plan and expand tiered water rate structures to apply to nonresidential customers in addition to residential customers.

Actions

A. Explore the potential of a tiered nonresidential water rate.

B. Encourage the installation and use of greywater and rainwater harvesting systems to reduce outdoor potable water use.

C. Implement the water-efficient landscaping ordinance and the water conservation ordinance.

D. Participate in ongoing regional coordination.

E. Continue to incentivize the use of recycled water for landscaping through rate reductions.

**Measure 4.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 4.2: Recycled Water

Work with regional partners to encourage expansion of recycled water infrastructure.

Actions

A. Work with regional partners and water providers to identify potential funding sources for expansion of recycled water infrastructure.

B. Continue to require all commercial and industrial development south of the Hetch Hetchy right-of-way to install recycled water lines, and require conversion of landscape irrigation to recycled water as soon as available.

**Measure 4.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Transportation and Land Use

The following goals build on the City's many existing efforts to create a vibrant, mixed-use community to better meet resident needs. By adopting the Transit Area Specific Plan and the Midtown Specific Plan, the City has encouraged transit-oriented and mixed-use development by right. Standards support easy access to public transit and infrastructure that supports walking and bicycling. The plans for these communities promote the co-location of homes near schools, work, and shops while protecting the unique characteristics of the city's established neighborhoods and open spaces.

## Goal 5: Provide an Economically Sustainable Mixed-Use Community Focused on High-Density Development Around Central Urban Plazas and Gathering Places.

### Measure 5.1: Increased Densities

Continue to promote the increase of density and mixed-uses in key opportunity areas, including the Midtown Specific Plan, Transit Area Specific Plan, and Town Center areas.

**Measure 5.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive of Measure 6.1

**Participation Metrics:** Supportive of Measure 6.1

Actions

A. Require new development to include two or more uses per building if located along identified corridors or in a specific plan area.

B. Ensure pedestrian accessibility for all new development.

C. When new streets are necessary, offset with a new pedestrian-only area.

D. Support high-rise buildings along corridors.

E. Identify opportunities to support a neighborhood-serving grocery/food store in mid-town with affordable housing above.

### Measure 5.2: Urban Plazas

Encourage development of urban plazas in new development in the Transit Area Specific Plan, Midtown Specific Plan and Town Center areas to encourage pedestrian activity and vibrant mixed-use centers that reduce vehicular activity.

Actions

A. Create a threshold (number of new units, projected people, etc.) for requiring creation of new plazas.

B. Encourage developers to plan ahead and work together to combine efforts in plaza development (e.g., one plaza that joins two or more developments).

C. Incentivize development of Main Street Town Square.

D. Adopt standards to require the use of pervious paving materials in plazas, in addition to the provision of mature landscaping and other strategies that will maximize GHG reduction potential.

**Measure 5.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 5.3: Open Space

Expand city parks and open spaces.

Actions

A. For every acre developed in the hillside area, set aside 1 acre for open space or parks.

B. Limit hillside development to very low densities and parks/open space.

C. Identify thresholds for new development mitigation for the provision of parks or open space.

**Measure 5.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

## Goal 6: Achieve an efficient transportation system integrated into distinct areas that meets the needs of all users.

### Measure 6.1: Transit Density

Support high levels of ridership at the new BART station by encouraging higher density, mixed uses, and connectivity along transit corridors and at transit nodes.

**Measure 6.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -11,750

**Participation Metrics:** 8,000 single-occupant commuters working and/or living in Milpitas become new transit riders

Actions

A. Use existing codes and opportunities to promote mixed-use and higher-density development in the following areas:
   a. BART station area
   b. Light rail station areas
   c. Montague Expressway
   d. Great Mall Parkway
   e. Centre Point Drive
   f. High-rise building corridors
B. Establish density bonuses for projects with affordable housing and mixed uses.
   a. Minimum density of 41 dwelling units per acre

**RELATION TO OTHER CAP MEASURES**

In order for the reductions above from increased transit density and the new BART station to take place, the City must successfully implement other supportive measures, including 5.1, 6.2, 6.3, 8.3, and 8.4.

### Measure 6.2: BART-Friendly Environment

Ensure a pedestrian-friendly environment around the BART and light rail transit stations in the Midtown Specific Plan and Transit Area Specific Plan areas.

Actions

A. Identify opportunities to break applicable areas into small, pedestrian-friendly blocks 300 to 400 feet wide.
B. Encourage the provision of public plazas and meeting areas.

**Measure 6.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive of Measure 6.1

**Participation Metrics:** Supportive of Measure 6.1

### Measure 6.3: Dense and Centralized Development

Promote dense development in central locations and along transportation corridors.

Actions

A. Identify density requirements suitable for each unique area.
B. Increase any density requirements in place.
C. Establish and enforce the urban boundary.

**Measure 6.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive of Measure 6.1

**Participation Metrics:** Supportive of Measure 6.1

### Measure 6.4: Regional Arterials

Maintain and continue to improve regional arterials within the city.

Actions

A. Conduct an inventory of the city's traffic signals and identify opportunities to improve signal timing at signalized intersections along regional arterials.

**Measure 6.4: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -600

**Participation Metrics:** 60 intersections (90%) improve signal timing and synchronization

## Goal 7: Increase use of non-motorized transportation throughout the community.

### Measure 7.1: Expanded City Parks

Expand the City's park and open space system consistent with the General Plan.

Actions

A. Ensure that new parks have three or more sides lined with streets.

B. Identify opportunities to share parks with schools in underserved neighborhoods.

**Measure 7.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 7.2: Complete Streets

Initiate a rigorous citywide complete streets program to foster pedestrian and bicycle activity throughout the community.

Actions

A. Continue to promote complete streets by removing barriers to alternative transportation and supporting the needs of all transit users.

B. Require infill development required to complete sidewalk connections and provide pedestrian amenities, including shading, benches, and landscaping.

**Measure 7.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 7.3: Bikeways Master Plan infrastructure

Implement and maintain the facilities and infrastructure improvements identified in the Bikeways Master Plan to achieve high levels of bicycle and pedestrian activity.

Actions

A. Implement the Bikeways Master Plan.

B. Pursue funding and regional partnerships.

**Measure 7.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 7.4: Bikeways Master Plan Outreach

Initiate ongoing education and monitoring outreach programs to promote bicycle use and ensure ongoing responsiveness to the needs of cyclists, consistent with the Bikeways Master Plan.

Actions

A. Partner with the Bicycle Pedestrian Advisory Commission to develop an educational campaign.

B. Reach out to schools and other community groups as identified in the Bikeways Master Plan.

C. Conduct audits of bicycle activities as identified in the Bikeways Master Plan.

D. Hold bicycle outreach events and provide a bicycle valet as identified in the Bikeways Master Plan.

**Measure 7.4: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 7.5: Bicycle Parking

Adopt development code standards to require bicycle parking for 10% of total required parking spots and bicycle support facilities for nonresidential development greater than 10,000 square feet.

Actions

A. Create new development standards to support bicycle-parking requirements.

**Measure 7.5: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

## GOAL 8: INCREASE PUBLIC TRANSIT RIDERSHIP AND RIDESHARING PARTICIPATION THROUGHOUT THE COMMUNITY.

### MEASURE 8.1: TRANSPORTATION DEMAND MANAGEMENT

ADOPT AND PHASE A CITYWIDE TRANSPORTATION DEMAND MANAGEMENT (TDM) ORDINANCE BY 2015, BUILDING ON RECOMMENDATIONS OF THE TRANSIT AREA SPECIFIC PLAN, AND ESTABLISH A FUNDING MECHANISM TO PAY FOR THE COSTS OF THE PROGRAM.

Actions

A. Expand existing rideshare programs to require mandatory inclusion of ridesharing in employer TDM programs and preferential parking for rideshare vehicles.

B. Allow proximity to BART to support TDM requirements for new development.

C. Offer density bonuses for exceeding minimum TDM requirements.

**Measure 8.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -440

**Participation Metrics:** 6,010 single-occupant commuters (25%) participate in rideshare program

### MEASURE 8.2: CAR-SHARE PROGRAMS

SUPPORT DEVELOPMENT OF A CAR-SHARE PROGRAM FOR LOCAL RESIDENTS.

Actions

A. Work with City Car Share or other non-governmental organizations and/or businesses to provide car-sharing resources and information.

**Measure 8.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -3,790

**Participation Metrics:** 3,610 single-occupant commuters (15%) participate in car-share program

### MEASURE 8.3: TRANSIT EDUCATION AND OUTREACH

PROMOTE THE USE OF PUBLIC TRANSIT THROUGH EDUCATION.

Actions

A. Through the City's Bicycle and Pedestrian Advisory Commission, work with BART and other transit providers to promote public transit.

**Measure 8.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive of Measure 6.1

**Participation Metrics:** Supportive of Measure 6.1

### MEASURE 8.4: REGIONAL TRANSIT USE

ENCOURAGE EXISTING PUBLIC TRANSIT OPTIONS THAT PROVIDE EFFECTIVE LINKS TO THE BAY AREA REGION, INCLUDING THE SANTA CLARA VALLEY TRANSPORTATION AUTHORITY AND CONNECTIONS TO THE ALTAMONT COMMUTER EXPRESS.

#### Actions

A. Ensure development of new areas is supported by the necessary levels of transportation infrastructure and support.

B. Continue to work with regional transportation partners to expand existing connector routes, increase service, and improve stops.

C. Continue to participate in ongoing regional transportation processes to advocate for continued transit service to Milpitas.

**Measure 8.4: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive of Measure 6.1

**Participation Metrics:** Supportive of Measure 6.1

## GOAL 9: ENSURE AN EFFICIENT PUBLIC AND PRIVATE PARKING SYSTEM COMMUNITYWIDE.

### MEASURE 9.1: UNBUNDLED PARKING COSTS

UNBUNDLE PARKING COSTS FROM HOUSING AND NONRESIDENTIAL BUILDING COSTS.

Actions

A. Revise development standards to separate parking costs from the cost to rent, purchase, or lease residential and nonresidential buildings to incentivize use of alternative transportation modes.

**Measure 9.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### MEASURE 9.2: NONRESIDENTIAL PARKING REQUIREMENTS

REDUCE MINIMUM PARKING REQUIREMENTS FOR NONRESIDENTIAL DEVELOPMENT.

Actions

A. Revise development standards to create incentives to reduce the minimum parking requirements for new nonresidential buildings in Milpitas (for example: allow for a reduction in parking in exchange for additional green plaza areas and opportunities for alternative transportation).

**Measure 9.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

## GOAL 10: PROVIDE AND SUPPORT EXPANSION OF INFRASTRUCTURE FOR LOW-EMITTING AND FUEL-EFFICIENT VEHICLES.

### MEASURE 10.1: PARKING FOR LOW-EMISSIONS VEHICLES

REVISE PARKING STANDARDS FOR PUBLIC AND NONRESIDENTIAL DEVELOPMENT TO INCLUDE DESIGNATED STALLS FOR LOW-EMISSIONS, FUEL-EFFICIENT VEHICLES AND CARPOOL/VANPOOL VEHICLES FOR A MINIMUM OF 10% OF NEW PARKING CAPACITY.

**Measure 10.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -2,800

**Participation Metrics:** 1,220 new parking spaces (19% of businesses) established as vehicle charging spaces

Actions

A. Revise development standards.

B. Provide materials to support developers in obtaining and providing charging stations.

C. Investigate the possibility of facilitating a large-scale group buy of charging stations and other equipment on behalf of developers.

D. Provide a parking reduction ratio of one-to-one for every percentage of total parking spots designated for low-emitting, fuel-efficient vehicles.

E. Pre-wire stalls for electric vehicle charging stations for 2% of new parking capacity.

### MEASURE 10.2: ALTERNATIVE FUELING STATIONS

ENSURE ALTERNATIVE FUELING STATIONS ARE ENCOURAGED AND ALLOWED THROUGH LAND USE DESIGNATIONS THAT CURRENTLY PERMIT GAS FUELING STATIONS.

Actions

A. Identify opportunities and suitable locations for new stations.

B. Revise development standards.

**Measure 10.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Measure 10.3: Electric Vehicle Partnerships

Partner with the Bay Area Air Quality Management District, Joint Venture Silicon Valley, and the Silicon Valley Clean Cities Coalition to pursue funding for plug-in hybrid and electric vehicle deployment projects in the city.

**Measure 10.3: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

#### Actions

A. Work with partner agencies to seek grant funding through state and regional partnerships to fund fleet conversions to electric vehicles.

### Measure 10.4: Residential Electric Vehicle Charging

Facilitate plug-in hybrid and electric vehicle charging stations for homes by promoting funding opportunities and streamlining permit procedures, including establishing maximum time frames for permit processing and simplified permit procedures.

**Measure 10.4: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -790

**Participation Metrics:** 1,100 new homes (38%) pre-wired for electric vehicles

#### Actions

A. Create a guide/brochure for plug-in hybrid and electric vehicle home charger installations.

B. Simplify electrical and building permit procedures for plug-in hybrid and electric vehicle charging stations.

C. Create an online permit application process for home charging stations.

D. Work with regional partners to provide educational information.

### Measure 10.5: Gas Tax

Investigate adoption of a local gas tax to create funding to provide rebates for clean fuel infrastructure and/or vehicles in Milpitas.

**Measure 10.5: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

#### Actions

A. Work with regional partners to identify opportunities to create a model ordinance and rate structure.

B. Monitor regional and state efforts to implement similar programs.

### MEASURE 10.6: BART STATION PEDESTRIAN CIRCULATOR

INVESTIGATE THE FEASIBILITY OF A PEDESTRIAN CIRCULATOR AROUND THE BART STATION.

ACTIONS

A. Study the feasibility of a pedestrian circulator around the BART station.

B. Pursue funding sources from BART, VTA and/or Metropolitan Transportation Commission.

**Measure 10.6: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** Supportive Measure – Not Estimated

**Participation Metrics:** Supportive Measure – Not Applicable

### Solid Waste

## Goal 11: Reduce waste generation in the community by 2020.

Most waste is sent to the landfill, decomposes, and emits methane gas over time. Providing additional opportunities to recycle and compost can reduce the amount of waste disposed and associated GHG emissions.

The reductions reported for Measure 11.1 comprise the individual contributions of Actions A through E, as each action focuses on different types of solid waste reduction. Actions A and B quantify reductions from food waste collection, Action C focuses on yard waste and other waste types that can be turned into mulch material, and Action D addresses construction and demolition materials, such as pressure-treated wood and other inert materials. Action E addresses reductions from all remaining types of waste diversion, such as paper and cardboard.

### Measure 11.1: Waste Diversion

Work with regional partners to increase the diversion of solid waste to 75% as required under AB 341.

**Measure 11.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -9,200

**Participation Metrics:** 6,020 households and businesses (25%) participate in food waste collection program

40% of new construction projects participate in construction and demolition collection

Actions

A. Support the expansion of existing food waste and composting collection routes in order to provide composting services for interested residents and businesses.

B. Encourage local restaurants to compost food and provide compostable to-go containers.

C. Work with Republic Services to determine the feasibility of expanding composting and recycling services.

D. Amend the building demolition permit requirements and adopt a comprehensive construction and demolition ordinance to reach a 75% diversion rate.

E. Partner with waste providers to expand the diversion of other solid waste, including non-food and non-construction and demolition waste.

### OFF-ROAD EQUIPMENT

## GOAL 12: SUPPORT THE EXPANSION AND USE OF CLEAN TECHNOLOGY OFF-ROAD EQUIPMENT.

### MEASURE 12.1: LAWN AND GARDEN EQUIPMENT

SUPPORT A COMMUNITY-WIDE TRANSITION TO CLEANER OUTDOOR LAWN AND GARDEN EQUIPMENT.

Actions

A. Promote regional and state rebates for appliance improvements.

B. Support the BAAQMD's efforts to reestablish a voluntary exchange program for residential lawn mowers and backpack-style leaf blowers.

C. Require new buildings to provide accessible exterior electrical outlets to charge electric-powered lawn and garden equipment.

**Measure 12.1: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -250

**Participation Metrics:** 680 conventional leaf blowers (35%) and 2,670 conventional lawn mowers (35%) replaced with electric versions

### MEASURE 12.2: CONSTRUCTION BEST MANAGEMENT PRACTICES

ENCOURAGE CONSTRUCTION PROJECTS TO COMPLY WITH BAAQMD PERFORMANCE-BASED BEST MANAGEMENT PRACTICES.

Actions

A. The City will encourage new development to comply with applicable BAAQMD best management practices that reduce GHGs, including use of alternative-fueled vehicles and equipment, use of local recycled materials, and recycling of construction or demolition materials.

**Measure 12.2: Implementation Metrics**

**2020 GHG Reduction ($MTCO_2e$):** -4,010

**Participation Metrics:** 40% of construction equipment comply with applicable best management practices

# 5. Reviewing Projects

This chapter identifies the mechanisms the City will use to achieve performance targets for reduction measures identified in **Chapter 4**, consistent with State CEQA Guidelines Section 15183.5(b)(1)(D) and BAAQMD CEQA Air Quality Guidelines Section 4.

## Applicability

For discretionary projects seeking to use CEQA streamlining provisions, the City may require measures in this CAP as mandatory conditions of approval or as mitigation identified in a mitigated negative declaration or in an environmental impact report, as appropriate, on a project-by-project basis. This approach allows the City to ensure that new development can benefit from CEQA streamlining provisions while also ensuring that the City can achieve the reduction targets outlined in this plan.

Furthermore, as a programmatic tiering document under CEQA, the CAP will be the City's one-stop shop for greenhouse gas analysis and mitigation under CEQA. This CAP does not identify measures as mandatory or voluntary. Rather, the City will ensure appropriate use of the CAP for CEQA streamlining by maintaining the prerogative to identify appropriate mandatory and voluntary measures to integrate into project design or mitigation on a project-by-project basis. The City will use the development checklist described below and work with project applicants to determine the appropriate use of the CEQA benefits of the Climate Action Plan.

## Development Checklist

To determine whether new development projects comply with the CAP, City staff will use the checklist in **Appendix C** for discretionary projects subject to CEQA.

# 6. Monitoring Progress

## Monitoring Progress

This chapter identifies the procedures the City will use to monitor implementation of the CAP and presents methods for evaluating the effectiveness of CAP measures, as well as potential reasons to reevaluate reduction measures in the future. These procedures are consistent with State CEQA Guidelines Section 15183.5(b)(1)(E) and BAAQMD Guidelines Section 4. This chapter also identifies the standards the City will implement on a case-by-case basis and presents initial milestones the City must accomplish to begin using the CAP as a basis for project-level CEQA review.

## Assessing Implementation

Reducing GHG emissions by 15% below baseline 2005 levels is an ambitious task. This section outlines a path for the City to monitor progress and summarizes the GHG reductions that will occur through implementation of the CAP. To ensure the success of this Climate Action Plan, the City will integrate CAP goals, measures, and actions into other local and regional plans, programs, and activities. As the City moves forward with Zoning Code updates, specific plans, Housing Element updates, and other planning efforts, staff will ensure that these efforts support and are consistent with the CAP.

### Implementation Programs

Implementing the CAP will require City leadership to execute these measures and report on their progress. This plan identifies the responsible department for each measure and offers time frames for implementing each strategy. Lastly, successful implementation requires regular reporting. Staff will monitor progress toward implementing the CAP on an annual basis and report progress to the City Council each year. Developing an implementation and monitoring tool will assist the City to track progress.

The following implementation programs will ensure the City can realize the benefits of the CAP.

### Implementation Program 1: Monitoring

Annually monitor and report progress toward achieving the reduction target.

#### Actions

A. Prepare an annual progress report for City Council review and consideration.

B. Utilize the monitoring and reporting tool to assist with annual reports.

C. Identify key staff responsible for annual reporting and monitoring.

### Implementation Program 2: Update the Greenhouse Gas Emissions Inventory and Climate Action Plan

Update the baseline greenhouse gas emissions inventory and Climate Action Plan every five years.

#### Actions

A. Prepare an inventory of 2010 community-wide and municipal GHG emissions no later than 2017.

B. Update the CAP no later than 2017 to incorporate the 2010 inventory and to reflect adoption of new technologies, programs, and policies to reduce GHG emissions.

C. Consider updating and amending the CAP as necessary, should the City find that specific reduction measures are not achieving intended GHG emissions reductions.

### Implementation Program 3: Collaborative partnerships

Continue to develop partnerships that support implementation of the Climate Action Plan.

#### Actions

A. Continue formal memberships and participation in local and regional organizations that provide tools and support for energy efficiency, energy conservation, GHG emissions reductions, adaptation, education, and implementation of this plan.

### Implementation Program 4: Funding sources

Secure necessary funding to implement the Climate Action Plan.

#### Actions

A. Identify funding sources for reduction measures as part of annual reporting.

B. Ensure implementation by including emissions reduction objectives in department budgets starting in fiscal year 2014/2015, the capital improvement program, and other City plans as appropriate.

C. Pursue local, regional, state, and federal grants as appropriate to support implementation.

### Implementation Program 5: Economic Development & Sustainability Manager

Create an Economic Development & Sustainability Manager position.

A. Create a full-time position to implement both economic and sustainability objectives, acting as the responsible liaison between City government, residents, and businesses for growth objectives and those identified in this plan.

B. Designate the Economic Development & Sustainability Manager as the responsible agent to monitor new resources that may become available through CAP implementation, such as funding that may soon be available through the state's cap-and-trade program.

C. Allocate job-hours to the Economic Development & Sustainability Manager to develop strategies described in this CAP and integrate them with the City's economic development objectives.

D. Task the Economic Development & Sustainability Manager with tracking grant and funding opportunities to support sustainability and climate action programs and energy efficiency development activities.

E. Designate the Economic Development & Sustainability Manager with the responsibility of working with departments to integrate CAP considerations into the City's operating budget and capital improvement plans.

F. Direct the Economic Development & Sustainability Manager to coordinate project activities with other City departments and external agencies to provide policy and technical support on sustainability and climate action issues.

### Implementation Program 6: Development checklist

UPDATE THE CLIMATE ACTION PLAN DEVELOPMENT CHECKLIST (APPENDIX C) AS NECESSARY TO REFLECT LESSONS LEARNED THROUGH PROJECT STREAMLINING.

#### Actions

A. Work with residents and developers to utilize the development checklist for CEQA streamlining.

B. Monitor state and BAAQMD actions to identify future changes and modifications to the state or BAAQMD CEQA guidelines that affect implementation of the CAP.

C. Work with the BAAQMD to ensure new guidelines are integrated in the development checklist.

D. Create and distribute to regional partners a case study highlighting the benefits, lessons learned, and customer feedback discovered through implementation of the development checklist.

### Implementation Program 7: General Plan annual reporting

INTEGRATE CLIMATE ACTION PLAN MONITORING AND REPORTING FINDINGS INTO GENERAL PLAN ANNUAL REPORTING.

A. Use the reporting function of the Implementation and Monitoring Tool to summarize and report annual reductions from implementation of CAP measures as part of the annual report to the City Council on General Plan implementation.

## Evaluating the Plan

The matrix in **Table 6-1** contains key metrics and information to support successful implementation of the CAP. The matrix presents a time frame, responsible department, and existing City policies that support each measure. Time frames presented in the table correlate to the following periods:

- Near-Term (0–2 years)
- Mid-Term (2–5 years)
- Long-Term (5–7 years)

The following list summarizes abbreviations used to describe policies or programs in related planning documents.

- HE – General Plan Housing Element (2010)
- MSP – Midtown Specific Plan (2008)
- TASP – Transit Area Specific Plan (2008)
- GBR – Green Building Regulations (2009)
- EDP – Milpitas Economic Development Plan (2005)
- RIP – 2005–2010 Redevelopment Implementation Plan: Mid-Cycle Update (2008)
- RDA – Amended and Restated Redevelopment Plan for Project Area No. 1 (2010)
- OSECE – General Plan Open Space & Environmental Conservation Element (1994)
- BMP – Bikeways Master Plan (2009)
- LUE – General Plan Land Use Element (1994)
- CBTP – Santa Clara Valley Transit Authority Community Based Transportation Plan (2008)

**Table 6-1: Implementation Plan**

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 1.1 | Residential Energy Audits in Older Homes | Near-Term | Planning & Neighborhood Services | HE Policy B-3<br>HE Policy F-1.1<br>HE Policy F-1.2<br>HE Policy F-1.4 | Retrofit Bay Area (Energy Upgrade CA) | www.energyupgradeca.org/county/santa_clara |
| 1.2 | Energy Upgrade California | Near-Term | Planning & Neighborhood Services | HE Policy F-1.1<br>HE Policy F-1.2<br>HE Policy F-1.4 | Retrofit Bay Area (Energy Upgrade CA) | www.energyupgradeca.org/county/santa_clara |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 1.3 | Discretionary Project Review | Mid-Term | Planning & Neighborhood Services | None | | |
| 1.4 | Energy Benchmarking | Mid-Term | Planning & Neighborhood Services | None | PG&E Pacific Energy Center classes on benchmarking | www.pge.com/pec/ |
| 1.5 | Urban Cooling | Mid-Term | Planning & Neighborhood Services | HE Policy F-1.2<br>MSP Policy 6.11 | Cool California resources | www.coolcalifornia.org/cool-roofs |
| 1.6 | Smart Grid Integration | Long-Term | Planning & Neighborhood Services | TASP Policy 5.6 | PG&E Emerging Technology Program | www.etcc-ca.com/ |
| 1.7 | Appliance Upgrades | Mid-Term | Planning & Neighborhood Services | None | PG&E appliance rebate portal | www.pge.com/myhome/saveenergymoney/moneysaver/ |
| 1.8 | Online Energy Monitoring | Near-Term | Planning & Neighborhood Services | TASP Policy 5.6 | PG&E Emerging Technology Program | www.etcc-ca.com/ |
| 2.1 | Energy Efficiency in New Development | Near-Term | Building & Safety, and Planning & Neighborhood Services | HE Policy F-1.3<br>HE Policy F-1.6<br>TASP Policy 5.7<br>TASP Policy 5.9 | CALGreen Building Code, LEED, USGBC | http://www.energy.ca.gov/greenbuilding/<br>http://new.usgbc.org/ |
| 3.1 | Renewable Energy in New Development | Near-Term | Planning & Neighborhood Services | MSP Policy 6.11<br>GBR II-20-3.01<br>TASP Policy 5.7<br>EDP Objective 4A.1 | California Solar Initiative | http://www.gosolarcalifornia.ca.gov/ |
| 3.2 | Group Purchasing of Renewable Energy | Mid-Term | Planning & Neighborhood Services | EDP Objective 4A.1 | Joint Venture Silicon Valley SV-REP, Solar America Cities | http://www.jointventure.org, http://www.nrel.gov/docs/fy11osti/49930.pdf |
| 3.3 | Voluntary Renewable Energy | Mid-Term | Planning & Neighborhood Services | None | California Solar Initiative, Cool California | http://www.gosolarcalifornia.ca.gov/, http://www.nrel.gov/docs/fy11osti/49930.pdf |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 3.4 | Municipal Best Practices in Renewable Energy | Near-Term | Planning & Neighborhood Services | None | Solar America Cities | http://www.nrel.gov/docs/fy11osti/49930.pdf |
| 3.5 | Model Power Purchase Agreement | Long-Term | Planning & Neighborhood Services | None | US Department of Energy | www1.eere.energy.gov/wip/solutioncenter/financialproducts/ppa.html |
| 4.1 | Tiered Water Rates | Near-Term | Finance | MSP Policy 6.2 | Bay Area Water Supply and Conservation Agency partnership | http://bawsca.org/ |
| 4.2 | Recycled Water | Long-Term | Planning & Neighborhood Services, Engineering and Public Works | MSP Policy 6.4<br>TASP Policy 6.18<br>TASP Policy 6.20<br>TASP Policy 6.21 | South Bay Water Recycling Program | |
| 5.1 | Increased Densities | Long-Term | Planning & Neighborhood Services | MSP Goal 2<br>MSP Policy 3.4<br>MSP Policy 3.10<br>MSP Policy 3.20<br>TASP Policy 4.69<br>TASP Policy 4.71<br>LUE Policy 2.a-1-24<br>HE Policy D-3<br>RIP Community Design 1 | Urban Land Institute<br>San Francisco Planning + Urban Research Association (SPUR)<br>Local Government Commission | http://opr.ca.gov/s_infilldevelopment.php |
| 5.2 | Urban Plazas | Long-Term | Planning & Neighborhood Services | RIP Community Design 2<br>MSP Goal 3<br>MSP Policy 7.11<br>RDA-1 Item 9<br>TASP Policy 4.33<br>TASP Policy 4.73 | Urban Land Institute<br>San Francisco Planning + Urban Research Association (SPUR)<br>Local Government Commission | http://opr.ca.gov/s_infilldevelopment.php |
| 5.3 | Open Space | Long-Term | Parks & Recreation, Planning & Neighborhood Services | LUE 2.a-I-15<br>LUE 2.a.I-16<br>MSP Policy 3.24<br>OSECE 4.a.I-2<br>TASP Policy 3.39 | Greenbelt Alliance | http://opr.ca.gov/s_urbanforestry.php |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 6.1 | Transit Density | Long-Term | Planning & Neighborhood Services, Engineering and Public Works | TASP Policy 4.54, 4.70<br>HE Policy D-3<br>HE Policy F-1.5<br>MSP Policy 3.4 | Regional BART network | http://www.bart.gov/ |
| 6.2 | BART-Friendly Environment | Long-Term | Planning & Neighborhood Services | TASP Policy 4.9 | Regional BART network | http://www.bart.gov/ |
| 6.3 | Dense and Centralized Development | Long-Term | Planning & Neighborhood Services | RIP Land Use 3<br>RIP Transportation 4 | | http://opr.ca.gov/s_infilldevelopment.php |
| 6.4 | Regional Arterials | Mid-Term | Planning & Neighborhood Services, Engineering and Public Works | LUE 3.b-G-1<br>TASP Policy 3.10 | City of San Jose | http://www.sanjoseca.gov/transportation/supportFiles/tlsp/TLSP_APPLICATION.pdf |
| 7.1 | Expanded City Parks | Mid-Term | Parks & Recreation, Planning & Neighborhood Services | None | Greenbelt Alliance | http://opr.ca.gov/s_urbanforestry.php |
| 7.2 | Complete Streets | Long-Term | Planning & Neighborhood Services | TASP Policy 3.14<br>TASP Policy 4.60<br>TASP Policy 4.61<br>TASP Policy 4.9 | ABAG, One Bay Area | onebayarea.org/file10013.html |
| 7.3 | Bikeways Master Plan Infrastructure | Mid-Term | Planning & Neighborhood Services, Engineering and Public Works | BMP Objective 1-3<br>BMP Goal 3<br>BMP Objective 3-2<br>BMP Objective 5-1<br>BMP Objective 5-2<br>BMP Objective 7-1<br>BMP Objective 8-1<br>BMP Objective 8-2<br>RIP Circulation 2<br>EDP Objective 2A.1<br>MSP Policy 4.2 | | http://www.opr.ca.gov/news.php?id=22 |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 7.4 | Bikeways Master Plan Outreach | Near-Term | Planning & Neighborhood Services | BMP Objective 1-1<br>BMP Objective 2-2<br>BMP Objective 2-1<br>BMP Objective 3-1<br>BMP Objective 4-1<br>BMP Objective 4-2<br>BMP Objective 4-3<br>BMP Objective 4-4<br>BMP Objective 6-1<br>BMP Objective 6-2<br>BMP Objective 7-2 | Bicycle Pedestrian Advisory Commission and Silicon Valley Bicycle Coalition | http://bikesiliconvalley.org/education |
| 7.5 | Bicycle Parking | Mid-Term | Parks & Recreation, Planning & Neighborhood Services | None | Bicycle Pedestrian Advisory Commission | bikesiliconvalley.org/ |
| 8.1 | Transportation Demand Management | Long-Term | Planning & Neighborhood Services | TASP Policy 3.16 | San Francisco's TDM partnerships | http://onebayarea.org/regional-initiatives/climate-initiatives-program/Innovative-Grants/Integrated-Public-Private-Transportation-Demand-Management-Project.html |
| 8.2 | Car-Share Programs | Long-Term | Planning & Neighborhood Services | None | City Car Share | https://www.citycarshare.org/ |
| 8.3 | Transit Education and Outreach | Near-Term | Public Works | CBTP Transportation Amenities 9<br>CBTP Transportation Amenities 11<br>CBTP Transportation Amenities 12 | | http://opr.ca.gov/s_transportation.php |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 8.4 | Regional Transit Use | Near-Term | Public Works | CBTP Transit Services 1<br>CBTP Transit Services 3<br>CBTP Transit Services 4<br>CBTP Transit Services 5<br>CBTP Transit Services 6<br>CBTP Transportation Amenities 7<br>CBTP Transportation Amenities 8<br>RDA-1 Goal/Objective 11 | Santa Clara Valley Transportation Authority (VTA) | http://www.vta.org/ |
| 9.1 | Unbundled Parking Costs | Near-Term | Planning & Neighborhood Services | None | MTC | http://mtc.ca.gov/ |
| 9.2 | Nonresidential Parking Requirements | Near-Term | Planning & Neighborhood Services | MSP Policy 4.24 | | |
| 10.1 | Parking for Low-Emissions Vehicles | Long-Term | Planning & Neighborhood Services | TASP Policy 3.34 | | opr.ca.gov/docs/Draft2012ZEVActionPlan(09-21-12).pdf |
| 10.2 | Alternative Fueling Stations | Mid-Term | Planning & Neighborhood Services | None | BAAQMD | http://www1.eere.energy.gov/cleancities/alternative_fuel_market_projects.html |
| 10.3 | Electric Vehicle Partnerships | Mid-Term | Planning & Neighborhood Services | None | BAAQMD and Electric Auto Association - Silicon Valley Chapter | eaasv.org/ |

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| 10.4 | Residential Electric Vehicle Charging | Long-Term | Building & Safety, and Planning & Neighborhood Services | None | | http://www.baaqmd.gov/Divisions/Strategic-Incentives/Bay-Area-EV-Ready/EV-Charge.aspx |
| 10.5 | Gas Tax | Mid-Term | Planning & Neighborhood Services | None | | |
| 10.6 | BART Station Pedestrian Circulator | Long-Term | Planning & Neighborhood Services | CE 3.d-G-7 | BART,VTA, MTC | |
| 11.1 | Waste Diversion | Long-Term | Building & Safety, and Planning & Neighborhood Services | None | Local Waste Haulers, CalRecycle Mandatory Commercial Recycling Ordinance | http://www.calrecycle.ca.gov/climate/recycling/ |
| 12.1 | Lawn and Garden Equipment | Near-Term | Planning & Neighborhood Services | None | BAAQMD | http://www.baaqmd.gov/Divisions/Strategic-Incentives/Off-Road-Vehicles.aspx |
| 12.2 | Construction Best Management Practices | Mid-Term | Planning & Neighborhood Services | None | BAAQMD | http://www.baaqmd.gov/Divisions/Strategic-Incentives/Off-Road-Vehicles.aspx |

### Implementation and Monitoring Tool

The City will use the implementation matrix presented in **Table 6-1**, as well as the implementation and monitoring tool developed in tandem with this CAP, to track, monitor, and update the plan. As the City reports implementation progress, staff will evaluate the effectiveness of each measure to ensure anticipated GHG reductions are occurring. In the event that GHG reductions do not occur as expected, the City can modify or add additional policies to the CAP to ensure the City meets the local reduction target. Ongoing implementation, monitoring, and modification of the measures will enable the City to meet its reduction target.

# 7. Glossary

**Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006:** Establishes a comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions of greenhouse gases for the State of California. AB 32 designates the California Air Resources Board (CARB) as the responsible agency for monitoring and reducing statewide GHG emissions to reduce emissions to 1990 levels by 2020.

**Assembly Bill (AB) 811:** Authorizes all cities and counties in California to designate areas within which willing property owners may finance the installation of distributed renewable energy generation, as well as energy efficiency improvements, through low-interest loans. These financing programs are commonly referred to as Property Assessed Clean Energy (PACE) programs.

**Assembly Bill (AB) 939:** Establishes a goal of achieving a statewide waste diversion rate of 50% and requires cities and counties to divert a minimum of 50% of their waste stream for reuse or recycling.

**Assembly Bill (AB) 1881:** Requires local agencies to adopt a water-efficient landscape ordinance, limiting the amount of water used for landscaping purposes.

**Association of Bay Area Governments (ABAG):** The regional planning agency for the nine counties and 101 incorporated cities in the San Francisco Bay Area.

**Buildout; Build-out:** Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations.

**Business-as-Usual (BAU):** A business-as-usual projection forecasts greenhouse gas emissions without regulatory or technical intervention to reduce GHG emissions.

**California Air Resources Board (CARB):** A division of the California Environmental Protection Agency charged with protecting public health, welfare, and ecological resources through the reduction of air pollutants.

**California Environmental Quality Act (CEQA):** A state law requiring state and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before action can be taken on the proposed project. General plans require the preparation of a program EIR.

**California Green Building Standards Code (CALGreen):** The 2010 California Green Building Standards Code, commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

# 7. GLOSSARY

**California Solar Initiative (CSI):** Allows the California Public Utilities Commission (CPUC) to provide incentives to install solar technology on existing residential, commercial, nonprofit, and governmental buildings if they are customers of the state's investor-owned utilities: Pacific Gas & Electric (PG&E), San Diego Gas & Electric (SDG&E), or Southern California Edison (SCE).

**Carbon Dioxide ($CO_2$):** A colorless, odorless gas that occurs naturally in the earth's atmosphere. Significant quantities are also emitted into the air by fossil fuel combustion.

**Carbon Dioxide Equivalent ($CO_2e$):** A metric measure used to compare the emissions from various greenhouse gases based on their global warming potential (GWP).The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP.

**Car Sharing:** A type of car rental where people rent cars for short periods of time, often by the hour.

**Clean Car Fuel Standards (AB 1493, Pavley):** Signed into law in 2002 and commonly referred to as Pavley standards. Requires carmakers to reduce GHG emissions from new passenger cars and light trucks beginning in 2011. CARB anticipates that the Pavley standards will reduce GHG emissions from new California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

**Climate Action Plan (CAP):** Strategic plans that establish policies and programs for reducing (or mitigating) a community's greenhouse gas emissions and adapting to the impacts of climate change.

**Climate Change (also referred to as global climate change):** The term "climate change" is sometimes used to refer to all forms of climatic inconsistency, but because the earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, climate change has been used synonymously with the term "global warming"; scientists, however, tend to use the term in the wider sense to also include natural changes in climate.

**Climate Change Mitigation:** A technical or behavioral intervention to reduce the sources of greenhouse gas emissions in order to reduce the potential effects of climate change.

**Climate Zone:** The California Energy Commission (CEC) has classified the distinct climates throughout California by climate zone to recognize the variability in energy use based on local weather patterns. The CEC uses these climate zones to determine energy budgets for new and renovated buildings and prescriptive packages for each climate zone to ensure that they meet the State's Title 24 energy efficiency standards.

**Co-Benefits:** An additional benefit occurring from the implementation of a GHG reduction measure that is not directly related to reducing greenhouse gas emissions.

**Complete Streets:** Complete streets policies ensure that transportation planners and engineers consistently design and operate the entire roadway with all potential users in mind. This includes private vehicles, bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. In 2007, the State of California adopted AB 1358, which directs the legislative body of a city or county, upon revision of the circulation element of its general plan, to identify how the jurisdiction will provide for the routine accommodation of all users.

# 7. Glossary

**Construction and Demolition Waste (C&D):** C&D materials consist of the waste generated during the construction, demolition, or renovation of buildings, roads, and other construction projects. C&D materials may include heavy, bulky materials such as concrete, glass, wood, and metal, among other materials.

**Energy Conservation:** Reducing energy waste, such as turning off lights, heating, and motors when not needed.

**Energy Efficiency:** Doing the same or more work with less energy, such as replacing incandescent light bulbs with compact fluorescent light bulbs or buying an Energy Star appliance to use less energy for the same or greater output.

**Energy Efficiency Standards (Title 24, Part 6):** Title 24 standards were first adopted in 1978 and established minimum energy efficiency standards for residential and nonresidential buildings. These standards are updated continually by providing more stringent energy budgets for new buildings in an effort to reduce California's energy consumption.

**Energy Star:** A joint program of the US Environmental Protection Agency and the US Department of Energy to provide consumers with information and incentives to purchase the most energy efficient products available.

**Energy Star Portfolio Manager:** An online management tool that allows nonresidential building owners and tenants to track and assess energy and water use over time. Benchmarking energy and water use allows building owners to identify investment priorities, determine underperforming buildings, and verify efficiency improvements.

**Environmental Impact Report (EIR):** A report required by the California Environmental Quality Act (CEQA) that assesses all the environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action or project. See California Environmental Quality Act (CEQA).

**Global Warming Potential (GWP):** An index used to translate the level of emissions of various gases into a common measure in order to compare the relative potency of different gases without directly calculating the changes in atmospheric concentrations. Greenhouse gases are expressed in terms of carbon dioxide equivalent. Global warming potentials are expressed in terms relative to carbon dioxide, which has a global warming potential of 1.

**Green Building:** Sustainable or "green" building is a holistic approach to design, construction, and demolition that minimizes the building's impact on the environment, the occupants, and the community. See the California Green Building Standards Code (CALGreen) for green building regulations in California.

**Greenhouse Gas or Greenhouse Gases (GHG):** Gases that cause heat to be trapped in the atmosphere, warming the earth. Greenhouse gases are necessary to keep the earth warm, but increasing concentrations of these gases are implicated in global climate change. Greenhouse gases include all of the following: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The majority of greenhouse gases come from natural sources, although human activity is also a major contributor.

# 7. Glossary

**Greenhouse Gas Inventory:** Provides estimates of the amount of GHGs emitted to and removed from the atmosphere by human activities. A city or county that conducts an inventory looks at both community emission sources and emissions from government operations. A base year is chosen and used to gather all data from that year. Inventories include data collection from such things as vehicle miles traveled (VMT), energy usage from electricity and gas, and waste. Inventories include estimates for carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), sulfur hexafluoride ($SF_6$), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), which are referred to as the six Kyoto gases.

**Green Waste:** Refers to lawn, garden, or park plant trimmings and materials and can be used in home composters or picked up curbside by municipal waste haulers.

**Greywater:** Wastewater collected from showers, bathtubs, bathroom sinks, and clothes washing machines that is reused on site for irrigation purposes.

**Low Carbon Fuel Standard (LCFS):** An executive order from former Governor Schwarzenegger, the Low Carbon Fuel Standard established the goal of reducing the carbon intensity of transportation fuels in California by 10% by 2020.

**Metropolitan Planning Organization (MPO):** A federally funded transportation planning organization comprising representatives from local government agencies and transportation authorities.

**Mixed Use:** Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A single site may include contiguous properties.

**Recycled Water:** Wastewater from tubs, toilets, and sinks inside homes and offices that is cleaned through a treatment process, producing non-potable water that is safe for landscapes, raw vegetable crops, and agricultural crops.

**Reduction Measure:** A goal, strategy, program, or set of actions that target and reduce a specific source of greenhouse gas emissions.

**Regional Transportation Plan (RTP):** A long-term blueprint of the region's transportation systems. The RTP is a federally mandated comprehensive long-range regional planning document that identifies the region's transportation needs, sets forth an action plan of projects, determines actions and programs to address the needs and issues, and documents the financial resources needed to implement the RTP.

**Renewable Energy:** Energy from sources that regenerate and are less damaging to the environment, such as solar, wind, biomass, and small-scale hydroelectric power.

**Renewables Portfolio Standard (RPS):** A regulation requiring utility companies in California to increase the production of renewable energy from solar, wind, or biomass, or geothermal sources.

**Senate Bill (SB) X7-7:** Passed in 2009, SB X7-7 requires the state to achieve a 20% reduction in per capita water use by 2020. This law also requires local water providers to set an interim 2015 and a final 2020 community-wide target and demonstrate that projected water use is in compliance with that target, otherwise funding will be affected.

# 7. Glossary

**Senate Bill (SB) 97:** Requires lead agencies to analyze GHG emissions and climate change impacts under CEQA.

**Senate Bill (SB) 375:** Directs the metropolitan planning organizations in California to create a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan. The SCS will demonstrate how the region will achieve the 2020 and 2035 GHG reduction targets for the region set by CARB.

**Smart Grid:** Delivers electricity from suppliers to consumers using two-way digital communications. The smart grid is envisioned to overlay the ordinary electrical grid with an information and net metering system, which includes smart meters. Smart meters will allow consumers to become more aware of their energy use and in the future will allow smart grid enabled appliances to be preprogrammed to operate at a time when electricity costs are lowest.

**Sustainability:** Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

**Sustainable Communities Strategy (SCS):** The land use element of each MPO's Regional Transportation Plan as required by SB 375. The SCS will demonstrate how the region will achieve the 2020 and 2035 VMT and GHG reduction targets for the region set by CARB.

**Sustainable Development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Transit-Oriented Development (TOD):** A mixed-use residential or commercial area designed to maximize access to transit options.

**Transportation Demand Management (TDM) Plan:** A voluntary or mandatory program developed by local agencies, large employers, or high traffic commercial services to limit the amount of congestion and pollution related to transportation demand. TDM plans may include incentives, regulations, and education about transportation alternatives.

**Unbundled Parking:** A parking strategy in which parking spaces are rented or sold separately, rather than automatically included with the rent or purchase price of a residential or commercial unit.

**Urban Heat Island:** Describes built-up areas that are hotter than nearby rural areas. On a hot, sunny summer day, roof and pavement surface temperatures can be 50–90°F (27–50°C) hotter than the air, while shaded or moist surfaces remain close to air temperatures. These surface urban heat islands, particularly during the summer, have multiple impacts and contribute to atmospheric urban heat islands. Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality.

**Vehicle Miles Traveled (VMT):** A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

**Water Conservation:** Reducing water use, such as by turning off taps, shortening shower times, and reducing outdoor irrigation demand.

**Water-Efficient Landscape:** Native or low-water-using landscapes. Water-efficient landscapes are required by law in all cities and counties in California to conserve water.

**Water Use Efficiency:** Replacing older technologies and practices in order to accomplish the same results with less water, for example, by replacing toilets with new high efficiency models and by installing "smart controllers" in irrigated areas.

**Zero-Emissions Vehicle (ZEV):** A vehicle that does not emit any tailpipe emissions from the on-board source of power. Both electric and hydrogen fuel cell vehicles are classified as ZEVs.

# 8. References


ABAG (Association of Bay Area Governments). 2009. Projections 2009.

———. 2012. Retrofit Bay Area Final Report.

Allied Waste Services. 2011. Participation rates in food composting program. Personal correspondence with Christine Clark.

BAAQMD (Bay Area Air Quality Management District). 2010. GHG Plan Level Quantification Guidance.

———. 2010. History of Air District: 1995–2000. http://www.baaqmd.gov/Divisions/Communications-and-Outreach/News-Media-and-Features/History-of-Air-District-2005/1995--2000.aspx.

———. 2011. Updated California Environmental Quality Act Air Quality Guidelines.

Blake, Cindy. 2009. Rideshare Administrative Assistant. Rideshare Lucky Bucks statistical data, November 3.

BPA (Bonneville Power Administration). 2011. Residential Behavior Based Energy Efficiency Program Profiles 2011. http://www.bpa.gov/Energy/n/pdf/BBEE_Res_Profiles_Dec_2011.pdf.

Brown, Rich, Sam Borgeson, Jon Koomey, and Peter Biermayer. 2008. U.S. Building-Sector Energy Efficiency Potential. Ernest Orlando Lawrence Berkeley National Laboratory, University of California. http://enduse.lbl.gov/info/LBNL-1096E.pdf.

California Air Resources Board, et al. 2010. Local Government Operations Protocol.

California Energy Commission. 2012. Proposed Energy Provisions of the California Green Building Standards Code. http://www.energy.ca.gov/title24/2013standards/green_building/documents/2012-09-20_webinar/2012-09-20_Webinar-Energy_Provisions_of_2013_Title_24_Part_11.pdf.

———. 2012. 2013 Building Energy Efficiency Standards.

California Integrated Waste Management Board. 2006. Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups.

California Natural Resources Agency. 2009. Amended Guidelines of Implementation of the California Environmental Quality Act.

CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures.

CARB (California Air Resources Board). 2007. Off-Road Software.

———. n.d. Climate Change Draft Scoping Plan – Measure Documentation Supplement. http://www.arb.ca.gov/cc/scopingplan/document/measure_documentation.pdf.

———. n.d. Landfill Emissions Tool. V1.2. http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm

# 8. References


City Car Share. n.d. Bringing Car-Sharing to Your Community. http://www.citycarshare.org/download/CCS_BCCtYC_Long.pdf.

City of Milpitas. 2010. Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010.

City of San Jose. 2008. Proposition 1B Traffic Light Synchronization Program Application for Traffic Signal Communications and Synchronization Project. http://www.sanjoseca.gov/transportation/supportFiles/tlsp/TLSP_APPLICATION.pdf.

CIWMB (California Integrated Waste Management Board). 2006. Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups.

CPUC (California Public Utilities Commission). 2011. 4th Quarter 2010 Renewable Portfolio Standard Report.

Donovan, G., and D. Butry. 2009. The value of shade: Estimating the effect of urban trees on summertime electricity use. Energy and Buildings (41): 662–668.

EPA (US Environmental Protection Agency). 2009. Potential for Reducing Greenhouse Gas Emissions in the Construction Sector. http://www.epa.gov/sectors/pdf/construction-sector-report.pdf.

Federal Transit Authority. 2012. 2005 National Transit Database. http://www.ntdprogram.gov/ntdprogram/.

Haight, M. 2005. "Assessing the environmental burdens of anaerobic digestion in comparison to alternative options for managing the biodegradable fraction of municipal solid wastes." Water Science & Technology (52): 553–559.

Hexagon Transportation Consultants, Inc. 2011. Milpitas Climate Action Plan VMT Calculations.

———. 2011. Personal correspondence with At van den Hout.

Itron, Inc. 2007. California Commercial End-Use Survey – Results Page. http://capabilities.itron.com/CeusWeb/Chart.aspx.

KEMA, Inc. 2010. 2009 California Residential Appliance Saturation Study, Volume 2: Results. CEC-200-2010-004.

NREL (National Renewable Energy Laboratory). 2012. PVWatts Calculator. http://www.nrel.gov/rredc/pvwatts/.

Olmsted, Sheila, and Robert Stavins. 2007. "Managing Water Demand: Price Vs. Non-Price Conservation Programs." A Pioneer Institute White Paper. http://www.hks.harvard.edu/fs/rstavins/Monographs_&_Reports/Pioneer_Olmstead_Stavins_Water.pdf.

ORNL (Oak Ridge National Laboratory). 2002. Transportation Energy Data Book: Edition 22. ORNL-6967.

# 8. References


Plug-In Cars. 2010. Nissan LEAF Finally Gets Official EPA Fuel Economy Label. http://www.plugincars.com/nissan-leaf-finally-gets-official-epa-label-106486.html.

Santa Clara Valley Transit Authority, 2010. Short Range Transit Plan. http://www.vta.org/studies/index.html.

SMUD (Sacramento Municipal Utilities District). 2012. "Cool Roofs." https://www.smud.org/en/residential/save-energy/rebates-incentives-financing/cool-roofs.htm. Interpersonal conversation with staff.

Trulia, Inc. 2012. Milpitas Market Trends. http://www.trulia.com/real_estate/Milpitas-California/market-trends/.

US Census Bureau. 2005–2007 American Community Survey 3-Year Estimates.

———. 2012. Quick Facts. http://quickfacts.census.gov/qfd/states/06/0647766.html.

VTPI (Victoria Transport Policy Institute). 2008. TDM Encyclopedia. Ridesharing. http://www.vtpi.org/tdm/tdm34.htm.

# APPENDIX A: GREENHOUSE GAS INVENTORY

## GREENHOUSE GAS INVENTORY AND FORECAST REPORT

This report provides a detailed presentation of the community-wide greenhouse gas emissions inventory for the City of Milpitas and the estimated changes in those emissions for 2020 and 2035.

### PURPOSE

The purpose of this greenhouse gas (GHG) emissions inventory (Inventory) is to identify the major sources of GHG emissions from the community of Milpitas and to provide a baseline against which future progress can be measured in a manner consistent with the direction of the Bay Area Air Quality Management District (BAAQMD). The identification of the major and minor sources of GHG emissions will also help in the process of creating reduction strategies in the CAP that are tailor-made to local emission characteristics.

On June 2, 2010, the BAAQMD's Board of Directors unanimously adopted new California Environmental Quality Act (CEQA) thresholds of significance and guidelines for GHG emissions. The BAAQMD CEQA Guidelines recommend air quality significance thresholds, analytical methodologies, and mitigation measures for cities and counties in the Bay Area to use when preparing air quality impact analyses under CEQA. These analyses are crucial to ensuring that new developments and improvements in the Bay Area do not adversely impact GHG emissions or the region's attainment of Assembly Bill (AB) 32 targets. The BAAQMD CEQA Guidelines include an option for completing a GHG emissions program, called a Qualified Greenhouse Gas Reduction Strategy, at the local government level. After meeting the specific criteria set forth by the BAAQMD to create a strategy, future developments in the jurisdiction would be able to go through a streamlined environmental review process for those projects in compliance with the BAAQMD CEQA Guidelines.

## KEY CONCEPTS

The following terms are used throughout and are fundamental to understanding the contents of the Inventory and Forecast:

- **Baseline year:** Emissions are quantified for the baseline year of 2005, an emerging standard in cities across California, consistent with the baseline year definition of AB 32. This baseline year allows the City to track and observe the impact of its actions taken to date on GHG emissions and better inform future strategies.

- **Business-as-usual (BAU):** The scenario on which all forecasts are based. Assumes no specific actions are taken to reduce emissions and growth comes from the expansion of activity and services within Milpitas.

- **Carbon dioxide equivalent ($CO_2e$):** Represents the three main GHGs (carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$)) in comparable terms, since all three gases trap heat in the atmosphere differently.

- **Sectors:** Emissions are grouped by the type of activity that generated the emissions, such as transportation, residential energy use, and commercial energy use.

## LOCAL CONSIDERATIONS

### DIRECT WASTEWATER EMISSIONS

The City of Milpitas's wastewater needs are met by the San Jose/Santa Clara Water Pollution Control Plant (Plant) located in San Jose. The wastewater delivered from Milpitas to the Plant produces emissions such as methane and nitrous oxide because of the wastewater treatment process. To show the effect of these potent GHGs on the City's inventory, the emissions were quantified using methods outlined in the Local Government Operations Protocol (LGOP). The formulas used include Equation 10.2, 10.3.2.1, and 10.3. By using service population as the key indicator, in choosing equations which capture process emissions occurring at the Plant, the City of Milpitas is able to accurately report its direct process emissions from wastewater disposal.

### LIGHT RAIL METHODS AND SOURCES

The City of Milpitas hosts three Santa Clara Valley Transit Authority (VTA) light rail transit stations with the city limits. With these stations located in Milpitas, residents, employees, and visitors have the opportunity and ability to utilize the VTA's light rail connections to the regional transit system. The emissions associated with the electric light rail infrastructure were included to reflect the amount of ridership resulting from the residents and employees in Milpitas.

Using the total number of VTA light rail boardings, the total number of VTA boardings, and the system-wide miles traveled for the proxy year of 2009, an estimated number of miles traveled on light rail was estimated for Milpitas users. Ridership information came from the VTA's Short Range Transportation Plan adopted in 2010 and the 2005 National Transit Database. Miles traveled on the light rail system were translated to GHG emissions using an energy factor (kWh of electricity per mile) from the Oak Ridge National Laboratory's (ORNL) Transportation Energy Data Book.

### POINT SOURCES METHODS AND SOURCES

Stationary, or point source, emissions are identified and quantified in the Inventory but are not included as part of the community-wide inventory results due to the City's limited control over these emissions and the availability of data. Stationary sources in Milpitas emitted 101,480 $MTCO_2e$ in 2009. Data from 2009, as opposed to the baseline year of 2005, was used as it was the earliest available data from the reporting party, the Bay Area Air Quality Management District. The sources of stationary emissions include a landfill gas power plant (accounting for 95% of emissions) and approximately 80 backup power generators at various commercial locations. These emissions are released directly into the atmosphere and do not include indirect emissions sources such as electricity consumption.

# APPENDIX A: GREENHOUSE GAS INVENTORY

## COMMUNITY INVENTORY SUMMARY

In 2005, Milpitas emitted approximately 744,150 metric tons of carbon dioxide equivalent ($MTCO_2e$). **Table A-1** reports the emissions by sector and ranks the sectors from highest to lowest.

**Table A-1: Baseline GHG Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 43% |
| Nonresidential Energy | 183,800 | 25% |
| Point Sources | 101,480 | 14% |
| Residential Energy | 64,230 | 9% |
| Solid Waste | 54,410 | 7% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |
| Direct Wastewater | 620 | <1% |
| Total* | 744,150 | 100% |

** Due to rounding, the total may not equal the sum of component parts.*

**Table A-1** reports point source emissions, which include stationary sources and the Newby Island Resource Recovery Park, and direct wastewater emissions. Stationary sources are fixed emitters of air pollutants, such as power plants, stationary generators, petrochemical plants, and other heavy industrial sources. Since stationary source emissions are influenced by market forces beyond the City's local influence and are best regulated by the BAAQMD or through federal and state programs, they are reported in this Inventory for informational purposes only. Similarly, the City has limited control over the operation of the Newby Island Resource Recovery Park and the San Jose/Santa Clara Water Pollution Control Plant and is unable to directly affect the emissions generated from previously generated waste and the city's relatively small contribution to total direct wastewater emissions. The baseline inventory is intended to guide future local policy decisions that relate to emissions within the City's influence; therefore, stationary sources, direct landfill emissions, and direct wastewater emissions are excluded from all further discussions in this Inventory.

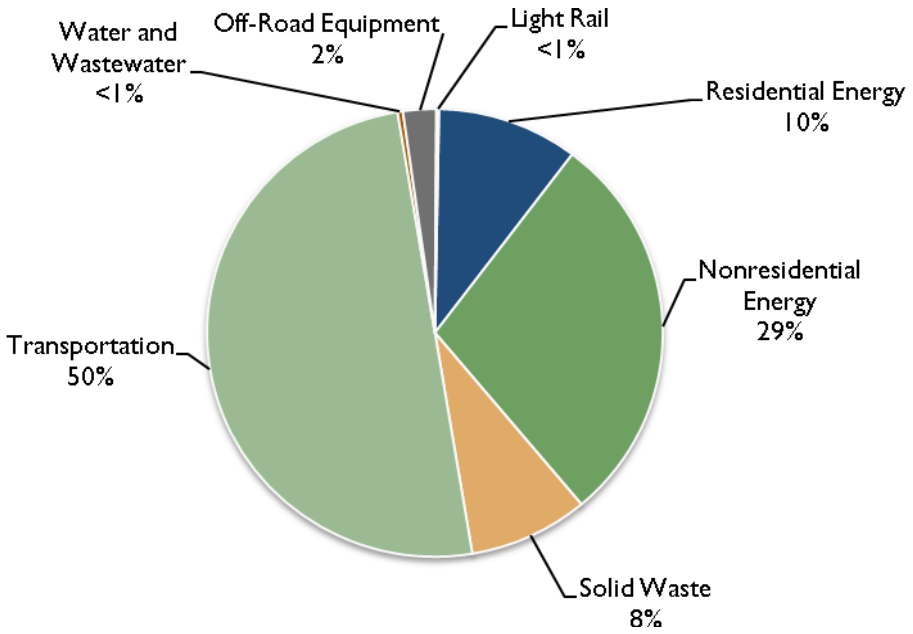
**Table A-2** and **Figure A-1** reflect Milpitas's effective baseline of 642,050 $MTCO_2e$. Transportation was the largest sector (320,990 $MTCO_2e$), contributing about 50% of total emissions. Nonresidential energy use is the second largest sector (183,800 $MTCO_2e$, or 29%), followed by residential energy with 64,230 $MTCO_2e$ making up 10% of emissions. The remaining 11% of emissions came from solid waste (54,410 $MTCO_2e$), water and wastewater (2,410 $MTCO_2e$), and light rail (1,070 $MTCO_2e$).

**Table A-2: Effective Baseline Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 50% |
| Nonresidential Energy | 183,800 | 29% |
| Residential Energy | 64,230 | 10% |
| Solid Waste | 54,410 | 8% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |
| Total* | 642,050 | 100% |

** Due to rounding, the total may not equal the sum of component parts.*

**Figure A-1: Effective Baseline Emissions by Sector**




## BUSINESS-AS-USUAL FORECAST

A business-as-usual (BAU) GHG emissions forecast is a prediction of how GHG emissions will change in the future with anticipated changes in population, commercial activity, and driving patterns. This GHG emissions forecast of community-wide emissions focuses on three target years: 2010, 2020, and 2035. The 2010 year is analyzed as a proxy for a community-wide inventory and will assist in determining the

City's progress in reducing emissions. The 2020 year is estimated for consistency with AB 32 targets. Finally, the year 2035 is studied for consistency with the BAAQMD CEQA Guidelines.

**Table A-3** lists the various growth indicators used in the forecasts of Milpitas's community-wide emissions. Growth in waste emissions is based on the total service population of Milpitas, as this includes projected residential, commercial, and industrial growth. Residential energy use is tied to the number of households within city limits for the target years. Similarly, commercial and industrial energy use emissions are assumed to grow with the number of jobs.

Transportation is the only sector where more than one source of growth estimation is used. Growth indicators for 2010 and 2020 were provided by Hexagon Transportation Consultants, Inc., and 2035 growth was estimated using countywide figures from the Bay Area Metropolitan Transportation Commission (MTC).

Increases in vehicles miles traveled for 2020 were derived from the Milpitas Travel Forecasting Model (MTFM), a transportation planning tool developed by Hexagon Transportation Consultants, Inc. The MTFM evaluates the traffic impacts anticipated to occur in the future as a result of additional planned development in Milpitas, considering the effects of the City's planning efforts, including policies and programs found in the Transit Area Specific Plan (adopted June 2008) and the Midtown Specific Plan (adopted March 2002, amended October 2008). Significant VMT reductions from future BART ridership based on extending the BART system through Milpitas to San Jose are integrated within the MTFM. In order to highlight the many local benefits of this new ridership, the VMT reductions associated with BART have been removed from the model and are included in CAP Measure 6.1. VMT were provided and calculated on a daily basis. These daily VMT figures were translated into annual VMT using a factor of 347 days per year, provided by the California Air Resources Board, to account for reduced work-related traffic on weekends and holidays.

**Table A-3: BAU Forecast Indicators**

| Growth Indicator | Emissions Sector | 2005 | 2020 | 2035 | Sources |
|---|---|---|---|---|---|
| Residents | | 64,800 | 82,300 | 106,000 | ABAG 2009 |
| Jobs | | 47,580 | 52,550 | 59,160 | ABAG 2009 |
| Service Population (Residents + Jobs) | Waste, Light Rail, Water | 112,380 | 134,850 | 165,160 | ABAG 2009 |
| Households | Residential Energy | 17,850 | 23,090 | 30,470 | ABAG 2009 |
| Employment | Nonresidential Energy | 47,580 | 52,550 | 59,160 | ABAG 2009 |
| Annual VMT | Transportation | 697,265,000 | 799,761,089 | 940,035,849* | Hexagon, MTC |

**VMT for 2035 was derived from countywide figures provided by the MTC*

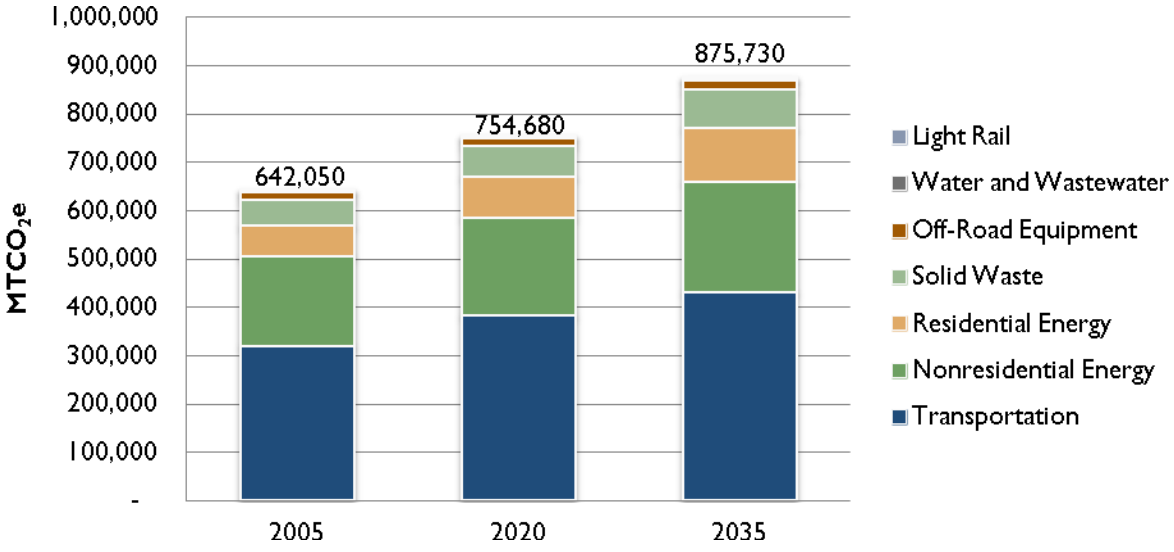
As shown in **Table A-4** and **Figure A-2**, emissions are anticipated to grow 18% from 2005 to 2020. Residential energy emissions are forecast to grow the most among the sectors (39%). The next largest sector would be light rail, followed by transportation, solid waste, and water and wastewater, all of which are expected to increase 20%. Many of these increases result from planned residential development in coming years. Emissions in 2035 are expected to grow 36% to 875,730 $MTCO_2e$.

**Table A-4: Business-as-Usual Emissions Forecast**

| | 2005 $MTCO_2e$ | 2020 $MTCO_2e$ | 2035 $MTCO_2e$ |
|---|---|---|---|
| Transportation | 320,990 | 383,630 | 432,750 |
| Nonresidential Energy | 183,800 | 203,000 | 228,540 |
| Residential Energy | 64,230 | 83,090 | 109,650 |
| Solid Waste | 54,410 | 65,290 | 79,960 |
| Off-Road Equipment | 15,140 | 15,460 | 19,670 |
| Water and Wastewater | 2,410 | 2,890 | 3,540 |
| Light Rail | 1,070 | 1,320 | 1,620 |
| Total* | 642,050 | 754,680 | 875,730 |
| Percentage Growth | – | 18% | 36% |

** Due to rounding, the total may not equal the sum of component parts.*

**Figure A-2: Business-as-Usual Forecast by Sector**



## ADJUSTED BUSINESS-AS-USUAL FORECAST

The adjusted business-as-usual (adjusted BAU) forecast is an estimate of how state actions focused on renewable energy, building energy efficiency, low-GHG transportation fuels, and vehicle fuel efficiency will reduce emissions in Milpitas. This adjustment creates a more realistic estimate of the city's future emissions since the reductions will require little to no effort on behalf of the City. A general overview of these state reduction programs is presented below.

**California's Renewables Portfolio Standard (RPS):** California's Renewables Portfolio Standard (RPS) mandates that 33% of electricity delivered in California is generated by renewable sources like solar, wind, and geothermal by 2020. The California RPS was first codified in 2002 by Senate Bill 1078 (requiring 20% renewable electricity mix by 2010) and further strengthened in April 2011 with the adoption of Senate Bill X 1-2 (requiring 33% renewable electricity mix by 2020).

Technological and political challenges may prevent some investor-owned utilities from meeting the 33% target by 2020. In 2010, the California Public Utilities Commission, the agency responsible for regulating and tracking the progress of the RPS, reported that 18% of California's electricity came from renewable sources in 2010, missing the 20% goal by 2%. California utilities have more than enough renewable electricity under consideration to meet the 33% target by 2020. However, due to contract and transmission limitations, not all of this new electricity will be available in time.[3] Taking these issues into account, this document assumes a more conservative forecast of a 28% renewable mix by 2020.

**Pavley Vehicle Standards:** California's Pavley regulations were established by AB 1493 in 2002 and require new passenger vehicles to reduce tailpipe GHG emissions from 2009 to 2020. Reductions from the Pavley regulations were calculated using the methodology included in the EMFAC 2011 tool provided by the California Air Resources Board (CARB) and supported by the BAAQMD. Emissions reductions per model year and vehicle class were applied to Milpitas's transportation emissions.

**Low Carbon Fuel Standard (LCFS):** Codified by 2007 Executive Order S-01-07, the LCFS is intended to reduce the GHG intensity of transportation fuels 10% by 2020. Under the BAAQMD's CEQA threshold development guidance, the LCFS is likely to reduce emissions locally by only 7.2% due to the exclusion of up-stream emissions and reductions. LCFS reductions apply to both on-road transportation and off-road equipment.

**Title 24, Energy Efficiency Standards:** The 2008 Title 24 update went into effect on January 1, 2010. The energy reductions quantified in the forecast are the mandatory improvements over the 2005 Title 24 code that was established by the update. These are statewide standards applied at the local level by city agencies through project review. The 2008 Title 24 Energy Efficiency Improvements in comparison to 2005 baseline Title 24 efficiency standards are provided by the California Energy Commission (CEC).

[3] Ibid.

**California Solar Initiative (CSI):** The CSI is a state program that provides cash rebates for the installation of an electric solar panel system. In order to qualify, the customer must buy electricity from one of California's three investor-owned utilities (Pacific Gas and Electric, Southern California Edison, or San Diego Gas & Electric).

**Medium- and Heavy-Duty Efficiency Standards:** Fuel efficiency improvement for the vehicle classes not covered by Pavley translate to GHG reductions for medium- and heavy-duty vehicles. The guidance for quantification of these reductions comes from the December 2009 BAAQMD Proposed Thresholds of Significance.

### IMPACT OF STATE REDUCTION PROGRAMS

As shown in **Table A-5**, state reduction efforts are anticipated to reduce BAU emissions by 128,690 $MTCO_2e$ in 2020 and by 214,710 $MTCO_2e$ in 2035. The majority of these reductions are from the Pavley standards and cleaner energy production standards that PG&E is implementing pursuant to the statewide RPS. In comparison to the BAU scenario, 2020 emissions with state reduction measures are 3% below baseline 2005 levels rather than 18% above. Emissions in 2035 are 3% above baseline as opposed to 36% above in the BAU forecast.

**Table A-5: Adjusted Business-as-Usual Emissions Forecast**

| | 2020 $MTCO_2e$ | 2035 $MTCO_2e$ |
|---|---|---|
| BAU Emissions Forecast | 754,680 | 875,730 |
| Pavley Vehicle Standards | -63,570 | -106,910 |
| Low Carbon Fuel Standard | -28,730 | -32,570 |
| Medium/Heavy-Duty Vehicle Efficiency | -840 | -1,030 |
| Renewables Portfolio Standard | -27,360 | -45,530 |
| California Solar Initiative | -360 | -320 |
| Title 24 | -7,830 | -28,350 |
| Total State Reductions | -128,690 | -214,710 |
| Adjusted Growth Projection | 625,520 | 661,020 |
| Percentage Change From 2005 | -3% | 3% |

# APPENDIX B: REDUCTION MEASURE METHODS AND SOURCES

## OVERVIEW AND PURPOSE

This reduction measure methods and sources appendix summarizes data sources, assumptions, and performance metrics used to calculate GHG emissions reductions for the City's Climate Action Plan. The sources and metrics are organized by measure and rely on four primary types of data and research: (1) the City's GHG emissions inventory and forecast, (2) government agency tools and reports, (3) case studies in similar jurisdictions, and (4) scholarly research.

Further, the approaches to quantification are consistent with the guidance provided by the BAAQMD for development of a Qualified GHG Reduction Strategy. The baseline GHG inventory and forecast serve as the foundation for the quantification of the City's GHG reduction measures. Activity data from the inventory forms the basis of measure quantification, including vehicle miles traveled, kilowatt-hours (kWh) of electricity or therms of natural gas consumed, and tons of waste disposed. Activity data was combined with the performance targets and indicators identified by the City and PMC staff. Together, the metrics of activity data and performance targets and indicators were used throughout the quantification process to calculate the GHG reduction benefit of each measure. This approach ensures that the City's GHG reductions are tied to the baseline and to future activities that are actually occurring within the city.

### SUPPORTIVE MEASURES

Not all measures presented in **Chapter 4** will result in direct GHG emissions reductions. However, the implementation of these measures, commonly referred to as supportive measures, are essential to achieve the reported GHG reductions for quantified measures. For these reasons, the following measures are those with no reportable methods, metrics, and sources.

- Measure 1.3: Discretionary Project Review
- Measure 1.8: Online Energy Monitoring
- Measure 3.4: Municipal Best Practices in Renewable Energy
- Measure 4.1: Tiered Water Rates
- Measure 4.2: Recycled Water
- Measure 5.1: Increased Densities
- Measure 5.2: Urban Plazas
- Measure 5.3: Open Space
- Measure 6.2: BART-Friendly Environment
- Measure 6.3: Dense and Centralized Development
- Measure 7.1: Expanded City Parks
- Measure 7.2: Complete Streets
- Measure 7.3: Bikeways Master Plan Infrastructure
- Measure 7.4: Bikeways Master Plan Outreach
- Measure 7.5: Bicycle Parking
- Measure 8.3: Transit Education and Outreach
- Measure 8.4: Regional Transit Use
- Measure 9.1: Unbundled Parking Costs
- Measure 9.2: Nonresidential Parking Requirements
- Measure 10.2: Alternative Fueling Stations
- Measure 10.3: Electric Vehicle Partnerships
- Measure 10.5: Gas Tax
- Measure 10.6: BART Pedestrian Circulator

# APPENDIX B: REDUCTION MEASURE METHODS AND SOURCES

## TECHNICAL DATA FOR QUANTIFIED MEASURES

| Measure: | 1.1: Residential Energy Audits in Older Homes |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -3,930 |
| Assumed Reduction per Participant (2020): | 160 kWh and 10 therms per participating home |
| Performance Target(s) (2020): | Participation of 6,030 homes built before 1980 |
| Reduction Method: | Reductions in electricity and natural gas use from energy audits are assumed to follow those from an aggressive energy efficiency outreach program. The Bonneville Power Administration published a case study in 2011 that showed a 2–3% reduction in home energy use through outreach programs. Since an energy audit does not directly result in energy reductions, only the identification of energy efficiency and conservations measures, it is assumed that with this knowledge, homeowners will take low- to no-cost actions, like those highlighted in outreach programs, to reduce energy use.<br>Reductions are applied to a static target number of examples or representative homes, an assumed percentage of pre-1980 homes audited using grant funds, and a target percentage of pre-1980 homes audited through a business partnership program. |
| Reduction Sources: | BPA (Bonneville Power Administration). 2011. Residential Behavior Based Energy Efficiency Program Profiles 2011. http://www.bpa.gov/Energy/n/pdf/BBEE_Res_Profiles_Dec_2011.pdf. |

| Measure: | 1.2: Energy Upgrade California |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -10,360 |
| Assumed Reduction per Participant (2020): | 1,160 kWh and 390 therms saved per single-family home<br>2,330 kWh and 780 therms saved per multi-family unit |
| Performance Target(s) (2020): | 3,260 single-family homes and 630 multi-family units |
| Reduction Method: | Target participation rates for single-family and multi-family homes were applied to the number of homes in the baseline year to calculate the number of necessary retrofits to reach the participation targets. Baseline electricity and natural gas use was used for both single-family and multi-family homes using baseline energy use and 2005 households provided by the Association of Bay Area Governments (ABAG). The household number was broken out into single- and multi-family homes using the US Census Bureau's 2005–2007 American Community Survey. Metrics on the amount of energy saved per household participating in the Bay Area's Energy Upgrade California programs, known as Upgrade Bay Area, came from the 2012 ABAG report, titled "Retrofit Bay Area Final Report." |
| Reduction Sources: | ABAG (Association of Bay Area Governments). 2012. Retrofit Bay Area Final Report.<br>US Census Bureau. 2005–2007 American Community Survey 3-Year Estimates. |

# APPENDIX B: REDUCTION MEASURE METHODS AND SOURCES

| Measure: | 1.4: Energy Benchmarking |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -8,260 |
| Assumed Reduction per Participant (2020): | 2,050 kWh and 130 therms per home rated and retrofitted 31,340 kWh and 690 therms per nonresidential buildings rated and retrofitted |
| Performance Target(s) (2020): | 4,560 homes benchmarked and 1,140 homes audited and retrofitted<br>2,960 nonresidential buildings benchmarked and 740 nonresidential buildings audited and retrofitted |
| Reduction Method: | An estimated number of homes sales per year, based on common online sources, was applied to an assumed rate of energy benchmarking activity. Of these newly sold and rated homes, a certain percentage was assumed to go through a basic energy retrofit to see energy savings. A similar approach was used for nonresidential buildings. Savings from residential retrofits were derived from reported savings for homes in the Bay Area that went through the Energy Upgrade California program, and nonresidential savings came from the Brown et al. report cited below. |
| Reduction Sources: | ABAG (Association of Bay Area Governments). 2012. Retrofit Bay Area Final Report.<br>Brown, Rich, Sam Borgeson, Jon Koomey, and Peter Biermayer. 2008. U.S. Building-Sector Energy Efficiency Potential. Ernest Orlando Lawrence Berkeley National Laboratory, University of California. http://enduse.lbl.gov/info/LBNL-1096E.pdf.<br>Trulia, Inc. 2012. Milpitas Market Trends. http://www.trulia.com/real_estate/Milpitas-California/market-trends/. |

| Measure: | 1.5: Urban Cooling |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -950 |
| Assumed Reduction per Participant (2020): | 0.25 $MTCO_2e$ reduced from energy conservation and carbon sequestration per home participating in a tree planting program, 120 kWh per home participating in a cool roof program, and 300 kWh per new passive solar home |
| Performance Target(s) (2020): | Participation of 890 remodeled homes and 2,920 new homes in the tree planting guidelines, participation of 450 existing homes in passive cooling outreach programs, 220 remodeled homes installing cool roofs, and 730 new passive solar homes |

| Measure: | 1.5: Urban Cooling |
|---|---|
| Reduction Method: | Reductions from the tree planting ordinance were applied to both new and existing development. A growth rate was formed to estimate the number of new homes built from 2013 to 2020 and the added electricity (using the forecast use adjusted for Title 24). An assumed target participation rate for new homes and remodels of existing homes was applied to the forecast and baseline information. Reductions come from the cited source below for sequestration and energy conservation from shading benefits.<br>A target participation rate in an outreach program focused on cooling techniques was bundled with an assumed realization rate (percentage of those participating in outreach that will take the next step in cooling their home with passive devices). This effective percentage participation rate was applied to the kWh of cooling electricity (derived from the Residential Appliance Saturation Survey (RASS)) and the number of homes to gain the savings per home and total residential kWh saved.<br>Action D applies only to existing homes going through retrofits (an estimated 5% by 2020). A target utilization rate was applied to reflect the likelihood that not all homes would participate in the cool roof program. A 20% reduction in cooling-related electricity was provided though personal communication with SMUD staff and was applied to the effective number of participating homes.<br>Action E is applied only to new homes built between 2013 and 2020. An assumed participation rate was used with an assumed reduction in cooling electricity from using a passive solar design. |
| Reduction Sources: | Donovan, G., and D. Butry. 2009. The value of shade: Estimating the effect of urban trees on summertime<br>electricity use. Energy and Buildings 41: 662–668.<br>KEMA, Inc. 2010. 2009 California Residential Appliance Saturation Study, Volume 2: Results. CEC-200-2010-004.<br>SMUD (Sacramento Municipal Utilities District). 2012. "Cool Roofs." https://www.smud.org/en/residential/save-energy/rebates-incentives-financing/cool-roofs.htm. |

| Measure: | 1.6: Smart Grid Integration |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -180 |
| Assumed Reduction per Participant (2020): | 340 kWh and 10 therms per participating new home<br>3,090 kWh and 40 therms per participating new nonresidential building |
| Performance Target(s) (2020): | 840 new homes added between 2018 and 2020<br>100 new businesses added between 2018 and 2020 |
| Reduction Method: | A compounding annual growth rate was used to estimate the number of homes and businesses and the added energy use from 2018 to 2020. A common smart-grid appliance implementation rate of 95% was assumed for all new development from 2018 to 2020. Assumed reductions in electricity and natural gas use were applied to reflect the likely reductions from using smart-grid-enabled appliances. |
| Reduction Sources: | US Census Bureau. 2005–2007 American Community Survey 3-Year Estimates. |

| Measure: | 1.7: Appliance Upgrades |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -1,560 |
| Assumed Reduction per Participant (2020): | 160 kWh saved per existing single-family home<br>210 kWh saved per existing multi-family home<br>5,050 kWh and 120 therms reduced per existing business |
| Performance Target(s) (2020): | 3,260 existing single-family homes, 1,960 existing multi-family homes, and 880 existing businesses |
| Reduction Method: | Reductions from upgrading appliances were reported by the California Air Pollution Control Officers Association (CAPCOA) source cited below and were applied to an assumed number of participating single-family and multi-family households. A target utilization rate of 75% was applied to reflect the likelihood of homes not utilizing all possible forms of energy-efficient appliances. Nonresidential reductions were calculated using the California Commercial End-Use Survey (CEUS). A utilization rate was also applied to nonresidential reductions based on the likelihood that not all efficient appliances would be installed in all buildings. |
| Reduction Sources: | CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures.<br>Itron, Inc. 2007. California Commercial End-Use Survey – Results Page. http://capabilities.itron.com/CeusWeb/Chart.aspx. |

| Measure: | 2.1: Energy Efficiency in New Development |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -150 |
| Assumed Reduction per Participant (2020): | 10 kWh and 10 therms per new home<br>210 kWh and 30 therms per new average-size business |
| Performance Target(s) (2020): | 60 new single-family homes, 350 new multi-family homes, and 260 new average size businesses |
| Reduction Method: | Tier 1 and Tier 2 levels of CALGreen are improvements upon the existing Title 24 Building Code in California. These improvements were translated into pure energy reductions using the CAPCOA source cited below. Reductions shown for this measure reflect one year (2013) of required Tier 1 improvements for all new development followed by the Tier 2 standard for 2014–2020. In this case, both phases of tiers are assumed to have the same improvement beyond Title 24. |

| Measure: | 2.1: Energy Efficiency in New Development |
|---|---|
| Reduction Sources: | California Energy Commission. 2012. Proposed Energy Provisions of the California Green Building Standards Code. http://www.energy.ca.gov/title24/2013standards/green_building/documents/2012-09-20_webinar/2012-09-20_Webinar-Energy_Provisions_of_2013_Title_24_Part_11.pdf.<br>———. 2012. 2013 Building Energy Efficiency Standards. http://www.energy.ca.gov/title24/2013standards/rulemaking/documents/2012-5-31-Item-05-Adoption_Hearing_Presentation.pdf.<br>CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures.<br>Hexagon Transportation Consultants, Inc. 2011. Milpitas Climate Action Plan VMT Calculations.<br>Itron, Inc. 2007. California Commercial End-Use Survey – Results Page. http://capabilities.itron.com/CeusWeb/Chart.aspx.<br>KEMA, Inc. 2010. 2009 California Residential Appliance Saturation Study, Volume 2: Results. CEC-200-2010-004. |

| Measure: | 3.1: Renewable Energy in New Development |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -1,360 |
| Assumed Reduction per Participant (2020): | 19,960 kWh and 1,370 therms per new nonresidential building<br>5,040 kWh per participating new single-family home |
| Performance Target(s) (2020): | 20 new nonresidential facilities and 1,210 new single-family homes pre-wired for solar which install solar by 2020 |
| Reduction Method: | Energy use added from 2013 to 2020 was calculated for both nonresidential and residential sectors along with businesses and single family homes added for the same period. An assumed percent of nonresidential energy was attributed to be subject to this measure, i.e. the participation rate, of 5%. It was assumed that 5% of new nonresidential buildings would achieve 50% of their energy from renewable sources through the City's discretionary review process. It was also assumed that 25% of new single family homes would be pre-wired with solar capabilities and that 25% of those pre-wired homes would install an average size solar system by 2020. |
| Reduction Sources: | NREL (National Renewable Energy Laboratory). 2012. PVWatts Calculator. http://www.nrel.gov/rredc/pvwatts/. |

| Measure: | 3.2: Group Purchasing of Renewable Energy |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -7,290 |
| Assumed Reduction per Participant (2020): | 5,040 kWh per participating home |

| Measure: | 3.2: Group Purchasing of Renewable Energy |
|---|---|
| Performance Target(s) (2020): | 3,260 single-family and 630 multi-family homes participating in financing and bulk purchasing programs |
| Reduction Method: | Assumed participation rates for single-family and multi-family homes were assumed for both the financing and bulk-purchasing portions of this measure. An average system size was then used along with the NREL's PVWatts calculator to produce kWh of electricity produced from solar energy per year. |
| Reduction Sources: | NREL (National Renewable Energy Laboratory). 2012. PVWatts Calculator. http://www.nrel.gov/rredc/pvwatts/. |

| Measure: | 3.3: Voluntary Renewable Energy |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -2,600 |
| Assumed Reduction per Participant (2020): | 5,040 kWh per participating home |
| Performance Target(s) (2020): | 2,450 single-family and 320 multi-family homes installing solar systems |
| Reduction Method: | Assumed participation rates for the installation of solar systems in both single-family and multi-family homes were applied to baseline household and electricity use data. An average system size was then used along with NREL's PVWatts calculator to produce kWh of electricity produced from solar energy per year. |
| Reduction Sources: | NREL (National Renewable Energy Laboratory). 2012. PVWatts Calculator. http://www.nrel.gov/rredc/pvwatts/. |

| Measure: | 3.5: Model Power Purchase Agreement |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -3,950 |
| Assumed Reduction per Participant (2020): | 36,000 kWh per average-sized business |
| Performance Target(s) (2020): | 590 average-sized businesses |
| Reduction Method: | A target participation rate in the PPA and solar installation programs was applied to estimates of the number of businesses in Milpitas (derived from a 2007 US Census Bureau count of the number of firms in the city) to get the number of participating businesses. An average system size of 15 kW was applied to each participant, and the NREL's PVWatts calculator was used to calculate the total kWh produced by each system. |
| Reduction Sources: | NREL (National Renewable Energy Laboratory). 2012. PVWatts Calculator. http://www.nrel.gov/rredc/pvwatts/.<br>US Census Bureau. 2005–2007 American Community Survey 3-Year Estimates. |

| Measure: | 6.1: Transit Density |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -11,750 |
| Assumed Reduction per Participant (2020): | 360 VMT per home and 480 VMT per job |
| Performance Target(s) (2020): | 8,000 new transit riders working and/or living in Milpitas |
| Reduction Method: | Milpitas's business-as-usual VMT forecast included reductions in conventional VMT as a result of increased transit ridership. Further correspondence with Hexagon Transportation Consultants, Inc., resulted in pulling out a set number of transit VMT from the forecast and including them here. |
| Reduction Sources: | Hexagon Transportation Consultants, Inc. 2011. Milpitas Climate Action Plan VMT Calculations.<br>Hexagon Transportation Consultants, Inc. 2011. Personal Correspondence with At van den Hout. |

| Measure: | 6.4: Regional Arterials |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -600 |
| Assumed Reduction per Participant (2020): | 10 $MTCO_2e$ reduced per synchronized traffic intersection |
| Performance Target(s) (2020): | 60 intersections |
| Reduction Method: | The number of intersections in Milpitas was reported in the FY 2010 CAFR, cited below. The savings per synchronized signal was derived from a 2008 funding proposal by the City of San Jose. Using the number of signals to be synchronized in the projects and the reported future savings in fuel use, a factor of gallons saved per signal was calculated and applied to the City of Milpitas. The project outline in the City of San Jose funding proposal was 90% engineered at the time, leading to a high confidence in the reduction numbers reported and used. |
| Reduction Sources: | California Air Resources Board, et al. 2010. Local Government Operations Protocol.<br>City of Milpitas. 2010. Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2010.<br>City of San Jose. 2008. Proposition 1B Traffic Light Synchronization Program Application for Traffic Signal Communications and Synchronization Project. http://www.sanjoseca.gov/transportation/supportFiles/tlsp/TLSP_APPLICATION.pdf.<br>CARB (California Air Resources Board). Climate Change Draft Scoping Plan – Measure Documentation Supplement. http://www.arb.ca.gov/cc/scopingplan/document/measure_documentation.pdf. |

# APPENDIX B: REDUCTION MEASURE METHODS AND SOURCES

| Measure: | 8.1: Transportation Demand Management |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -440 |
| Assumed Reduction per Participant (2020): | 210 miles reduced per participating commuter |
| Performance Target(s) (2020): | 6,010 single-occupant commuters participating in rideshare program |
| Reduction Method: | The total number of people who commute from Milpitas by driving alone was obtained from the US Census Bureau's 2005–2007 American Community Survey. An assumed participation rate was applied to get the number of drivers switching to a rideshare commuting program. A VMT reduction per participant was applied to show the savings from a rideshare program. |
| Reduction Sources: | Blake, Cindy. 2009. Rideshare Administrative Assistant. Lucky Bucks statistical data. November 3.<br>US Census Bureau. 2005–2007 American Community Survey 3-Year Estimates. |

| Measure: | 8.2: Car-Share Programs |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -3,790 |
| Assumed Reduction per Participant (2020): | 3,000 miles per participant per year |
| Performance Target(s) (2020): | 3,610 single-occupant commuters participating in car-share program |
| Reduction Method: | The total number of single-occupant commuters was retrieved from the US Census Bureau's American Community Survey. An assumed participation rate was applied. Participation in car-sharing programs in a typical region is 10–20% of residents living in neighborhoods suitable for car sharing, and perhaps 3–5% of those residents would car share rather than own a private vehicle ownership if the service were available (VTPI 2009). Car sharing is found to typically be used by residents that drive 6,000 miles a year or less. Reduction is approximately 50%, or 3,000 miles a year. |
| Reduction Sources: | City Car Share. n.d. Bringing Car-Sharing to Your Community. http://www.citycarshare.org/download/CCS_BCCtYC_Long.pdf.<br>VTPI (Victoria Transport Policy Institute). 2008. TDM Encyclopedia. Ridesharing. http://www.vtpi.org/tdm/tdm34.htm. |

| Measure: | 10.1: Parking for Low-Emissions Vehicles |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -2,800 |
| Assumed Reduction per Participant (2020): | 4.6 $MTCO_2e$ reduced per electric vehicle charging station parking spot installed |
| Performance Target(s) (2020): | 1,220 additional electric vehicle charging station parking spots |

| Measure: | 10.1: Parking for Low-Emissions Vehicles |
|---|---|
| Reduction Method: | Reductions are assumed to come from an aggressive outreach program focused on electric vehicle fleet conversion and the setting aside of parking spots for electric and other low-emissions vehicles. An assumed mileage driven per parking spot per year metric was used to estimate the emissions associated with one nonresidential parking spot per year. The difference between these emissions and the emissions associated with driving an electric or low-emissions vehicle is the reduction reported for the measure. |
| Reduction Sources: | Plug-In Cars. 2010. Nissan LEAF Finally Gets Official EPA Fuel Economy Label. http://www.plugincars.com/nissan-leaf-finally-gets-official-epa-label-106486.html. |

| Measure: | 10.4: Residential Electric Vehicle Charging |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -790 |
| Assumed Reduction per Participant (2020): | 2,060 fossil fuel–powered VMT per household |
| Performance Target(s) (2020): | 1,100 new homes pre-wired for electric vehicles |
| Reduction Method: | The number of vehicle miles traveled (VMT) within Milpitas on local roads, assumed to be the most common use for an electric vehicle (EV), was collected from Table 2 of the Hexagon memo cited below. An assumed participation rate for pre-wiring and a further rate for pre-wired homes utilizing EVs were used to calculate the total savings. Per household savings assume that the internal trips on local roads are replaced completely by EVs. |
| Reduction Sources: | ABAG (Association of Bay Area Governments). 2009. Projections 2009.<br>Hexagon Transportation Consultants, Inc. 2011. Milpitas Climate Action Plan VMT Calculations. |

| Measure: | 11.1: Waste Diversion |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -9,200 |
| Assumed Reduction per Participant (2020): | 0.4 tons of food waste per participating customer<br>1.5 tons of C&D waste per new construction project |
| Performance Target(s) (2020): | 6,020 customers participating in food waste collection program and 40% of new construction projects |

# APPENDIX B: REDUCTION MEASURE METHODS AND SOURCES

| Measure: | 11.1: Waste Diversion |
|---|---|
| Reduction Method: | For the food waste collection action focused on the community, an assumed participation rate of 5% was applied, along with the percentage of waste which was food, to calculate the tons of food waste disposed of in 2005. A factor utilized in the quantification of existing measures was used to calculate the amount of $MTCO_2e$ offset by composting food waste and not disposing of it in a landfill. Implementation is based on a target percentage of restaurants participating.<br>The number of restaurants in the city was estimated using a focused search of yelp.com. An assumed number of employees per restaurant was applied so that the CIWMB's tons per employee per day figure could be better utilized. Table SW-1.3 of CAPCOA was used to calculate the tons of food waste from total tons. A factor utilized in the quantification of existing measures was used to calculate the amount of $MTCO_2e$ offset by composting food waste and not disposing of it in a landfill. Implementation is based on a target percentage of restaurants participating.<br>For the C&D ordinance action, the amount of waste disposed in 2020 was used because it is based on future growth and is more accurate for the future C&D generation from growth in Milpitas. The amount of waste from C&D, as a percentage of total, came from the CARB Landfill Emissions Tool v1.2. A compliance rate of 95% was applied to the 75% diversion rate to calculate the effective diversion rate of 71%. The CARB Landfill Emissions Tool was used again to calculate how much $MTCO_2e$ is emitted per each ton of C&D waste disposed. This factor was applied to the tons of C&D diverted in 2020 to calculate the total GHG benefit of the ordinance. |
| Reduction Sources: | CIWMB (California Integrated Waste Management Board). 2006. Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups.<br>CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures.<br>California Air Resources Board. Landfill Emissions Tool. V1.2. http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm<br>Haight, M. 2005. "Assessing the environmental burdens of anaerobic digestion in comparison to alternative options for managing the biodegradable fraction of municipal solid wastes." Water Science & Technology (52): 553–559. |

| Measure: | 12.1: Lawn and Garden Equipment |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -250 |
| Assumed Reduction per Participant (2020): | 0.08 $MTCO_2e$ per lawn mower replaced and 0.04 $MTCO_2e$ per leaf blower replaced |
| Performance Target(s) (2020): | 680 conventional leaf blowers and 2,670 conventional lawn mowers replaced with electric versions |
| Reduction Method: | The GHG reduction potential of switching leaf blowers and lawn mowers to electric from gasoline or diesel will result in decreased fuel consumption and air pollution but will also result in a small increase in electricity use to power this equipment. The net difference between the original emissions of those converted pieces of equipment and the emissions from the added electricity use from conversion is represented here. |

| Measure: | 12.1: Lawn and Garden Equipment |
|---|---|
| Reduction Sources: | BAAQMD (Bay Area Air Quality Management District). 2010. History of Air District: 1995–2000. http://www.baaqmd.gov/Divisions/Communications-and-Outreach/News-Media-and-Features/History-of-Air-District-2005/1995--2000.aspx.<br>CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures.<br>CARB (California Air Resources Board). 2007. Off-Road Software. |

| Measure: | 12.2: Construction Best Management Practices |
|---|---|
| 2020 Emissions Reductions ($MTCO_2e$): | -4,010 |
| Assumed Reduction per Participant (2020): | 5% to 9% reduction in emissions per piece of equipment |
| Performance Target(s) (2020): | 40% of construction equipment comply with applicable best management practices |
| Reduction Method: | A target conversion rate to alternative fuels of 40% was assumed for all construction equipment used in Milpitas. An even distribution was used for the four fuels listed in the measure, meaning each will have a market penetration of 10%. Emissions factors from Table 4 in the EPA report "Potential for Reducing Greenhouse Gas Emissions in the Construction Sector" were used to calculate the reduction from converting diesel vehicles to CNG fuel; Table 5 was used for conversion to biodiesel and assumed reductions were used for electric and hybrid conversions. |
| Reduction Sources: | EPA (US Environmental Protection Agency). 2009. Potential for Reducing Greenhouse Gas Emissions in the Construction Sector. http://www.epa.gov/sectors/pdf/construction-sector-report.pdf. |

# APPENDIX C: DEVELOPMENT CHECKLIST

## DEVELOPMENT CHECKLIST

The following checklist has been developed to assist project applicants and City staff to determine whether a proposed project complies with the Climate Action Plan.

If the proposed project's expected GHG emissions were not considered in the GHG emissions 2020 and 2035 forecast included in **Appendix A** of the CAP, this checklist is provided for informational use but may not preclude preparation of separate GHG analysis for the project. Examples of projects that may not be incorporated into the City's forecast include stationary source emissions regulated by the Bay Area Air Quality Management District, General Plan amendments, new specific plans that exceed the City's proposed population and job growth forecasts, and GHG emissions used in specific manufacturing processes that are not easily tracked at a community-wide level.

### PROJECT DESCRIPTION/CHARACTERISTICS

Please identify the applicable land uses included in the proposed project and provide a brief description of the proposed project (or the project description to be used for the associated environmental document).

Identify the applicable land uses:

☐ Residential ☐ Commercial ☐ Industrial ☐ Manufacturing ☐ Other

Project Description:

# APPENDIX C: DEVELOPMENT CHECKLIST

### AMENDMENTS REQUESTED

Does the project require an amendment to any of the following planning documents?

General Plan: ☐ Yes ☐ No ☐ Not Sure

Midtown Specific Plan: ☐ Yes ☐ No ☐ Not Sure

Transit Area Specific Plan: ☐ Yes ☐ No ☐ Not Sure

### GHG EMISSIONS INCORPORATED WITHIN CITY GHG FORECAST

Was this project, and its potential GHG emissions sources, considered in the City's GHG inventory and forecast?

☐ Yes ☐ No ☐ To be determined by staff

### PROJECT SOURCES OF GHG EMISSIONS CONSIDERED IN CITY INVENTORY

Identify the activities and sources of GHG emissions anticipated by the proposed project during either the construction or operational phases of the project.

| Potential GHG Emissions Sources: | | |
|---|---|---|
| ☐ Electricity Use | ☐ Res./Comm./Ind. Waste | ☐ Gasoline or Diesel Use |
| ☐ Natural Gas Use | ☐ Wastewater Disposal | ☐ Transportation (On-Road) |
| ☐ Const. & Demolition Waste | ☐ Water Use | ☐ Off-Road Equipment |
| ☐ Other _____ | | |

### ESTIMATED GHG EMISSIONS

If a GHG emissions analysis has been prepared for the proposed project, please provide the estimated GHG emissions for the project below or as an attachment to this worksheet.

Annual Construction Emissions: _____ $MTCO_2e$

Annual Operational Emissions: _____ $MTCO_2e$

# APPENDIX C: DEVELOPMENT CHECKLIST

## APPLICABLE MEASURES/COMPLIANCE

Identify in the checklist below the applicable measures that will be implemented as part of the proposed project to demonstrate consistency with the City's Climate Action Plan.

### Required Measures

This list includes measures and actions included in the CAP that are (1) required to be included in the project design and implementation and( 2) currently being implemented by the City. By following these two conditions and meeting the requirements identified below, the project demonstrates consistency with the CAP. As the City implements additional CAP measures, they will be added to this list.

| Measure | Action | Applicability | Compliance* |
|---|---|---|---|
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |

** All measures that are considered applicable on this list are required to be implemented in order to demonstrate consistency with the CAP.*

## RECOMMENDED MEASURES

This list includes measures and actions identified in the CAP, or programs and regulations that have yet to be adopted by the City, which would apply to a project of this type. These measures should be included in the project design as feasible and, once implemented or adopted by the City, be included in the list of required measures above.

| Measure | Action | Applicability | Compliance* |
|---|---|---|---|
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |

** All measures considered applicable on this list should be considered for implementation in order to demonstrate consistency with the CAP.*

## OTHER GHG REDUCTION MEASURES IMPLEMENTED

List and describe any additional measures that this project will incorporate to reduce GHG emissions that are not included in the CAP. If available, provide the estimated GHG reductions that would occur on an annual basis from implementing the measure, in $MTCO_2e$.

| Additional Measure | Estimated Annual GHG Reductions ($MTCO_2e$) |
|---|---|
| | |
| | |
| | |
| | |

# Appendix D: City Council Resolution Adopting the CAP

To be inserted in the Final Climate Action Plan.

CITY OF MILPITAS

CALIFORNIA

INCORPORATED

JANUARY 26, 1954

Page 1-4

## Relationship to the General Plan and California Environmental Quality Act

The City has developed the CAP to serve as a strategic planning document. While achieving GHG reductions, the CAP also implements objectives of numerous local planning documents and statewide regulations. The CAP is a stand-alone policy and implementation item coordinated with the adopted General Plan. The City will adaptively manage the CAP over time, maintaining flexibility to update the CAP as opportunities shift and new resources emerge.

### Coordination with the General Plan

The Milpitas General Plan identifies energy efficiency, waste reduction, and efficient land use as priorities for the City. Numerous General Plan policies and recommendations in other planning documents would reduce GHG emissions. In turn, CAP measures, policies, and actions to reduce community-wide GHGs are aligned with General Plan goals and policies.

The CAP also supports Milpitas's specific and master plans. Amendments to the General Plan in 2013 prioritize the residential development of the Midtown and Transit Area Specific Plan, presenting the City's policy to not consider the conversion to residential uses of other areas until achieving 80% buildout of the Midtown and Transit Area Specific Plans (see Implementing Policy 2.a-I-2 of the General Plan). Through implementation of these plans, the City has already made significant progress to reduce future GHG emissions. The beneficial effects of these efforts are presented in both the City's emissions growth forecast in **Chapter 2** and in the existing measures section of **Chapter 4.**

Page 4-11

### MEASURE 2.1: ENERGY EFFICIENCY IN NEW DEVELOPMENT

ENCOURAGE NEW DEVELOPMENT AND REMODELS TO EXCEED MINIMUM BUILDING STANDARDS FOR ENERGY EFFICIENCY AND CONTINUE IMPLEMENTATION OF THE ADOPTED GREEN BUILDING ORDINANCE.

### Actions

A. Incentivize new development to exceed minimum building standards through permit fee reductions.

B. Consider the development of an equipment lease-to-own program to offset the cost of energy-efficient equipment purchases.

C. Continue to require new multi-family buildings to complete a LEED or Green Point Rated checklist [Milpitas Municipal Code (MMC) II-20-3.01(a)].

D. ~~In addition to CALGreen Tier 1 energy efficiency requirements, n~~ New nonresidential construction between 25,000 and 49,999 gross square feet must still obtain LEED certification (with verification) (MMC II-20-3.01(b)). New nonresidential construction or renovations greater than or equal to 50,000 gross square feet must be verified as LEED silver (MMC II-20-3.01(c)). Construction or renovations of municipal buildings greater than or equal to 50,000 square feet must be LEED silver (MMC II-20-3.01(d)).

Page 4-24

### MEASURE 9.1: UNBUNDLED PARKING COSTS

UNBUNDLE PARKING COSTS FROM HOUSING AND NONRESIDENTIAL BUILDING COSTS.

Actions

A. Revise development standards for multi-family and mixed-uses to separate parking costs from the cost to rent, purchase, or lease residential and nonresidential buildings to incentivize use of alternative transportation modes.

Page 4-25

### MEASURE 10.1: PARKING FOR LOW-EMISSIONS VEHICLES

REVISE PARKING STANDARDS FOR PUBLIC AND NONRESIDENTIAL DEVELOPMENT TO INCLUDE DESIGNATED STALLS FOR LOW-EMISSIONS, FUEL-EFFICIENT VEHICLES AND CARPOOL/VANPOOL VEHICLES ~~FOR A MINIMUM OF 10% OF NEW PARKING CAPACITY~~.

Actions

A. Revise development standards.

E. Provide materials to support developers in obtaining and providing charging stations.

F. Investigate the possibility of facilitating a large-scale group buy of charging stations and other equipment on behalf of developers.

G. Provide a parking reduction ratio of one-to-one for every percentage of total parking spots designated for low-emitting, fuel-efficient vehicles.

H. Pre-wire stalls for electric vehicle charging stations for 2% of new parking capacity

Page 4-26

### ~~MEASURE 10.5: GAS TAX~~

~~INVESTIGATE ADOPTION OF A LOCAL GAS TAX TO CREATE FUNDING TO PROVIDE REBATES FOR CLEAN FUEL INFRASTRUCTURE AND/OR VEHICLES IN MILPITAS.~~

~~Actions~~

~~A. Work with regional partners to identify opportunities to create a model ordinance and rate structure.~~

~~B. Monitor regional and state efforts to implement similar programs.~~

Page 4-27

### MEASURE 10.~~6~~ 5: BART STATION PEDESTRIAN CIRCULATOR

INVESTIGATE THE FEASIBILITY OF A PEDESTRIAN CIRCULATOR AROUND THE BART STATION.

ACTIONS

A. Study the feasibility of a pedestrian circulator around the BART station.

B. Pursue funding sources from BART, VTA and/or Metropolitan Transportation Commission.

Page 5-1

## APPLICABILITY

For discretionary projects seeking to use CEQA streamlining provisions, the City may require measures in this CAP as mandatory conditions of approval or as mitigation identified in a mitigated negative declaration or in an environmental impact report, as feasible ~~appropriate~~, on a project-by-project basis. This approach allows the City to ensure that new development can benefit from CEQA streamlining provisions while also ensuring that the City can achieve the reduction targets outlined in this plan.

Furthermore, as a programmatic tiering document under CEQA, the CAP will be the City's one-stop shop for greenhouse gas analysis and mitigation under CEQA. This CAP does not identify measures as mandatory or voluntary. Rather, the City will ensure appropriate use of the CAP for CEQA streamlining by maintaining the prerogative to identify appropriate mandatory and voluntary measures to integrate into project design or mitigation ~~on a project-by-project basis~~. The City will recommend inclusion of all feasible and applicable measures on a project-by-project basis. The City will use the development checklist described below to identify appropriate measures. City staff will also ~~and~~ work with project applicants to determine the appropriate use of the CEQA benefits of the Climate Action Plan.

Page 6-10

**Table 6-1: Implementation Plan**

| Measure | | Time Frame | Responsible Department | Existing City Policies | Potential Regional Programs, Example Partners | Resources |
|---|---|---|---|---|---|---|
| ~~10.5~~ | ~~Gas Tax~~ | ~~Mid-Term~~ | ~~Planning & Neighborhood Services~~ | ~~None~~ | | |
| 10.~~6~~ 5 | BART Station Pedestrian Circulator | Long-Term | Planning & Neighborhood Services | CE 3.d-G-7 | BART,VTA, MTC | |

Page B-1

## Supportive Measures

Not all measures presented in **Chapter 4** will result in direct GHG emissions reductions. However, the implementation of these measures, commonly referred to as supportive measures, are essential to achieve the reported GHG reductions for quantified measures. For these reasons, the following measures are those with no reportable methods, metrics, and sources.

- Measure 1.3: Discretionary Project Review
- Measure 1.8: Online Energy Monitoring
- Measure 3.4: Municipal Best Practices in Renewable Energy
- Measure 4.1: Tiered Water Rates
- Measure 4.2: Recycled Water
- Measure 5.1: Increased Densities
- Measure 5.2: Urban Plazas
- Measure 5.3: Open Space
- Measure 6.2: BART-Friendly Environment
- Measure 6.3: Dense and Centralized Development
- Measure 7.1: Expanded City Parks
- Measure 7.2: Complete Streets
- Measure 7.3: Bikeways Master Plan Infrastructure
- Measure 7.4: Bikeways Master Plan Outreach
- Measure 7.5: Bicycle Parking
- Measure 8.3: Transit Education and Outreach
- Measure 8.4: Regional Transit Use
- Measure 9.1: Unbundled Parking Costs
- Measure 9.2: Nonresidential Parking Requirements
- Measure 10.2: Alternative Fueling Stations
- Measure 10.3: Electric Vehicle Partnerships
- ~~Measure 10.5: Gas Tax~~
- Measure 10.~~6~~5: BART Pedestrian Circulator

Page C-2

## ~~Estimated GHG Emissions~~

~~If a GHG emissions analysis has been prepared for the proposed project, please provide the estimated GHG emissions for the project below or as an attachment to this worksheet.~~

~~Annual Construction Emissions: _____ $MTCO_2e$~~

~~Annual Operational Emissions: _ $MTCO_2$~~

**AGENDA ITEM: IX-2**

# 2-D

# MILPITAS PLANNING COMMISSION AGENDA REPORT

**PUBLIC HEARING** Meeting Date: April 10, 2013

**APPLICATION:** **GENERAL PLAN AMENDMENT NO. GP13-0002: CLIMATE ACTION PLAN**

APPLICATION SUMMARY: This Climate Action Plan (CAP) is designed to streamline environmental review of future development projects in the City of Milpitas consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) and the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction target of 15% below 2005 emissions levels by 2020.

LOCATION: Citywide

**RECOMMENDATION:** **Staff recommends that the Planning Commission:** Adopt Resolution No. 13-014 recommending approval of the project to the City Council.

CEQA Determination: A Negative Declaration has been circulated for public comment.

PLANNER: Sheldon S. Ah Sing, Senior Planner

ATTACHMENTS:
A. Resolution No. 13-014
B. Project Initial Study/Negative Declaration
C. Draft Climate Action Plan
D. Study Session Meeting Minutes (March 20, 2013)

## BACKGROUND

Acknowledging some of the climate change issues, the State of California adopted the Global Warming Solutions Act of 2006, also known as AB 32. The law requires the California Air Resources Board (CARB) to develop regulatory and market mechanisms that will reduce greenhouse gas emissions to 1990 levels by 2020
.
In December 2008, CARB approved the AB 32 Scoping Plan outlining regulatory and market mechanisms to achieve the goal of AB 32. The plan cites local government action as an integral partner to achieving the State's goals. A number of other legislative actions support AB 32 and the overall focus on energy efficiency and climate change.

The Bay Area Air Quality Management District (BAAQMD) established new California Environmental Quality Act (CEQA) thresholds in 2010 regarding greenhouse gas (GHG) emissions. As a result some discretionary projects would exceed these established thresholds and require further environmental documentation unless the project was consistent with adopted Climate Action Plan or qualified greenhouse reduction strategy.

This Climate Action Plan (CAP) is designed to streamline environmental review of future development projects in the City of Milpitas consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) and the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction target of 15% below 2005 emissions levels by 2020.

## PROJECT DESCRIPTION

This report provides an overall summary of the project because the Climate Action Plan or Qualified GHG Reduction Strategy (used interchangeably) includes greater detail and is organized in such as way to be straightforward.

### *Project Kick Off*

The project began using work that was already previously completed, such as the Municipal GHG Emissions inventory from 2005. The City had a budget of $100,000 to complete the project and reviewed Requests for Proposals from consulting firms that could provide the City with the technical expertise to draft a qualified greenhouse gas reduction strategy. In addition, the City received a grant from the Santa Clara Valley Transportation Authority which paid for approximately 60% of the cost of the project. PMC was chosen through a competitive process to assist the City with the project. Thus the project was launched in 2011.

### *Inventory and Reduction Target*

*Inventory*

A GHG emissions inventory (Inventory) lays the groundwork for the entire CAP planning process. This Inventory catalogues GHG emissions for 2005 and projects emissions levels for 2020. To comply with state guidance, the CAP identifies an emissions reduction target for the forecast year (see Chapter 3 of the CAP). The difference between the emissions projection and the reduction target represents the necessary reduction in the amount of GHG emissions and sets

the focus for the reduction measures presented in Chapter 4 of the CAP. Additional information on the Inventory is provided in Appendix A of the CAP.

In 2005, the Milpitas community emitted approximately 744,150 $MTCO_2e$. **Table 1** below reports these emissions by sector and ranks the sectors from highest to lowest.

**Table 1:**
**Baseline Greenhouse Gas Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 43% |
| Nonresidential | 183,800 | 25% |
| Residential | 64,230 | 9% |
| Stationary Sources | 101,480 | 14% |
| Solid Waste | 54,410 | 7% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |
| Direct Wastewater | 620 | <1% |
| Total | 744,150 | 100% |

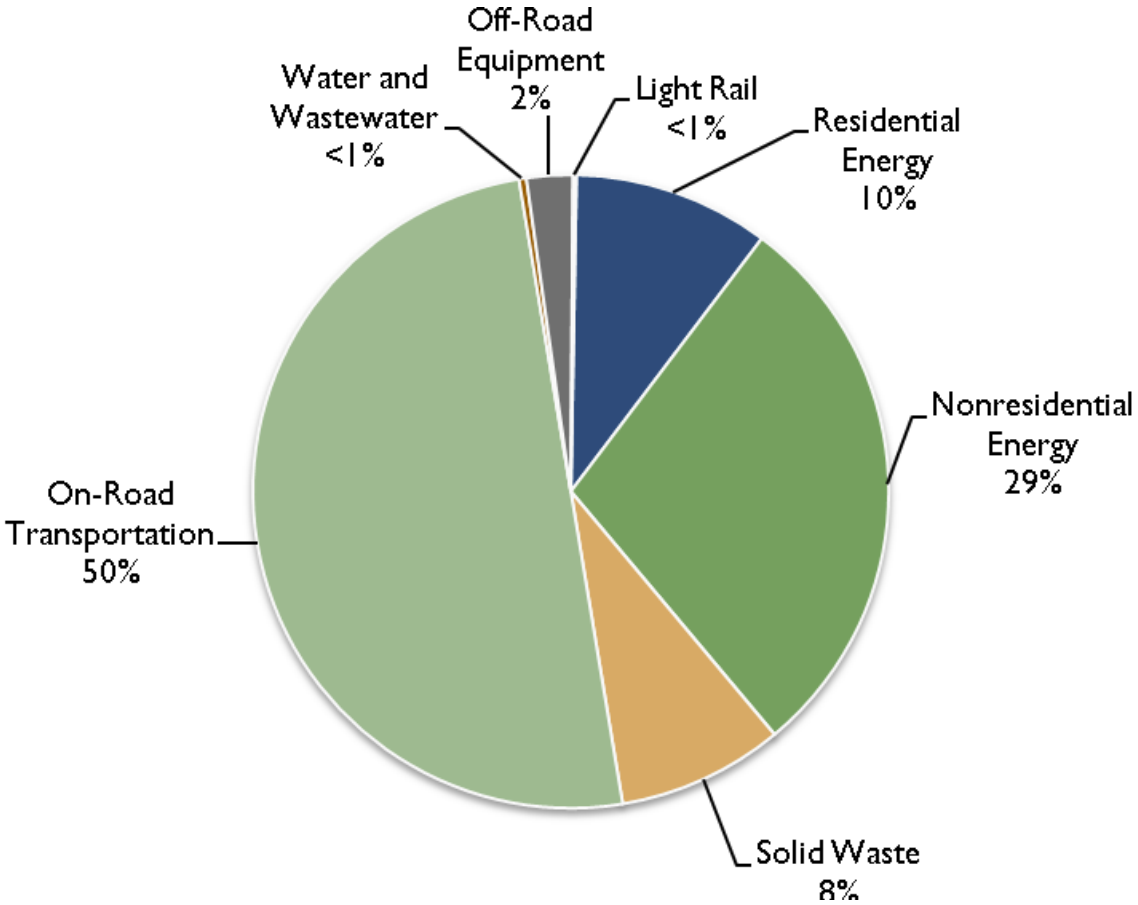
The baseline inventory guides future local policy decisions that relate to emissions within the City's influence; therefore, stationary sources, direct landfill emissions, and direct wastewater emissions are excluded from further discussion. **Table 2** and **Figure 1** reflect Milpitas's jurisdictional baseline of 642,050 $MTCO_2e$.

**Table 2:**
**Jurisdictional Baseline Greenhouse Gas Emissions by Sector**

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Transportation | 320,990 | 50% |
| Nonresidential Energy | 183,800 | 29% |
| Residential Energy | 64,230 | 10% |
| Solid Waste | 54,410 | 8% |
| Off-Road Equipment | 15,140 | 2% |
| Water and Wastewater | 2,410 | <1% |
| Light Rail | 1,070 | <1% |

| | 2005 $MTCO_2e$ | Percentage of Total |
|---|---|---|
| Total | 642,050 | 100% |

**Figure 1:**
**Jurisdictional Baseline Emissions by Sector**




***Greenhouse Gas Emissions Forecast***
A GHG emissions forecast is an estimate of future GHG emissions based on anticipated changes in population, jobs, households, commercial activity, and driving patterns in the community. This forecast of community-wide emissions addresses 2020, the AB 32 horizon year. Two versions of the forecast are presented below—a business-as-usual (BAU) and a State-adjusted BAU (adjusted BAU) scenario.

*Business as Usual Forecast*
The BAU forecast estimates how emissions would grow over time without influence from state, regional, and local GHG reduction efforts. This BAU forecast assumes 2005 energy consumption and energy efficiency rates and incorporates demographic information from the Association of

Bay Area Governments (ABAG) 2009 regional population, household, and employment forecasts.

**Table 3:**
**Business-as-Usual Emissions Forecast, 2020**

| | 2005 $MTCO_2e$ | 2020 $MTCO_2e$ | Percentage Change |
|---|---|---|---|
| Transportation | 320,990 | 383,630 | 20% |
| Nonresidential Energy | 183,800 | 203,000 | 10% |
| Residential Energy | 64,230 | 83,090 | 29% |
| Solid Waste | 54,410 | 65,290 | 20% |
| Off-Road Equipment | 15,140 | 15,460 | 2% |
| Water and Wastewater | 2,410 | 2,890 | 20% |
| Light Rail | 1,070 | 1,320 | 23% |
| Total | 642,050 | 754,680 | 18% |

As shown in **Table 3**, without state or local action, emissions would grow 18% from 2005 to 2020. Energy emissions would grow the most among the sectors (39%). The next largest sector would be light rail, followed by transportation, solid waste, and water and wastewater, all of which are expected to increase 20%. Many of these increases result from planned residential development in coming years.

*Adjusted Business as Usual Forecast*
The adjusted business-as-usual (adjusted BAU) forecast estimates how state renewable energy, building energy efficiency, low-GHG transportation fuels, and vehicle fuel efficiency actions will reduce emissions in Milpitas. This adjustment creates a more realistic estimate of the city's future emissions since the reductions will require little to no effort on behalf of the City, yet count toward a locally established GHG emissions reduction target. A general overview of these state reduction programs is presented below. A more in-depth discussion is provided in Appendix B of the CAP.

As shown in **Table 4**, implementation of the above-listed state programs would reduce BAU emissions by 128,980 $MTCO_2e$ in 2020. Most of these reductions come from the Pavley standards and cleaner Pacific Gas and Electric (PG&E) energy pursuant to the RPS. Compared to the BAU scenario, 2020 emissions with state reduction measures would be 3% below baseline 2005 levels, rather than 18% above. Appendix B of the CAP provides a detailed look at the how each state GHG reduction program affects the individual inventory sectors.

**Table 4:**
**Summary of Adjusted Business as Usual Emissions Forecast**

| State Reduction Summary | | 2020 $MTCO_2e$ Reduction |
|---|---|---|
| BAU Emissions Forecast | | 754,680 |
| State Reductions | Pavley Vehicle Standards | -63,570 |
| | Low Carbon Fuel Standard | -28,730 |
| | Medium/Heavy-Duty Vehicle Efficiency | -840 |
| | Renewables Portfolio Standard | -27,360 |
| | California Solar Initiative | -360 |
| | Title 24 | -7,830 |
| Total State Reductions | | -128,980 |
| Adjusted BAU Emissions Forecast | | 625,520 |

***Reduction Target***
The GHG reduction target is the overarching goal of the CAP and an objective way to measure the success of the Qualified GHG Reduction Strategy. The purpose of the reduction target is to identify a level of community GHG emissions below which emissions would not be cumulatively considerable under the State and BAAQMD CEQA Guidelines.

Based on technical assessment for conditions in the Bay Area, the BAAQMD identified three thresholds for plan-level GHG analysis:

- Reduce emissions to 1990 levels by 2020;
- Reduce emissions 15% below baseline (2008 or earlier) emission levels by 2020; or
- Meet the plan efficiency threshold of 6.6 $MTCO_2e$ per service population. Additionally, the BAAQMD CEQA Guidelines identify an efficiency threshold for land use projects of 4.6 $MTCO_2e$ per service population.

*Milpitas Target*
This CAP establishes a local GHG reduction target of 15% below baseline 2005 emissions levels by 2020. This target serves as the City's cumulative level of significance for community-wide GHG emissions through 2020. The reduction target equates to a 96,300 $MTCO_2e$ reduction in community-wide GHGs from baseline 2005 levels by 2020. It will require a reduction of 79,780 $MTCO_2e$ from 2020 adjusted BAU forecast levels.

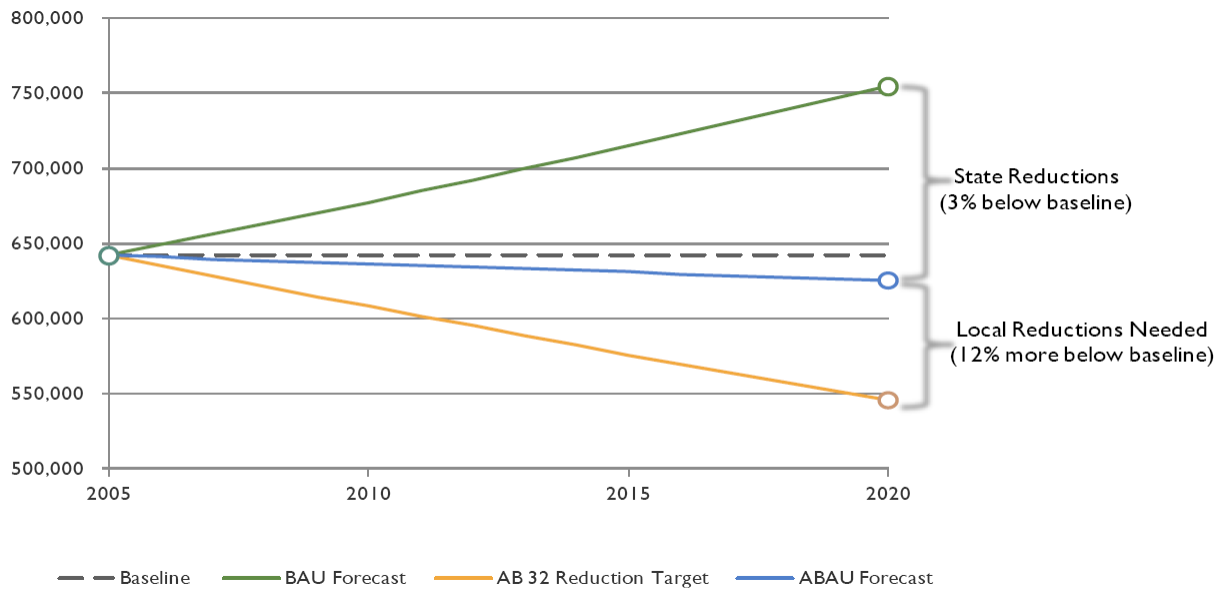
The CAP provides a road map to achieve this target in the context of planned growth and development. The City will close the gap between forecast emissions and the reduction target by implementing measures and actions identified in Chapter 4 of the CAP. **Table 5** and **Figure 2**

identify the 3% reduction from baseline emissions anticipated with implementation of state policies and programs, and the 12% gap that local GHG reduction measures will address to achieve the 15% reduction target.

**Table 5:**
**Greenhouse Gas Emissions Target and Necessary Local Reduction**

| | **2020 $MTCO_2e$** |
|---|---|
| Reduction Target (15% below baseline) | 545,740 |
| Adjusted Business-as-Usual Forecast | 625,520 |
| Local Reduction Needed to Reach Target | -79,780 |

**Figure 2:**
**Greenhouse Gas Emissions Target and Necessary Local Reduction**




**Reduction Measures**
Two categories of GHG reduction policies are presented in this CAP: (1) existing activities and (2) CAP measures and actions. Existing activities include projects or programs enacted since the 2005 baseline year, which will result in future GHG reductions and which existed before the creation of this CAP in 2013. Such projects include municipal solar and tree planting efforts, as well as existing requirements for energy efficiency in new development. CAP measures and actions were created for this document through a collaborative planning process. The City will implement these measures and actions through new and existing programs, standards for new development, and programs that improve the efficiency of existing development.

*Summary of Reductions*
**Table 6** summarizes anticipated $MTCO_2e$ reductions in 2020 from existing activities and CAP measures, illustrating how statewide policies in the adjusted BAU forecast and these local

actions will reduce GHGs by 16.2% (87,450 $MTCO_2e$) from baseline 2005 emission levels, exceeding the 15% reduction target by 2020.

**Table 6:**
**Summary of Total Greenhouse Gas Reductions and Progress Toward Target**

| | **2020 $MTCO_2e$** |
|---|---|
| Local Reductions Needed to Achieve 15% Target | -79,780 |
| Reductions Achieved (Existing + CAP Measures) | -87,450 |
| Percentage Below Baseline | -16.2% |

**Table 7** summarizes how the existing measures, each CAP goal topic, and individual reduction measures contribute to the 87,450 $MTCO_2e$ of GHG reductions in 2020. Energy measures are the largest contributor to GHG reductions, representing nearly half (40,580 $MTCO_2e$, 46%) of the anticipated reductions. Transportation and land use measures comprise 23% (20,170 $MTCO_2e$) of the anticipated reductions. Existing measures are the third largest reduction category, comprising about 15% (13,240 $MTCO_2e$) of the anticipated reductions. Solid waste measures (9,200 $MTCO_2e$, 11%) and off road equipment measures (4,260, 5%) make up the remaining reductions.

Energy

- Goal 1: increase energy efficiency and conservation in the City's existing building stock.
- Goal 2: implement innovative building standards to set the path toward zero net energy in new development.
- Goal 3: maximize the provision of local energy needs from renewable energy use in new and existing uses.
- Goal 4: demonstrate leadership in water conservation.

Transportation and Land Use

- Goal 5: provide an economically sustainable mixed-use community focused on high-density development around central urban plazas and gathering places.
- Goal 6: achieve an efficient transportation system integrated into distinct areas that meets the needs of all users.
- Goal 7: increase use of non-motorized transportation throughout the community.
- Goal 8: increase public transit ridership and ridesharing participation throughout the community.

- Goal 9: ensure an efficient public and private parking system communitywide.
- Goal 10: provide and support expansion of infrastructure for low-emitting and fuel-efficient vehicles.

Solid Waste

- Goal 11: reduce waste generation in the community by 2020.

Off-Road Equipment

- Goal 12: support the expansion and use of clean technology off-road equipment.

**Table 7:**
**Greenhouse Gas Reductions by Goal Topic**

| Topic | Goals/Category | 2020 $MTCO_2e$ by Goal | 2020 $MTCO_2e$ by Goal Topic |
|---|---|---|---|
| Existing Activities | Existing Activities | -13,240 | -13,240 |
| Energy | Goal 1: Energy Efficiency in Existing Development | -25,240 | -40,580 |
| | Goal 2: Energy Efficiency in New Development | -150 | |
| | Goal 3: Renewable Energy | -15,200 | |
| Water | Goal 4: Water Conservation | <-10 | <-10 |
| Transportation & Land Use | Goal 5: Mixed-Use Development | Supportive | -20,170 |
| | Goal 6: Transportation-Oriented Development | -12,350 | |
| | Goal 7: Bicycle- and Pedestrian-Oriented Development | Supportive | |
| | Goal 8: Ridesharing and Transit | -4,230 | |
| | Goal 9: Parking | Supportive | |
| | Goal 10: Alternative Fuels and Ridesharing | -3,590 | |
| Solid Waste | Goal 11: Solid Waste Diversion | -9,200 | -9,200 |
| Off-Road Equipment | Goal 12: Off-Road Equipment | -4,260 | -4,260 |
| Total Reductions | | | -87,450 |

*Reductions since 2005 Baseline*
The City of Milpitas has a proven history of developing and implementing GHG reduction activities. Emissions reductions from these activities will take place regardless of the development of the CAP. They are included in this plan because the City has not previously quantified them, and they count toward achievement of the GHG emissions reduction target. These measures also highlight how proposed CAP measures build upon existing efforts.

Existing efforts include "waste reduction", "new multi-family development", "Bikeways Master Plan", "Municipal solar power purchase agreement", "water conservation", "recycled water", and the City's "green building program".

**Table 8** summarizes anticipated GHG reductions in 2020 from these existing efforts. Nearly two-thirds of these reductions are attributed to the City's waste reduction efforts (8,740 $MTCO_2e$), and more than a quarter result from the large amount of planned multi-family development (3,440 $MTCO_2e$). The Bikeways Master Plan is expected to reduce GHG emissions by 590 $MTCO_2e$, and the City's solar PPA will reduce emissions by 270 $MTCO_2e$ in 2020.

**Table 8:**
**Greenhouse Gas Reduction Summary for Existing Activities, 2020**

| | **2020 $MTCO_2e$** |
|---|---:|
| Waste reduction | -8,740 |
| New multi-family development | -3,440 |
| Bikeways Master Plan | -590 |
| Municipal solar power purchase agreement | -270 |
| Water conservation | -190 |
| Recycled water | -10 |
| Total | -13,240 |

***Implementing the Plan***

*CEQA Streamlining*

For discretionary projects seeking to use CEQA streamlining provisions, the City may require measures in the CAP as mandatory conditions of approval or as mitigation identified in a mitigated negative declaration or in an environmental impact report, as appropriate, on a project-by-project basis. This approach allows the City to ensure that new development can benefit from CEQA streamlining provisions while also ensuring that the City can achieve the reduction targets outlined in this plan.

*Monitoring Progress*

Implementing the CAP will require City leadership to execute these measures and report on their progress. This CAP identifies the responsible department for each measure and offers time frames for implementing each strategy. Lastly, successful implementation requires regular reporting. Staff will monitor progress toward implementing the CAP on an annual basis and report progress to the City Council each year. Developing an implementation and monitoring tool will assist the City to track progress.

## ADOPTED PLANS AND ORDINANCES CONSISTENCY

***General Plan***
An amendment to the General Plan is proposed and will include reference to the reduction target and the CAP. However, there are limitations on the amount of times a General Plan can be amended in a calendar year, staff proposes delaying the amendment until it can be coupled with another pending General Plan amendment project (June 2013). This will not delay the effectiveness of the CAP.

## ENVIRONMENTAL REVIEW
The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). Staff determined that the project will not have a significant impact on the environment and therefore a Negative Declaration is prepared. An Initial Study and Negative Declaration was drafted and circulated between February 28 and March 19, 2013.

## PUBLIC COMMENT/OUTREACH
***Workshop***
The City held a public workshop on August 24, 2011 to describe the project and obtain comments from those interested. Comments were integrated into the public draft released on March 1, 2013.

***Stakeholder Consultation***
Planning staff and consultant met with representatives from the local Sierra Club chapter and the governmental affairs personnel from the Building Industry Association on March 6, 2013 to describe the CAP and receive comment. As a result of comments, a study session with the Planning Commission was scheduled for March 20, 2013.

***Planning Commission Work Session***
A work session was held on March 20, 2013 and resulted in a presentation to the Planning Commission regarding the Draft CAP. Comments were received from the public and the commission regarding the policies of the CAP. The minutes for the meeting are attached to this report.

***Upcoming Public Hearings***
It is expected that the City Council will evaluate the project on May 7, 2013.

## CONCLUSION
The proposed CAP is a result of collaboration of multiple stakeholders and city departments under the guidance of expert consultants that drafted a document which is consistent with the framework established by state law. The CAP will allow the streamlining of discretionary projects subject to CEQA and creates quantifiable goals.

## RECOMMENDATION
**STAFF RECOMMENDS THAT** the Planning Commission adopt Resolution No. 13-014 recommending approval of the project to the City Council.

*Attachments:*

A. Resolution No. 13-014
B. Project Initial Study/Negative Declaration
C. Draft Climate Action Plan
D. Work Session meeting minutes (March 20, 2013)

# APPROVED

## SPECIAL PLANNING COMMISSION MINUTES
**March 20, 2013**

**I. PLEDGE OF ALLEGIANCE**

**Chair Mandal** called the meeting to order at 7:00 P.M. and led the Pledge of Allegiance.

**II. ROLL CALL/SEATING OF ALTERNATE**

**Present:** Sudhir Mandal, Larry Ciardella, Garry Barbadillo, John Luk, Rajeev Madnawat, Zeya Mohsin, and Gurdev Sandhu

**Absent:**

**Staff:** Ah Sing, Hom, McHarris and DeHerrera

**Alternate Commissioner**: Demetress Morris

**III. PUBLIC FORUM**

**Chair Mandal** invited members of the audience to address the Commission on any topic not on the agenda, noting that no response is required from the staff or Commission, but that the Commission may choose to agendize the matter for a future meeting.

**Rob Means, Milpitas resident –** The Sunnyhills Neighborhood Association (SNA) is working to create an automated transit feeder (personal rapid transit system) from their neighborhood to the future BART station. This type of transit system could help curb car usage within the city. The SNA is asking for the City's assistance and they would like to work with the City to secure the needed funding.

**IV. APPROVAL OF MINUTES**

**Chair Mandal** called for approval of the February 27, 2013 minutes of the Planning Commission.

There were no changes to the minutes.

**Motion to approve the Planning Commission minutes as submitted.**

M/S: Sandhu / Madnawat

AYES: 6

NOES: 0

ABSENT: 1 (Ciardella)

ABSTAIN: 0

**V. ANNOUNCEMENTS**

**Steven McHarris, Planning Director –** Staff wanted to remind the commissioners: 1) The 2013 Commissioner's Recognition luncheon will be held Saturday, April 13, 2013 at the Milpitas Community Center. RSVP is due by April 5, 2013. 2) There is an opportunity for commissioner training to be held locally and at no cost. This is a four part series to commence this Saturday, March 23, 2013 and would be very beneficial for all commissioners. Reservations are needed.

**Vice-Chair Ciardella** – The League of California Cities put on an excellent training program and is worth attending. Vice-Chair also shared a letter from the Leukemia & Lymphoma Society asking for any support towards further research to help end blood cancers. The website for donations is mwoy.org

**VI. CONFLICT OF**

**Steven McHarris, Planning Director,** asked if any member of the Commission has any

**INTEREST**

personal or financial conflict of interest related to any of the items on tonight's agenda.

**There were no Commissioners who identified a conflict of interest.**

**VII. APPROVAL OF AGENDA**

**Chair Mandal** asked whether staff or the Commission have any changes to the agenda.

There were no changes to the agenda.

**Motion to approve the March 20, 2013 agenda as submitted**.

M/S Ciardella / Mohsin

AYES: 7

NOES: 0

ABSENT: 0

ABSTAIN: 0

**VIII. CONSENT CALENDAR**

Consent calendar items are considered to be routine and may be approved in one motion at the discretion of the Chair. **For public hearing items, prior to actual Commission consideration, the Chair may open the public hearing and ask if anyone present wishes to discuss any consent calendar items. There will be no discussion of consent calendar items unless a member of the audience or the Commission asks to have the item removed from the consent calendar.** Persons who want to speak on any item on the consent calendar should come forward now and ask to have that item removed from the consent calendar. **Any items removed will be discussed in the order arranged by the Chair**

**VIII-1**

**SITE DEVELOPMENT PERMIT SD13-0004**

A request to install 8-foot tall perimeter fencing for an industrial building located at 1656 McCarthy Blvd. (APN 86-03-064), zoned Industrial Park with Site and Architectural Overlay. Applicant: Terry Stanley.

***(Recommendation – Adopt Resolution No. 13-007 approving the project with conditions)***

**Cindy Hom, Assistant Planner**, confirmed that the Fire Department did review the project and approved it. The Police Department also reviewed the plans and they do have access in case of an emergency. There are other sites within the city that also have similar type of security fencing.

**VIII-2**

**SITE DEVELOPMENT PERMIT AMENDMENT NO. SA12-0009**

A request to amend an existing sign program to allow for an additional sign location and increase in the letter height on secondary signs for the Hillview Professional Business Park Center located at 890 Hillview Court (APN 28-26-004), zoned Town Center with Site and Architectural Overlay (TC-S). Applicant Joe DiChoso.

***(Recommendation – Adopt Resolution No. 13-008 approving the project with conditions)***

**Motion: Approve the two items on the consent calendar as presented with**

**conditions of approval – Resolution Nos. 13-007 and 13-008.**

M/S: Madnawat / Barbadillo

AYES: 7

NOES: 0

ABSENT: 0

ABSTAIN: 0

**IX. PUBLIC HEARING** **There were no public hearing items on the agenda**

**X. UNFINISHED BUSINESS**

**Sheldon Ah Sing, Senior Planner.** Tonight's presentation is a study session for the proposed Climate Action Plan**.** The Milpitas Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy [known here foreword as the Milpitas Climate Action Plan (CAP) establishes strategies for reducing municipal and community-wide greenhouse gas (GHG) emissions. The CAP is a proactive strategy document that enables the City to maintain local control of implementing State direction (AB 32 – the California Global Warming Solutions Act) to reduce GHG emissions to 1990 levels by 2020. Proposed GHG reduction strategies align with existing General Plan policies.

Some benefits of the Climate Action Plan are: One stop for CHG analysis and mitigation under CEQA; Transparency in the review process; Outlines appropriate measures for new projects; identification of preferred GHG mitigation strategies; streamlined CEQA review for projects consistent with CAP.

The project was launched in 2011 and the City was awarded a grant from VTA to defray 60% of the cost and 40% is from RDA money. There has been public outreach with on-going consultation with the Bay Area Air Quality Management District (BAAQMD). BAAQMD established thresholds: to reduce emissions to 1990 levels by 2020; or reduce emissions 15% below baseline (2008 or earlier) emissions levels; or to meet plan efficiency threshold of 6.6 MTCO2e per service population or 4.6 MTCO2e per service population for land use projects. Milpitas' target is to use the 15% below 2005 baseline.

Reduction summary -- is to set a target greater than the 15% baseline, with a proposed target of 16.2%. Goals are to continue reduction of existing activities along with those new measures set by the CAP. This will require some changes to city municipal code. In accordance with CEQA, the CAP will not have a significant impact on the environment. Staff will provide annual reports to the Council and continue to monitor if we are on track to meet our goals.

***Recommendation: Seek comments from the public and direction from the Commission***

**Commissioners' Comments:**

- Encourage the use of energy-efficient appliances and planting deciduous trees.

- Provide continuous outreach to the public.
- For a larger reduction impact, encourage replacement of furnaces and A/C units in older residential homes.
- Look into working with PG&E to offer rebates where possible.
- Encourage contractors to build in solar energy facilities for new homes
- Offer discount on permitting costs to builders for using certain environmental friendly materials.
- Possibly provide some incentive to builders to defray costs to provide more expensive materials.
- Maybe our Parks Commission could encourage the homeowners associations or other groups in Milpitas to promote greener environments by planting more trees and landscaping.
- The cost of solar panels has gone down per watt; however, the permit cost and installation cost is still very high. This does not encourage residents to want to make a change. We should work together to reduce costs.
- If the City provides more bike lanes it will encourage less use of vehicles and reduce the CO2.
- Encourage gas stations to set up recharging stations or establish locations within the city for recharging to encourage people to purchase electric cars. The lack of locations to recharge makes it difficult for people with electric vehicles.
- We need to look for ways to be more aggressive in order to surpass our reduction goal.
- In Taiwan they use small solar rooftop water heater tanks that are inexpensive. This could be something to look into to replace what is used here.
- Is it possible to look into roof-top wind turbines for residential?

**Public Comments:**

**Priscilla Sedman, Milpitas Resident** – Supports the CAP and had comments on following: Measure 6.1 (Transit density) - The VTA ECO Pass is good for residents in high-density development. For Measure 11.1 – (Waste Diversion) –Community gardens are beneficial for residents as well as having more open space. Regarding sustainability, it would be good to establish a sustainability commission. Regarding retrofit – look at some non-profit organizations that promote energy conservation and reduction.

**Rob Means, Milpitas Resident** – Mr. Means complimented staff on putting together the CAP and for the Commission addressing many pertinent issues. It is important to continually monitor things and make adjustments. By 2020 we need to be down by 15% below baseline; then 15 years later we will be required to be down another 35% below baseline level – so we will need to be very aggressive. By exploring the Automated Transit Network feeder system proposed by the Sierra Club, there is a potential to reduce emissions by about 29,000 metric tons.

In Europe they have been able to reduce their CO2 by half of what we are doing. In Asia they are growing rapidly and are pursuing other technology areas as solar thermal, wind installations and conversion to electric vehicles. In California, our emissions are

causing billions in financial loss to farmers.

**Carol Kline, Milpitas Resident** – Mentioned that in Japan they built a bank of small wind turbines to create a wall that was unobtrusive. The CAP presented is a good start and we need to continue our efforts.

**Eddie Tun, Milpitas Resident** – Thanked the Commission for considering the CAP and encouraged the Commission to push beyond the 15% target.

**Liz Ainsworth, Milpitas Resident** – Questioned how there can actually be a reduction in emissions when we are building more residential which brings more people and cars into the city that creates traffic pollution. Also, where is the collaboration with the transit organization that created the new toll lane? She sees a reduction of businesses within our city, thus forcing residents to travel outside for services. How can we encourage people to live and shop within the city? By addressing these issues the CAP could be a more comprehensive plan.

**Sheldon Ah Sing** – Staff will look into the various possibilities and review the comments provided.

## XI. ADJOURNMENT

The meeting was adjourned at 8:20 pm to the next meeting of March 27, 2013.

**Motion to adjourn**
M/S: Madnawat / Barbadillo

Respectfully Submitted,

Steven McHarris
Planning & Neighborhood Services Director

Joann DeHerrera
Recording Secretary

# UNAPPROVED

## PLANNING COMMISSION SUBCOMMITTEE MINUTES

**Wednesday, April 10, 2013**
**6:30 pm**

**I. ROLL CALL**

Present: John Luk and Garry Barbadillo
Staff: Tiffany Brown, Diana Pancholi and Joann DeHerrera

**1. PUBLIC HEARING**

**Minor Site Development Permit No. MS13-0009**

**a. Tiffany Brown, Assistant Planner**, presented a request to hold a one-day special event in celebration of the National Day of Prayer on May 2, 2013, between the hours of 7:00 - 9:00 pm at the Milpitas Sports Center Football Stadium at 1325 E Calaveras Blvd. Applicant: Daniel J. Griffiths.

***(Staff Recommendation: Approve permit number MS13-0009 subject to the attached conditions of approval).***

**Motion** to approve the project subject to conditions of approval.

M/S: Luk / Barbadillo

AYES: 2

NOES: 0

ABSENT: 0

ABSTAIN: 0

**Minor Site Development Permit No. MS13-0013**

**b. Diana Pancholi, Project Planner,** presented a request to construct a new 1,179 sq.ft storage enclosure at 275 S. Hillview Drive. The purpose of the proposed structure is to facilitate the use of the existing FAB building as an HCL & N20 bulk dispensing bunker. Applicant: Enrique Aceves, Linear Technology

***(Staff Recommendation: Approve permit number MS13-0013 subject to the attached conditions of approval).***

**Motion** to approve the project subject to conditions of approval.

M/S: Luk / Barbadillo

AYES: 2

NOES: 0

ABSENT: 0

ABSTAIN: 0

**II. ADJOURNMENT**

This meeting was adjourned at 6:37 p.m.

# UNAPPROVED

## PLANNING COMMISSION MINUTES
## Wednesday, April 10, 2013

**I. PLEDGE OF ALLEGIANCE**

**Vice-Chair Ciardella** called the meeting to order at 7:00 P.M. and led the Pledge of Allegiance.

**II. ROLL CALL/SEATING OF ALTERNATE**

**Present:** Larry Ciardella, Garry Barbadillo, John Luk, Rajeev Madnawat, Zeya Mohsin and Demetress Morris

**Absent:** Sudhir Mandal and Gurdev Sandhu

**Staff:** Ah Sing, Brown, Erickson, McHarris, and DeHerrera

**Alternate Commissioner:** Commissioner Morris was seated as a member of the voting body.

**III. PUBLIC FORUM**

**Vice-Chair Ciardella** invited members of the audience to address the Commission on any topic not on the agenda, noting that no response is required from the staff or Commission, but that the Commission may choose to agendize the matter for a future meeting.

**Robert Marini**, Milpitas resident, would like to ask the Commission to have the City install a sidewalk connection from Calaveras Blvd. on the west side of Abel Street The lack of sidewalk requires a pedestrian to cross the street go up a few blocks and then cross back to the street to where the sidewalk begins. This will create a direct path on the west side of Abel Street.

**Rob Means**, Milpitas resident, shared information from article in Scientific America regarding climate change indicating that pollution and rise in temperature rates have been underestimated. Mr. Means feels that the City of Milpitas needs to accelerate our response to this issue.

**IV. APPROVAL OF MINUTES**

**Vice-Chair Ciardella** called for approval of the March 27, 2013 minutes of the Planning Commission.

There were no changes to the minutes.

**Motion** to approve the Planning Commission minutes as submitted.

M/S: Mohsin / Luk

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**V. ANNOUNCEMENTS**

**Steven McHarris, Planning Director**, reminded the commissioners about the

Commissioner's Recognition Luncheon to be held this Saturday, 4/13/13, 12:00 noon at the Milpitas Community Center. Planning Director McHarris mentioned that staff enrolled the commissioners as members of the American Planning Association. Commissioners will start receiving quarterly newsletters and will be informed of APA events and training opportunities.

**Vice-Chair Ciardella** announced an upcoming Affordable Housing Tour in Milpitas sponsored by Silicon Valley Leadership Group, on Saturday, May 18, 2013, and encouraged commissioners to attend. The Leukemia & Lymphoma Society is holding a car wash in the Safeway parking lot from 10am to 5pm this Saturday, 4/13/13. The Spring Valley Volunteer Fire Department will hold an event, "Champions of Hope", at 8:00 pm, Saturday, 4/13/13. The proceeds from these two events will benefit cancer research.

**VI. CONFLICT OF INTEREST**

**City Attorney, Mike Ogaz,** asked if any member of the Commission has any personal or financial conflict of interest related to any of the items on tonight's agenda.

There were no Commissioners who identified a conflict of interest.

**VII. APPROVAL OF AGENDA**

**Vice-Chair Ciardella** asked whether staff or the Commission have any changes to the agenda.

There were no changes to the agenda.

**Motion** to approve the April 10, 2013 agenda as submitted.

| | |
|---|---|
| M/S: | Madnawat / Mohsin |
| AYES: | 6 |
| NOES: | 0 |
| ABSENT: | 2 (Mandal, Sandhu) |
| ABSTAIN: | 0 |

**VIII. CONSENT CALENDAR**

There were no items on the consent calendar

**IX. PUBLIC HEARING**

**IX-1**

**ZONING TEXT AMENDMENT NO. ZA13-0002**

**Tiffany Brown, Assistant Planner,** presented a request to amend the text within the Zoning Ordinance to incorporate Live-Work units as a conditionally permitted use within the Town Center Zoning District, introduce Live-work specifications under Section 13 for special uses, and further define Live-work units in Section 2 for definitions. Applicant: Doyle Heaton, DRG Builders Inc.

At the Planning Commission meeting of March 27, 2013, the Commission recommended approval of a project with four live-work units, contingent upon preparation of a zoning text amendment to accompany the project for City Council consideration. Ms. Brown reviewed site development criteria for neighboring cities that incorporate live-work units and further discussed what may be appropriate for the City of Milpitas

The current definition of live-work unit was described as: "Live-Work Unit means a dwelling unit with a separate living space attached to a work space within the same unit. The work space and the living space must be occupied by the same tenant." Ms.

Brown proposed to define the live-work unit as follows: "Live-Work Unit means a dwelling unit with a separate living space attached to a work space within the same unit. The work space and the living space must be owned and occupied by the same tenant. Live-work uses would allow one non-residential employee, more customers, and a broader range of uses than permitted in Home Occupations." The Special Use Section further defines the purpose and intents, applicability, review requirements, permitted and prohibited uses and minimum performance standards.

Ms. Brown reviewed The Economic Development Commission's (EDC) comments on Section 10-13.12 (D): minimum performance standards #2 and #12. Standard #2 – The EDC did not want to limit the business to one business per space. Staff checked with other City departments and all agree there is no adverse impact to allow more than one business to a unit, and staff recommends deleting the standard. Standard #12 – The EDC felt use limitations may be too restrictive. Staff worked with the Fire Department to ensure safety within a live-work location and changed this standard.
If the Commission recommends approval of the Zoning Text Amendment, this item will go to the City Council on May 7, 2013, concurrently with the 375 Los Coches residential project.

***Recommendation – Adopt Resolution No. 13-015 recommending approval by the City Council, along with the EDC recommended changes.***

**Commissioner Madnawat –** Asked the City Attorney for clarification of the wording in Section 5 – "live-work units allow one non-residential employee". Does it mean a business can only have one employee; or if a business has more than one employee, but that at any given time, only one employee can occupy the work space? Also, why is there the restriction for only one non-residential employee in the unit?

**Mike Ogaz, City Attorney** – Indicated that the provision limits one non-residential employee and one employee could occupy and conduct business in the unit. An employee who incidentally drops by would probably not be considered an employee within the space. This would be based upon the circumstances.

**Tiffany Brown, Planner** – Stated that the intent of the use was so that the owner is the business operator. The size of the space is limited which affects the parking requirements.

**Commissioner Madnawat** – In the same section defining live-work unit states the live-work unit must be "owned and occupied" by the same tenant What is the reason for this requirement and what was it based on?

**Tiffany Brown, Planner** – Indicated the wording was based on discussion by staff, examples from other cities, and defining the intent of live-work.

**Commissioner Barbadillo** – On 3/27/13, the Planning Commission approved the housing proposal and at that meeting the issue of live-work concept was approved. Now there is a proposed amendment to the existing zoning text. Shouldn't defining the ordinance be done first then the application to a project? It seems that staff is trying to fit a zoning ordinance to a specific project and that by doing it this way, hopefully it does not open the way for future projects to be handled this way.
**Steven McHarris, Planning Director** – Stated that the proposed zoning amendment would normally be completed prior to considering a live-work project. However, changes to the Los Coches project required the proposed zoning amendment at this time. The Commission placed a condition of approval to prepare such zoning amendment in

order to be able recommend the complete project to the City Council.

However, staff is presenting the zoning amendment which would apply to the entire Town Center zone. The existing zoning text was insufficient for live-work projects. This amendment will allow future live-work projects to be processed more efficiently. This live-work amendment would apply city-wide to any zoning district where a live-work could be permitted or conditionally permitted.

**Public hearing**

**Ed McGovern, representing Doyle Heaton**. The applicant is in support of this resolution and wants to accommodate staff's concerns and recommended changes to the project.

**Carol Kassab, Milpitas Chamber of Commerce** – Asked for clarification on Section 6-D, Minimum Performance Standards #3 and #4. Standard #3 states the commercial component as designated on the floor plan and approved through the conditional use permit cannot be converted to residential. Standard #4 states a residential use cannot be converted to commercial. As an owner, would I be precluded from selling the live-work unit to someone who wanted it strictly for residential?

**Steven McHarris, Planning Director** – Stated that the unit would need to remain as "Live-Work" and could not be converted to only residential use. The new owner may elect to keep the work area vacant.

**Motion to close the public hearing**.

| | |
|---|---|
| M/S: | Madnawat/Mohsin |
| AYES: | 6 |
| NOES: | 0 |
| ABSENT: | 2 (Mandal, Sandhu) |
| ABSTAIN: | 0 |

**Commissioner Madnawat –** Expressed several concerns: 1) The description of a live-work unit only allows one residential employee, which staff stated would apply to live-work units city-wide. If a larger live-work unit was constructed someplace else within the city, would an owner be restricted to one residential employee? 2) The wording "owned and" greatly limits marketability of the unit. Only another small business who wanted to both live and operate their business in the unit would be interested in buying it. What benefit is there for this restriction? Should the unit be foreclosed on, then the owner "now the bank" would not be living there. Commissioner Madnawat would like to eliminate this wording "owned and" from the live-work definition to allow a different ownership from the occupant.

**Commissioner Mohsin –** All the possible live/work alternatives need to be analyzed. Otherwise, an owner would be severely limited.

**Mike Ogaz, City Attorney** – Mr. Ogaz then clarified that the current language does in fact restrict the unit in that the owner needs to occupy the unit and also use the commercial component. There is some merit to leave the wording as originally written; however, it would also be OK with Commissioner Madnawat's recommendation.

**Steven McHarris, Planning Director –**When staff analyzed the use, staff also considered the required the parking. As an owner and resident of a live-work unit, the resident, who would operate the business, would not impact the parking count if they did not lease the commercial component. Mr. McHarris agreed with Commissioner Madnawat's concerns about omitting "owned and" from the definition.

**Commissioner Luk –** Indicated that if other cities have the restriction that live-work units need to be owned and occupied by the same person, then he agrees with the current wording.

**Tiffany Brown, Planner** – Emphasized that the list of definitions in the zoning ordinance is a list that applies to the entire zoning ordinance. The zoning text amendment for the special uses for live-work only applies to those zones that conditionally allow live-work units. Current zones that conditionally allow for live-work are R3, R4 and R5, which are high-density zones, and if this project is approved, it would also apply to Town Center.

**Commissioner Barbadillo –** Asked if this ordinance passes with staff's recommendation, wouldn't it a violation of property rights?

**Mike Ogaz, City Attorney** – Indicated that all land use restrictions impose restrictions on use of property. But that the use restrictions need to be reasonable and not be so restrictive to constitute a "taking".

**Commissioner Madnawat –** Inquired how he could word an amendment to the resolution that instead of restricting the number of non-resident employees in a live-work unit to one, that the number of non-resident employees is based on the square footage work space of the unit, assuming that larger units could be constructed elsewhere in the city.

**Mike Ogaz, City Attorney –** Stated that this type of amendment would be difficult to prepare at this time. Staff would need to bring this back to the commission after further review.

**Motion** to adopt *Resolution No. 13-015, recommending approval to the City Council as amended, with the exception to remove the term "owned and" from the live-work definition in Section 5.*

| | |
|---|---|
| M/S: | Madnawat / Mohsin |
| AYES: | 6 |
| NOES: | 0 |
| ABSENT: | 2 (Mandal, Sandhu) |
| ABSTAIN: | 0 |

**IX-2**

**GENERAL PLAN AMENDMENT NO. GP13-0002: CLIMATE ACTION PLAN**

**Sheldon Ah Sing, Senior Planner** provided a review and updates to the Climate Action Plan (CAP) that was presented during a study session at the March 20, 2013 Planning Commission meeting. The CAP is a result of collaboration of multiple stakeholders and is consistent with the emissions reduction framework established by State law and BAAQMD. It will allow for streamlining of discretionary projects subject to CEQA to create quantifiable GHG emissions reduction goals.

Climate Action Plan benefits are: One stop for GHG analysis and mitigation under CEQA; provides transparency in the review process; outlines appropriate measures for new projects; identifies preferred localized GHG mitigation strategies; streamlines CEQA review for projects consistent with this CAP.

Reduction summary: Mandated target is 15% below the baseline, with our actual target of 16.2%. Local reduction need is 80,000 MTCO2e. Reductions achieved (existing & CAP measures) – 87,450 MTCO2e. Goals are to continue reduction of existing activities along with those new measures set by the CAP. There has been public outreach with comments from VTA, Sierra Club and Bay Area Management District. Staff will provide annual reports to the Council and Planning Commission and will continue to have dialogue with the stakeholders. No other changes are planned at this time. The project is consistent with the General Plan. An amendment is proposed to integrate the reduction target into the General Plan. A negative declaration was circulated and staff received no comments.

***Recommendation – Adopt Resolution No. 13-014 recommending approval of the project as amended to the City Council.***

**Commissioner Madnawat –** Asked how is the volume of gas emissions quantified from the cars that pass through Milpitas? How will the City enforce emission reduction for vehicles that come here from other cities?

**Jeff Henderson, PMC consultant –** The traffic that is included in the emissions inventory is based on the City of Milpitas' traffic model and the land use forecast embedded is in the General Plan and based on the General Plan. Trips that begin or end within Milpitas are part of the calculation. Pass-through trips that begin and end outside of Milpitas are excluded from the calculation. Trips that are shared by another jurisdiction split the calculation. The length of travel and speed of travel and type of vehicles are equated for different vehicle types. The reduction is achieved through State programs that set the emission regulations and compliance.

**Motion to open the public hearing**

M/S: Morris / Mohsin

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**Rob Means,** Milpitas resident – Shared his thoughts about the CAP and three highest priorities for change that stood out: 1) Distributed renewable energy generation to get off carbon-based fuel; 2) A sustainability manager to monitor the CAP; 3) Potential of automated transit network technology. He encouraged the Commission to emphasize these three areas.

**Marco Goithia,** Student at SUSU and Sierra Club member – Commented on pages 4-5 of the staff memorandum citing an amendment to measure 10.5 gas tax, and questioned why it was deleted. It was a good way to produce public awareness and directly impacting people on the affects of green house gases.

**Motion to close the public hearing**.

M/S: Madnawat / Luk

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**Motion** to adopt Resolution No. 13-014 recommending approval of the project to the City Council

M/S: Madnawat / Morris

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**IX-3**

**GENERAL PLAN AMENDMENT NO. GP12-0002, SPECIFIC PLAN AMENDENT NO. ST12-0002, ZONING AMENDMENT NO. ZA12-0003, PLANNED UNIT DEVELOPMENT NO. PD12-0002, MAJOR TENTATIVE MAP NO. MT12-0002, SITE DEVELOPMENT PERMIT NO. SD12-0001 & CONDITIONAL USE PERMIT NO. UP12-0010: PRESTON PROPERTIES RESIDENTIAL PROJECT**

**Sheldon Ah Sing, Senior Planner,** presented a request to change the General Plan, Specific Plan and Zoning land use designation from Heavy Industrial (M2) to High Density Multi-family Residential (R3) with Planned Unit Development. The project is a re-zone of 16.6 acres. The applicant proposes 213 dwelling units (95 detached and 118 multi-family homes) with on- and off-site improvements. A Draft Environmental Impact Report (EIR) has been circulated for the project located at 133, 225, 227-261 Bothelo Lane. Applicant: KB Home.

**Mr. Ah Sing** presented the project overview as being submitted on October, 2011; and in December 2011, the applicant initiated the EIR. The last submittal was in May 2012, the draft EIR was circulated between November and December 2012. The project deficiencies were reviewed as follows: The Union Pacific authority supersedes the City's which does not allow the City to rectify any complaints; the adjacency to the freight yard and rail yard operations and activities; the lack of connectivity to the greater Milpitas community and connection to Main Street per the Midtown Specific Plan; and difficulty making the required findings for entitlements.

**Mr. Ah Sing** stated that the project is inconsistent with the General Plan, Mid-Pacific Plan, surrounding areas and general welfare concerns. The draft EIR contains errors regarding circulation, land use and hazardous materials. The closest railroad track is 50 feet away, and hazardous materials are stored and transported on the rail road property without any input from the City because Union Pacific operates under the authority of the federal government. Union Pacific has communicated that they will expand the freight yard area operations with taller, more luminous lighting, which facilitates their night-time operation.

Comments have been received on the proposed project from the Regional Water Quality Board, the School District and Santa Clara Valley VTA; the school district opposes this project. The City has learned from the Parc Metro project that was built close to the railroad tracks at Curtis Street, resulting in railroad operation related resident complaints. Staff recommends the Planning Commission recommend the City Council deny the proposed project based primarily on the site location being surrounded by each of the identified incompatible land uses and operations.

***(Recommendation – Adopt Resolution No. 13-013 recommending denial of the project***

***to the City Council)***

**Ray Panek, Sr Vice-President for KB Home-Forward Planning**, San Ramon –. Stated that the draft EIR is a KB Home initiated report, but under CEQA, the City is the responsible agency for the report. Any discussion with the EIR consult has been through City staff. The draft EIR did not identify any environmental impacts that could not be mitigated to a level of insignificance. **Mr. Panek** referred to land use statements in the draft EIR pages 3.8-11 through 3.8-29, "Analyses of the City's EIR preparer finds the proposed project consistent with General Plan policies and they are consistent with those policies either as the project is proposed or with mitigation."

**Mr. Panek** commented that the draft EIR identified consistency with the goals, objectives and policies of the Mid-Town Specific Plan. He stated that the multi-family high-density residential and architectural overlay, R3 standards, parks and public open space development standards and parking standards required no mitigation, and that there are no cumulative impacts generated by the project, and it is not considered growth-inducing. There was a review of the Carlos Street extension in which the draft EIR did not identify significant project impacts. **Mr. Panek** mentioned the recently-approved Braddock and Logan project is located in close proximity to railroad tracks and questioned the distinction with their project.

**Mr. Panek** provided his recommendation to the Planning Commission as follows: continue the public hearing and direct staff to complete the CEQA process by preparing the final EIR; direct staff to accept the updated Vesting Tentative Map (VTM); and bring the final EIR and the updated project application and VTM to the Planning Commission for recommendation to the City Council for approval.

**Arminta Jensen, representing Ruggeri-Jensen-Azar**, in Gilroy – Gave an overview of the project with the different amenities. The project consists of 213 units with parking, a paseo, and three open spaces. There is a proposed 2-way bike path along Ford Creek and a walkway through the project that connects the path to the public trail. All units will have two-car garages with 99 additional parking spaces in addition to the required parking for the site. The detached homes have a shared side yard with a sound wall. The HOA will manage the waste collection from the houses to be picked up in one location.

There would be two vehicular accesses into the site – from Railroad Avenue and Hammond Way with access gates. Access has been reviewed by the Fire Department. Ms. Jensen also discussed the off-site pedestrian and bicycle circulation and connectivity to with new sidewalks. Ms. Jensen quoted from the draft EIR, page 3.10-11 – 12 regarding emergency response to the site stating that access would meet the required response time.

**Motion to open the public hearing**

| | |
|---|---|
| M/S: | Mohsin / Luk |
| AYES: | 6 |
| NOES: | 0 |
| ABSENT: | 2 (Mandal, Sandhu) |
| ABSTAIN: | 0 |

**Henry Santos, Lester Lane, Los Gatos –** Mr. Santos owns property near this location and expressed several concerns about approving the project. It will cause more traffic congestion and more demand on the already low water supply. He also feels that the project should not be allowed to use Sinnot Lane. Mr. Santos stated that he and other property owners contributed 25 ft of their land in order to get this lane built. He also mentioned that on his property he use to dig down two or three feet and would see water come up in the winter.

**Rob Means, Milpitas Resident** – The proposed project would be adjacent to the new BART lines that will be running about every six minutes once it is fully operational. Trains are required to blow their horn at street crossings, which will be excessively noisy for residents. There are complaints from residents who live in the Parc Metro area about the noise from trains. This project site is less than 18 ft above sea level; and in the long term, property will be impacted by sea level rise due to global warming. Mr. Means feels the Commission owes it to future homeowners to approve good places for Milpitas residents to live.

**Nastasia Hammer, Milpitas resident** – Agrees that the proposed project should not be built. It is too close to the rail road operations and we need more recreational sites, open space and not more high-density homes. The housing will adversely affect the schools.

**Motion to close the public hearing**.

M/S: Madnawat / Luk

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**Commissioner Madnawat –** Inquired if Railroad Avenue would be able to handle the traffic. Staff stated yes, it would be able to handle the traffic.

**Brian Sturdivant, City of Milpitas Fire Chief** – The Fire Department's concern revolves around the activity at the rail yard rather than the response time. There had been two minor Hazmat releases in 2007 and 2009, and the risk still remains. There are two high-pressure pipelines, a jet fuel line and PG&E gas lines that run through the area. Fire Prevention staff conducted a simulated time stamp into the proposed project site. As stated in the EIR, access meets the four (4) minute response time.

**Albert Zamora, City of Milpitas Fire Marshal** – The City does not have control over the railroad operations or identification of hazardous materials on-site or passing through. There are two companies that currently use the rail to transport toxic chemicals and gases which will pass through this area.

**Motion** to table the matter to a later time and continue to work with staff.

M/S: Morris / Mohsin

AYES: 2 (Morris, Mohsin)

NOES: 3 (Barbadillo, Ciardella and Madnawat)

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 1 (Luk)

**Commissioner Madnawat** – Stated that the difference about this site compared to other housing projects in this area is that it is surrounded on all sides by unfavorable uses. Having housing in this location would not provide the quality of life that we, as a city, should be providing to people coming to live here. People would not find this site desirable. **Commissioner Madnawat** proceeded to make a counter motion:

**Motion** to adopt Resolution No. 13-013 recommending denial of the project to the City Council

M/S: Madnawat / Barbadillo

AYES: 3 (Barbadillo, Ciardella and Madnawat)

NOES: 2 (Morris, Mohsin)

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 1 (Luk)

## X. NEW BUSINESS

### X-1

### PRESENTATION OF THE PROPOSED 2013-18 CAPITAL IMPROVEMENT PROGRAM (CIP):

**Steve Erickson, City of Milpitas Capital Improvement Program Manager -** Provided an overview of the Proposed 2013-18 Capital Improvement (CIP) Annual Report. He reviewed the purpose of the CIP, highlighted accomplishments of last year, proposed projects for the next five years, summary of projects and staff recommendation.

The purpose is to have a finding that the 5-year CIP is in conformance with the City's General Plan and recommend adoption by the City Council. Last year's accomplishments within budget and on time were: Exterior improvements to Fire Station #1; upgraded audio visual equipment at City Hall; completed Alviso Adobe park renovations; S. Milpitas Blvd. pavement overlay; Cape Seal resurfacing project in the NE area of Milpitas; pedestrian and bicycle enhancement along Escuela Parkway; Abel Street transit connection improvement; completed emergency project for the Ayer Water pump station; installed a solar photovoltaic system at the Main Sewer Pump Station, at the Milpitas Sports Center and at the Gibraltar Pump Station.

The next five-year proposed funding summary: Community improvements: City building facilities, the Milpitas Sports Center, Police/Public Works building – repair & replace aging generator transfer switch and building improvements. Park projects: Pinewood Park renovation, Higuera Adobe Park renovation, City parks irrigation system repair and improvements. Street projects: Planned is a 2013 – 2014 pavement resurfacing program, street landscape irrigation improvement, and McCarthy Ranch landscape and lighting district improvement project from 237 to Dixon Landing Rd. Utilities (water, sewer and storm) projects: Dempsey Rd waterline replacement project, Cathodic protection improvement to the Tularcitos and Minnis water tanks, and in the Sunnyhills area a pressure release valve project.

***(Recommendation: Find the Proposed 2013-18 in conformance with the General Plan and Recommend the Proposed Capital Improvement Program to City Council).***

**Motion to open the public hearing**

M/S: Morris / Luk

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**Rob Means, Milpitas Resident –** One of the projects in the CIP is the crossing of the railroad tracks to connect Yosemite and Curtis**.** When the project was first talked about years ago the price to construct the crossing was about $3 million; and now the projected cost has greatly increased. Mr. Means feels that the cost could be much less by using new alternative transportation technology like PRT. He would like the Commission to recommend to City Council to focus on this project; and rather than waiting five years, get started earlier by moving the EIR into the current fiscal year.

**Vice-Chair Ciardella** – Asked staff if the City could get in contact with local landscape design schools to see if they would be interested in a contest to design the Main Street city park or to provide ideas / conceptual design and a licensed professional could review the design.

**Kathleen Phalen, Acting Public Works Director** – Indicated that generally the City contracts with licensed professions who have errors and omissions insurance to prepare designs to meet plans specifications. The idea about using a design school for conceptual design could be a possibility.

**Motion to close the public hearing**.

M/S: Madnawat / Luk

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**Motion:** Find the Proposed 2013-18 Capital Improvement Program in conformance with the General Plan and Recommend the Proposed Capital Improvement Program to City Council.

M/S: Mohsin / Morris

AYES: 6

NOES: 0

ABSENT: 2 (Mandal, Sandhu)

ABSTAIN: 0

**XI. ADJOURNMENT** The meeting was adjourned at 9:30 pm to the next meeting of April 24, 2013.

**Motion to adjourn**
M/S: Madnawat / Luk

Respectfully Submitted,

Steven McHarris
Planning & Neighborhood Services Director

Joann DeHerrera
Recording Secretary

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ALAMEDA COUNTY
Tom Bates
Scott Haggerty
Nate Miley
(Vice Chair)
Tim Sbranti

CONTRA COSTA COUNTY
John Gioia
David Hudson
Mary Piepho
Mark Ross

MARIN COUNTY
Susan Adams

NAPA COUNTY
Brad Wagenknecht

SAN FRANCISCO COUNTY
John Avalos
Edwin M. Lee
Eric Mar

SAN MATEO COUNTY
Carole Groom
(Secretary)
Carol Klatt

SANTA CLARA COUNTY
Ash Kalra
(Chair)
Liz Kniss
Jan Pepper
Ken Yeager

SOLANO COUNY
James Spering

SONOMA COUNTY
Teresa Barrett
Shirlee Zane

Jack P. Broadbent
EXECUTIVE OFFICER/APCO

**2-F**

April 9, 2013

Mr. Sheldon S. Ah Sing
Senior Planner
City of Milpitas
Planning Division
455 East Calaveras Boulevard
Milpitas, CA 94553

Subject: City of Milpitas Draft Climate Action Plan

Dear Mr. Ah Sing,

Bay Area Air Quality Management District (District) staff has reviewed the City's Draft Climate Action Plan (Plan). We understand that the City's intentions in developing the Plan are to reduce greenhouse gas (GHG) emissions throughout the City and to streamline CEQA review of new land use projects.

The District applauds the City's initiative in addressing GHG emissions and supports its efforts in developing the Plan. The District has the following specific comments on the Plan.

According to the District's *GHG Plan Level Guidance*, the emissions inventory and business-as-usual forecast should be modified to include direct emissions associated with wastewater treatment. If multiple jurisdictions are serviced by the wastewater treatment facility, emissions from the facility should be apportioned by population, according to Milpitas' proportion of the facility's service area. By including these emissions in the inventory and forecast, the City can take credit for any emission reductions from wastewater treatment due to its GHG reduction measures.

In addition, we encourage the City to consider including emissions from the Newby Island Resource Recovery Park landfill in the GHG inventory, to the extent that the City can influence the methane capture rate at the facility. While the facility is privately owned and operated, the City may be able to influence the methane capture rate through its contracting and/or permitting requirements with the landfill owner. By including the landfill in the GHG inventory and forecast, any increase in the methane capture rate at the landfill can be included as a GHG reduction measure and counted toward meeting the Plan's GHG reduction target. See the Contra Costa County Climate Action Plan for an example of how privately owned and operated landfills have been included in a local climate action plan in this manner.

In order to meet California's GHG reduction goals for AB 32 and, more importantly, for Executive Order S-3-05 (an 80% reduction below 1990 levels by 2050), California will need to achieve significant emission reductions, from new development as well as from the built community. The draft Plan states that Milpitas is a high-growth community, and so includes many mandatory measures

aimed at reducing GHG emissions from new development. The District supports this approach. However, relying on new development to achieve the bulk of emission reductions will likely not be enough to achieve these aggressive targets. Therefore, we have identified additional feasible measures that have proven effective at reducing GHG emissions in other jurisdictions that have not been included in the Plan. The District recommends that the Plan strengthen its GHG reduction approach in the following ways:

- Expand the City's Green Building Program (Measures 1.1 and 2.1) to require energy efficiency standards beyond Title 24 for all residential and commercial construction and remodels.

- Add a time of sale energy efficiency upgrade requirement to residential and commercial buildings, such as a residential/commercial energy conservation ordinance (RECO/CECO).

- Expand Measure 1.5: Urban Cooling to require cool paving strategies in re-paving projects as well as new development.

- Expand Measure 8.1: Transportation Demand Management to include details on the Transportation Demand Management (TDM) Ordinance, such as requiring employers of 50 or more employees to offer TDM programs to their employees. The TDM programs should include strategies such as allowing employers to exclude from taxable wages the commuting costs of transit, vanpools or cycling; employer-paid subsidies for commuting by transit or vanpool; employer-provided bus, shuttle or vanpool service; or other programs such as telecommuting, rideshare matching, etc. These strategies would complement the District's upcoming region-wide commuter benefits program authorized by Senate Bill 1339.

We commend the City for its efforts to address the critical issue of climate change through local action. By addressing the issues in this letter, the Plan will better reflect the District's own guidance on the development of climate action plans. In doing so, District staff believes that the Plan would be more likely to achieve its GHG reduction target and the City would be in a better position to use the Plan as a tierable document under CEQA.

District staff is available to assist the City in addressing these comments. If you have any questions, please contact Abby Young, Principal Environmental Planner, at (415) 749-4754.

Sincerely,

Jean Roggenkamp
Deputy Air Pollution Control Officer

cc: BAAQMD Chair Ash Kalra
BAAQMD Director Liz Kniss
BAAQMD Director Jan Pepper
BAAQMD Director Ken Yeager

# *Sierra Club Loma Prieta Chapter*

*Celebrating 80 years of protecting the planet*

3921 East Bayshore Road, Suite 204, Palo Alto, CA 94303 | loma.prieta.chapter@sierraclub.org
TELEPHONE: (650) 390-8411 | FAX: (650) 390-8497


City of Milpitas
455 E. Calaveras Boulevard
Milpitas, CA 95035

**Re: Comments on the <u>Draft Climate Action Plan (CAP)</u> for Milpitas**

Honorable Mayor and City Council, Planning Commission, and Mr. Sheldon Ah Sing,

The Sierra Club Loma Prieta Chapter appreciates the substantial effort and clear purpose evident in the proposed Climate Action Plan (CAP). Given our present circumstances – global warming accelerating faster than scientists predicted – the Sierra Club supports your efforts at emission reductions by offering three categories of comments: 1) Outstanding Policies, 2) Supported Policies and Suggestions, and 3) Areas of Concern with Recommendations.

Thank you for considering our recommendations. We hope that by working together, Milpitas can meet, and even exceed, its goals.

1. **<u>Outstanding Policies</u>**
   a. We are happy to see that the City of Milpitas is promoting **distributed, renewable energy generation** specifically, "through Goal 3, the City will reduce GHG emissions from traditional electricity production and natural gas by promoting the production of local, on-site renewable energy for both residential and nonresidential uses."
   b. Studies have found that **unbundling parking costs** makes a big difference in people's transportation choices. So, we are pleased to see MEASURE 9.1: Unbundle Parking Costs with the following language: "Revise development standards to separate parking costs from the cost to rent, purchase, or lease residential and nonresidential buildings to incentivize use of alternative transportation modes."
   c. Achieving the necessary $CO_2$ reductions by 2035 will require a dramatic shift away from fossil-fueled vehicles to clean vehicles. So, we applaud GOAL 10: **Provide and Support expansion of infrastructure for low-emitting and fuel-efficient vehicles.**
   d. We applaud MEASURE 10.5: **Gas Tax** and encourage the City of Milpitas to implement this promptly without awaiting regional and state efforts. A one- or two-percent carbon tax could be implemented without significantly affecting local gasoline sales, but it would send a pricing signal to consumers that a long-delayed carbon tax had arrived. Such a carbon tax could be extended to natural gas used in homes and businesses. We fully concur with the proposal to use the tax "to create funding to provide rebates for clean fuel infrastructure and/or vehicles in Milpitas."

e. **BART Station Pedestrian Circulator**. With the highly successful demonstrations of Personal Rapid Transit (PRT) at Heathrow Airport, Masdar in Abu Dhabi, and in Sweden, now is the time to consider use of the technology in the United States. Therefore, we urge Milpitas to accelerate MEASURE 10.6: BART STATION PEDESTRIAN CIRCULATOR with an emphasis on using advanced transit technology when staff studies "the feasibility of a pedestrian circulator around the BART station." The financial argument for PRT is strong. According to the Bikeway Master Plan Update (page vi) and Bicycle Master Plan (page 8-8), the four recommended bicycle/pedestrian overcrossings in the Transit Area are estimated to cost $20 million. Since the 2009 publication of those documents, estimated costs of the four POCs has risen 40% to $28M ($9M + $9M + $5M + $5M). Before spending $28M on bicycle/pedestrian improvements in the TASP area, fiscal prudence would ask what value to the area could be provided by 3 linear miles and 6 stations of PRT for the same price.

f. **Implementation Metrics**. We applaud the City's aggressive implementation metrics. Such willingness to set high goals will serve Milpitas well as further changes are needed in the years after 2020. In particular, we cite for special recognition Measures 1.1, 1.2, 1.4, 1.7, 3.1, 3.2, 3.3, 3.5, 6.1, 8.1, 8.2, 10.1, 10.4, 11.1, 12.1, and 12.2 of the Climate Action Plan. During review, some questions arose.
    i. In regards to, "Measure 1.1: Residential energy audits in older homes facilitate energy audits of 40% of the city's existing housing stock by 2015 and 60% through city-supported incentives."
        1. Question: Does "by 2015" means 1/1/2015 or 12/31/2015?
    ii. In regards to, "Measure 6.1: Implementation Metrics: Participation Metrics: 8,000 single-occupant commuters working and/or living in Milpitas become new transit riders.
        1. Question: What is the total number of single-occupant commuters currently working and/or living in Milpitas?
    iii. Although Measure 10.1 supports developers in obtaining and providing charging stations for new parking locations for electric cars, no provision is made for the growing number of electric bikes and scooters. On the other hand, Measure 12.1, Action C could serve that transportation segment in addition to its intended use. "Require new buildings to provide accessible exterior electrical outlets to charge electric-powered lawn and garden equipment."
        1. Question: Is it appropriate to refer to electric bikes in this or any other section of the CAP?

g. **Sustainability Manager.** We also commend staff for noting the need for someone to drive the programs outlined in the CAP. This individual will be helpful, if not essential, to the other six implementation programs. One example is Implementation Program 6: Development Checklist. The Development Checklist (CAP Appendix C) is an innovation that we are pleased to see implemented. Even better is your commitment to "Create and distribute to regional partners a case study highlighting the benefits, lessons learned, and customer feedback discovered through implementation of the development checklist."

h. Finally, we applaud your commitment to **monitoring efforts**: "This plan identifies the responsible department for each measure and offers time frames for implementing each strategy."

**2. <u>Supported Policies and Suggestions</u>**

There are several measures and actions that were not mentioned in the Milpitas Climate Action Plan that we hope you will consider including:

a. Measure 10.3: Electric Vehicle Partnerships, Action A states: "Work with partner agencies to seek grant funding through state and regional partnerships to fund fleet conversions to electric vehicles." We'd like the City to consider funding light electric vehicles (LEV), like electric bikes

and scooters, as well. Due to their low cost and ready availability, LEVs could easily be incorporated as part of the City's fleet. Good quality electric bikes and scooters can be purchased for less than $2500 each. In addition to reducing $CO_2$ emissions each time an LEV is used rather than an automobile, City staff will be promoting the use of LEVs in the community simply by riding instead of driving.

b. Page 4-5 briefly describes various programs, including the Bikeways Master Plan. The second sentence cites commuter mode shifts from personal vehicles to bicycles. As many cyclists consider their bikes to be "personal vehicles," we suggest a minor edit to the sentence to distinguish between bicycles and personal vehicles that generate carbon emissions: "The reductions are associated with commuter mode shifts from personal fossil-fueled vehicles to bicycles."

**3. <u>Areas of Concern with Recommendations</u>**

Clearly, the CAP does well within the scope set for itself, i.e. through the year 2020. However, areas of concern still exist. The Sierra Club Loma Prieta Chapter has the same aim as the Milpitas Climate Action Plan, to significantly reduce greenhouse gas emissions in order to reduce the impacts of the climate crisis on our planet and for future generations. We hope you will seriously consider our recommendations for improvement:

a. We applaud staff's recognition that not all measures will be achieved in a timely way. We agree with the precaution of including a buffer, but we feel the buffer is too small. If all implementation metrics were achieved but not exceeded, a 16.2% reduction in $CO_2$ emissions would ensue, a 1.2% buffer over the 15% minimum required under AB32. **Given the challenge of achieving many aggressive implementation metrics, and how rapidly climate change is accelerating into crisis conditions, we see a 5% buffer as being more appropriate.** And we acknowledge that some reductions are not included (such as from the existing green building program) "because the information needed to quantify the program is unavailable." Regardless, exceeding the standards of AB 32 helps California attain its goals.

b. Although we totally support "GOAL 7: Increase use of non-motorized transportation throughout the community," we find that "Action A, Implement the Bikeway Master Plan," is deficient. The Plan is out of date due to rapid changes since its 2009 publication. Although Milpitas has a good record at painting stripes for bicycle lanes, it lags other cities in building large infrastructure projects that support cyclists, pedestrians and public transit. For example:

    i. The Bikeway Master Plan fails to support a keystone project that has been identified over the years in various City plans. Recently the City Council again indicated its interest in a bike/pedestrian crossing of the railroad tracks to connect Yosemite Drive with Curtis Avenue.

    ii. The Bikeway Master Plan also makes no mention of two other bicycle/pedestrian connections with the potential to substantially increase use of transportation alternatives in Milpitas: 1) an east-west crossing of I-880 near the Calaveras Boulevard interchange, and 2) a north-south crossing of Scott Boulevard for users of the Hetch-Hetchy right-of-way.

c. Although the CAP well addresses steps to meet the 2020 goal of reducing emissions by 15%, there is no information about the years after 2020. Rather than delay implementation of this CAP by extending its time frame to 2035, **we recommend that the CAP be updated in 2015 to include measures needed to attain the 2035 goal** of reducing emissions by 52% as required by AB 32. Two areas with above-average potential for emission reductions are transportation and population.

    i. Transportation and land use measures comprise 23% of the anticipated reductions in 2020. However, transportation contributes 50% of total emissions. Innovative strategies in transportation may hold unforeseen potential.

ii. IMPACT OF STATE REDUCTION PROGRAMS (page A-8) mentions that "Emissions in 2035 are 3% above baseline ..." [emphasis added] That portends a failure to reduce emissions by 52% in 2035 as required by AB 32. The unstated primary driver of this failure is population growth as shown in Table A-3: BAU Forecast Indicators. The number of residents is expected to grow from 64,800 in 2005 to 106,000 in 2035, a 63% increase. **Policies and programs to reduce fertility rates** should be investigated for their potential effects on emissions.

d. Explore the potential of an **Automated Transit Network (ATN)** for reducing $CO_2$ emissions in Milpitas as recommended at the August 24, 2011 CAP Planning Commission Workshop and public comment meeting. For additional background, see Sierra Club comments to the recent Circulation Element update. If such a citywide ATN system were operating and captured 10% of the driving in Milpitas, it would reduce emissions approximately 29,683 $MTCO_2e$ in 2020 – a reduction that dwarfs any other implementation measure in the CAP.[1]

e. The monitoring provisions of the CAP will inform us how our plan is working, but **consequences and accountability** are needed to ensure we meet the reductions that are critical to the future of Milpitas and human life.

**Conclusion**

Again, we commend staff on the excellent work involved in creating the CAP and appreciate the opportunity to provide our input. We hope that our comments combined with the wisdom of the entire community elevates the Milpitas CAP to an award-winning and exemplary model that shines a light for other communities.

Respectfully Submitted,

Robert Means
Co- Chair, Milpitas Cool Cities Team

Gita Dev
Sustainable Land Use Committee Member

Megan Fluke Medeiros
Conservation and Development Manager

[1] According to Table A-3: BAU Forecast Indicators, annual VMT by Milpitas residents in 2005 was 697,265,000. Using a fleet average mileage for passenger vehicles of 21 miles per gallon (Page 3 of Climate Change Draft Scoping Plan: Measure Documentation Supplement (http://www.arb.ca.gov/cc/scopingplan/document/measure_documentation.pdf) yields a baseline consumption of 33,203,095 gallons of gasoline annually. Using a conversion factor from the Scoping Plan (0.00894 $MTCO_2e$ /gallon of gasoline), that number of gallons generates 296,835 $MTCO_2e$ annually. If 10% of VMT by Milpitas residents was captured by renewably-powered ATN, a reduction of 29,683 $MTCO_2e$ can be expected.

SANTA CLARA
**Valley Transportation Authority**

March 29, 2013

City of Milpitas
Planning Division
455 East Calaveras Boulevard
Milpitas, CA 95035-5479

Attention: Sheldon Ah Sing

Subject: Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy

Dear Mr. Ah Sing:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy for the City of Milpitas. We have the following comments.

Transportation Demand Management and Trip Reductions
VTA commends the City for highlighting transportation measures to reduce Greenhouse Gas Emissions in the CAP, including measures to support density and transit-friendly design (Measures 6.1-6.4), increase bicycle infrastructure and use (Measures 7.1-7.5), encourage transportation management through outreach (Measures 8.1-8.4), and more effectively manage parking in the City (Measures 9.1-9.2).

VTA encourages the City to include more specific and enforceable guidelines for Transportation Demand Management (TDM) in the CAP. Although Measure 8.1 calls for the City to "adopt and phase a citywide Transportation Demand Management (TDM) ordinance by 2015," the measure lacks specific percentage reduction targets and does not include a monitoring program or penalties. Percentage targets could be tied to land uses, location of development, and/or proximity to transit (e.g. the Transit Area Specific Plan). In addition, the measure should clearly define the baseline against which reductions should be taken and specify which projects are required to meet the targets. VTA recommends that the targets apply to new development as well as expansions of existing businesses. For an example of a TDM measure with specific reduction targets based on geographic area, please see Mountain View's Greenhouse Gas Reduction Program (August 2012), Measure T-1.1 (pg. 4-25 – 4-26).

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

ML1302

# NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

To: ☐ Interested Agencies and Individuals

☑ Santa Clara County Clerk-Recorder
70 West Hedding St. E Wing 1st floor
San Jose, CA 95110

From: City of Milpitas
Planning Division
455 E. Calaveras Blvd.
Milpitas, CA 95035

Contact:
Sheldon S. Ah Sing, Senior Planner
(408) 586-3278
sahsing@ci.milpitas.ca.gov

**Applicant:** City of Milpitas

**Project Title:** Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy

**Project Description:** The Climate Action Plan (CAP) is designed to streamline environmental review of future development projects in the City of Milpitas consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) and the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction target of 15% below 2005 emissions levels by 2020.

**Project Location:** NA

**Project Number:** NA

**Public Review Period:** February 28 through March 19, 2013

**Hearing Dates/Times:** To be announced

**Hearing Location:** City of Milpitas City Hall, Council Chambers
455 E. Calaveras Blvd.

The Negative Declaration and Initial Study as well as all referenced documents will be available for public review at:

| | |
|---|---|
| City of Milpitas City Hall<br>455 E. Calaveras Blvd.<br>Milpitas, CA 95035 | http://www.ci.milpitas.ca.gov/government/planning/environmental.asp |

Please submit any comments on the Negative Declaration to the City on or before March 19, 2013. Please direct your comments to Sheldon S. Ah Sing, Senior Planner, at the above address, or by the telephone and e-mail contacts provided at the top of this form. Please also use this contact information to make any inquiries regarding this project.

**Signature** Sheldon S. Ah Sing **Date** 25 Feb 2013

**Initial Study**

**ENVIRONMENTAL CHECKLIST FORM**

**For the Milpitas Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy**

**1. Project title: Milpitas Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy**

**2. Lead agency name and address: City of Milpitas; 455 E. Calaveras Blvd. Milpitas, CA 95035**

**3. Contact person and phone number: Sheldon S. Ah Sing (408) 586.3278**

**4. Project location: Milpitas, California (Citywide)**

**5. Project sponsor's name and address: City of Milpitas; 455 E. Calaveras Blvd. Milpitas, CA 95035**

**6. General plan designation: Citywide project, not applicable**

**7. Zoning: Citywide project, not applicable**

**8. Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The Milpitas Climate Action Plan and Qualified Greenhouse Gas Reduction Strategy [known here foreword as the Milpitas Climate Action Plan (CAP)] establishes strategies for reducing municipal and community-wide greenhouse gas (GHG) emissions. The CAP is a proactive strategy document that enables the City to maintain local control of implementing State direction (AB 32 – the California Global Warming Solutions Act) to reduce GHG emissions to 1990 levels by 2020. Proposed GHG reduction strategies align with existing General Plan policies.

**9. Surrounding land uses and setting:** Briefly describe the project's surroundings:

Citywide project

**10. Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.)

None

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| ☐ | Aesthetics | ☐ | Agriculture and Forestry Resources | ☐ | Air Quality |
| ☐ | Biological Resources | ☐ | Cultural Resources | ☐ | Geology /Soils |
| ☐ | Greenhouse Gas Emissions | ☐ | Hazards & Hazardous Materials | ☐ | Hydrology / Water Quality |
| ☐ | Land Use / Planning | ☐ | Mineral Resources | ☐ | Noise |
| ☐ | Population / Housing | ☐ | Public Services | ☐ | Recreation |
| ☐ | Transportation/Traffic | ☐ | Utilities / Service Systems | ☐ | Mandatory Findings of Significance |

**DETERMINATION:** (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☑ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sheldon S Ah Sing
Signature

21 Feb 2013
Date

Sheldon S. Ah Sing
Printed Name

For

## MAPS

### Figure 1: Regional Map

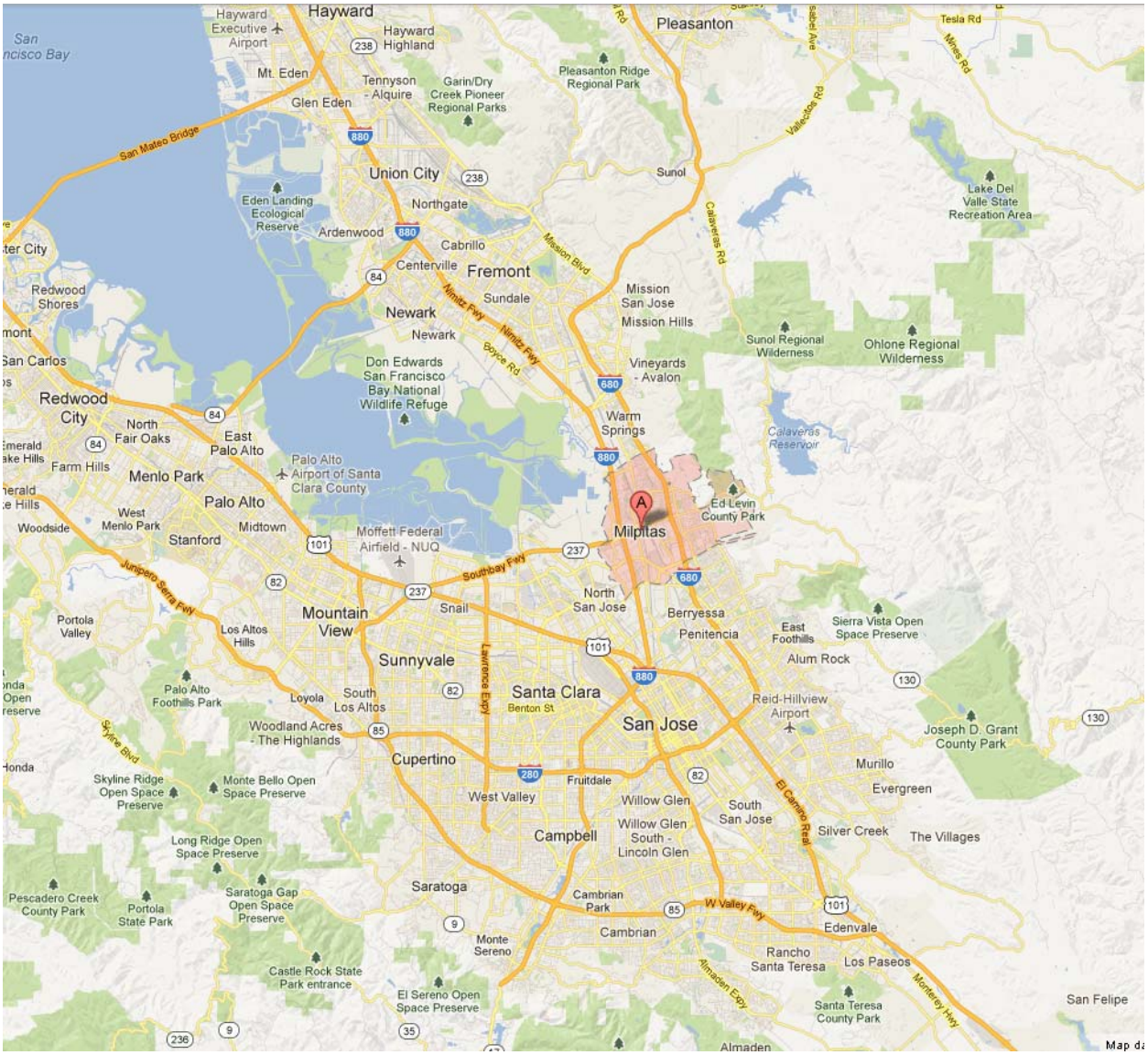
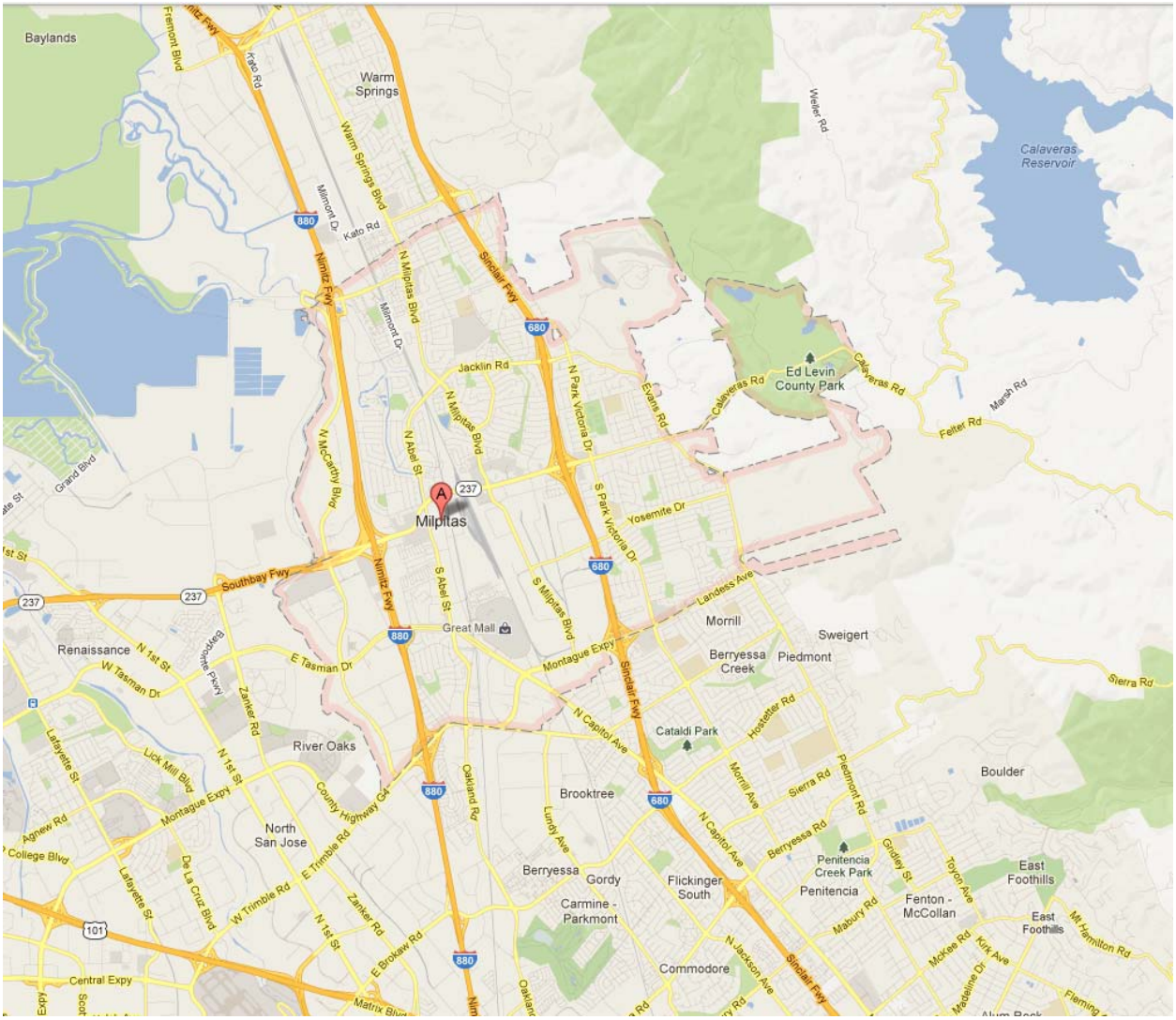


**Figure 2: Vicinity Map**



**EVALUATION OF ENVIRONMENTAL IMPACTS:**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significance

## ISSUES

| I. AESTHETICS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ | 2,4, 8 |
| 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ | 2,4, 8 |
| 3) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ | 2, 8 |
| 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ | 1, 8 |

**Comment:**

1) Have a substantial adverse effect on a scenic vista?

CAP strategies encourage use of green building design features such as cool roofs. Cool roofs use white or reflective roofing material to minimize heat gain in a house. Other green design features could include solar installations on large structures such as parking garages. Solar panel and cool roof installations are subject to design review in Site and Architectural Overlay Districts. One goal of the design review process is to ensure there are no adverse effects on scenic vistas. Therefore, the impact is less than significant.

2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No state scenic highway is located in Milpitas. Therefore, no impact would result.

3) Substantially degrade the existing visual character or quality of the site and its surroundings?

Refer to (1) above. The impact is less than significant.

4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Encouraging solar panels or cool roofs on rooftops promotes energy efficiency and the use of renewable energy sources in the city. Solar panels do not reflect light, are not visible at night, and would not create a new source of substantial glare. Cool roofs that are white may create some glare when viewed from a higher vantage point, but the glare is minimal during the day and negligible at night, and therefore would not be considered substantial. The CAP also encourages interior and exterior lights throughout the community to be turned off whenever possible to conserve energy, which also helps preserve nighttime views. Therefore, the impact is less than significant.

**II. AGRICULTURAL AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
|---|---|---|---|---|---|
| Would the project: | | | | | |
| 1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ | 1,2,4 |
| 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ | 1,2 |
| 3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)? | ☐ | ☐ | ☐ | ☒ | |
| 4) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ | |
| 5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ | 1,2 |

**Comment:**

1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The CAP is a policy document that provides strategies to reduce GHG emissions in the City. No conversion of farmland is proposed. Conversely, the CAP promotes acquisition of additional open space within the City, which could be farmed or used as community garden space. The document is consistent

with Milpitas General Plan policies regarding protection of agricultural lands and would not conflict with existing zoning for agricultural use. No impact would result.

2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Refer to (1) above. No impact would result.

3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?

Refer to (1) above. No impact would result.

4) Result in the loss of forest land or conversion of forest land to non-forest use?

Refer to (1) above. No impact would result.

5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Refer to (1) above. No impact would result.

| **III. AIR QUALITY**<br>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ | 1,10 |
| 2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☐ | 1,10 |
| 3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors? | ☐ | ☐ | ☒ | ☐ | 3,10 |
| 4) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ | 1, 2, 7 |
| 5) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ | 1 |

**Environmental Setting:**
The City of Milpitas is located within the Santa Clara Valley sub-region of the San Francisco Bay Area Air Basin (Air Basin). The Air Basin comprises all or portions of the nine Bay Area counties. Air quality in the Air Basin is regulated by the United States Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and the Bay Area Air Quality Management District (BAAQMD). Regional and local air quality is impacted by dominant airflows, topography, atmospheric inversions, location, season, and time of day.

**Comment:**
1) Conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality plan is the BAAQMD Bay Area 2010 Clean Air Plan, which outlines air quality standards and attainment status for multiple air pollutants, including ground-level ozone and its key precursors, ROG and NOx; particulate matter; air toxics; and GHGs.

The CAP contains strategies to reduce GHG emissions and improve air quality in the city consistent with the State's primary GHG reduction goals contained in AB 32. The CAP is also consistent with the June 2010 proposed BAAQMD GHG Plan-level Thresholds, and State CEQA Guidelines Section 15183.5, which prescribes criteria for adoption of a qualified GHG reduction plan. Potential impacts to air quality could result from increased infill development, which is encouraged by the CAP. However, new development is subject to CEQA, the BAAQMD thresholds for ozone and particulates, and the City's standard development review process. Compliance with these existing regulations and standards would ensure consistency with the Bay Area 2010 Clean Air Plan, and result in a less-than-significant impact.

2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Refer to (1) above. Impacts would be less than significant.

3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?

Refer to (1) above. Impacts would be less than significant.

4) Expose sensitive receptors to substantial pollutant concentrations?

Refer to (1) above. Impacts would be less than significant.

5) Create objectionable odors affecting a substantial number of people?

Refer to (1) above. Impacts would be less than significant.

| IV. BIOLOGICAL RESOURCES | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ | 1,4 |
| 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ | 1, 4, 8 |
| 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ | 1,4 |

**Comment:**

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The CAP does not propose new development in the City. However, both infill development and mixed-use development are encouraged. Infill is characterized by development within already urbanized portions of the city that are not primary habitats for identified species of concern. Furthermore, new large development projects that have the potential to affect local wildlife would require project-level environmental review pursuant to CEQA. Therefore, impacts would be less than significant.

2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The CAP is a policy document guiding the community to reduce GHG emissions. The CAP does not propose development that would interfere with riparian or sensitive natural communities identified in local or regional plans. Therefore, impacts would be less than significant.

3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Refer to (1) and (2) above. Impacts would be less than significant.

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?

The CAP does not contain strategies that would affect movement of wildlife species or impede the use of native wildlife nursery sites. Therefore, no impact would result.

5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The CAP does not contain strategies that would affect local policies or ordinances protecting biological resources. Rather, the CAP supports local policies and ordinances protecting biological resources, and specifically promotes expansion of tree canopy within the community. Therefore, no impact would result.

6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The CAP is consistent with approved local, regional, or state habitat conservation plans. Therefore, no impact would result.

| V. CULTURAL RESOURCES | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature? | ☐ | ☐ | ☒ | ☐ | 1,4 |
| 4) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☒ | ☐ | 1,4 |

**Comment:**

1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?

The CAP recommends energy conservation measures that may affect historic buildings. However, major alterations to historic buildings would require review and potentially mitigation consistent with the City's Municipal Code procedures for historic resources. Compliance with these existing regulations and standards would protect each historic structure's integrity, resulting in a less-than-significant impact.

2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

The CAP is a policy document recommending strategies to reduce GHG emissions. It does not propose any specific development project. There is a remote possibility that ground-disturbing activities could occur as a result of infill, mixed-use, and transit-oriented developments encouraged by the CAP, and that such ground disturbance could uncover previously unknown archaeological resources. In the event that this occurs, compliance with existing State regulations pertaining to archeological resources, paleontological resources, and human remains would ensure a less-than-significant impact.

3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?

Refer to (2) above. The impact is less than significant.

4) Disturb any human remains, including those interred outside of formal cemeteries?

Refer to (2) above. The impact is less than significant.

| VI. GEOLOGY AND SOILS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) | ☐ | ☐ | ☒ | ☐ | 1,11, 12, 13 |
| b) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |
| c) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |
| d) Landslides? | ☐ | ☐ | ☒ | ☐ | 1 |
| 2) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |
| 3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |
| 4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |
| 5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☒ | ☐ | 1, 11, 12, 13 |

**Comment:**

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

b) Strong seismic ground shaking?

c) Seismic-related ground failure, including liquefaction?

d) Landslides?

The City of Milpitas includes fault study areas in hillside areas, where no significant growth is anticipated to occur as a result of implementing CAP measures and actions. The CAP does encourage infill, mixed-use, and transit-oriented development on the valley floor. Such development would be required to comply with the City building code, which includes seismic design standards. Therefore, compliance with existing development regulations and standards would result in a less-than-significant impact.

2) Result in substantial soil erosion or the loss of topsoil?

No future project resulting from implementation of the CAP would directly involve major movement of topsoil or directly result in substantial soil erosion. In the event that proposed residential or commercial retrofits or renovations, construction of bike paths and pedestrian improvements, or new mixed-use or transit-oriented development projects pursuant to the CAP require construction activity that may result in substantial soil erosion or loss of topsoil, such activities would be subject to the City's existing grading regulations, which are specifically designed to reduce potential erosion impacts. Therefore, compliance with existing development regulations and standards would result in a less-than-significant impact.

3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. All development projects would be subject to applicable engineering and City building code requirements specifically designed to reduce potential hazards and damage from on- or off-site landslides, lateral spreading, subsidence, liquefaction, or soil collapse. Therefore, compliance with existing development regulations and standards would result in a less-than-significant impact.

4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No new development projects will result from the implementation of the CAP although infill, mixed-use, and transit-oriented developments are encouraged. All development projects would be subject to applicable engineering and City building code requirements specifically designed to minimize the possible effects of expansive soil. Therefore, compliance with existing development regulations and standards would result in a less-than-significant impact.

5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No new development projects will result from the implementation of the CAP although infill, mixed-use, and transit-oriented developments are encouraged. All development projects would be subject to applicable engineering and City building code requirements designed to ensure that they are developed on soils which are capable of supporting the use of septic tanks, or alternative waste water disposal systems where sewers are not available for the disposal of waste water. Therefore, compliance with existing development regulations and standards would result in a less-than-significant impact.

| VII. GREENHOUSE GAS EMISSIONS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ | 2, 3 |
| 2) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ | 2, 3 |

**Comment:**

1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As identified in the CAP, the Milpitas community emitted 642,050 $MTCO_2e$ in baseline year 2005. With anticipated population and employment growth, emissions in Milpitas in 2020 are forecast to increase by 18% to 754,680 $MTCO_2e$. Implementation of statewide emissions reduction programs would reduce community-wide emissions in Milpitas to 625,520 $MTCO_2e$ in 2020.

The CAP provides strategies the City can implement to reduce GHG emissions. The CAP identifies a reduction target consistent with the CARB AB 32 Scoping Plan of 15% from the baseline year emissions by 2020. As proposed, implementation of statewide emission reduction programs and local actions identified in the CAP would reduce GHGs by 16.2% (87,450 $MTCO_2e$) from baseline 2005 emission levels, exceeding the 15% reduction target by 2020. Therefore, the CAP establishes a road map to directly and indirectly reduce, rather than increase, community-wide GHG emissions. The impact would be less than significant.

2) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The CAP is a policy document that identifies strategies to guide the implementation of GHG reduction measures in the City and quantifies the emissions reductions that result from these strategies. These strategies seek to meet the goal of reducing Milpitas GHG emissions 15% below baseline levels by 2020, consistent with guidance provided in the CARB AB 32 Scoping Plan and the BAAQMD June 2010 GHG Plan-level Significance Thresholds. The CAP also includes adaptation measures to improve the City's ability to address the potential impacts that climate change may have on the City and its residents. The CAP therefore implements, rather than conflicts with, state regulations to reduce GHG emissions (AB 32, SB 375, SB 97). The impact would be less than significant.

| VIII. HAZARDS AND HAZARDOUS MATERIALS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ | 1 |
| 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ | 1 |
| 3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ | 1 |
| 4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☒ | ☐ | 1 |
| 5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ | 1 |
| 6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ | 1 |
| 7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ | 1 |

| VIII. HAZARDS AND HAZARDOUS MATERIALS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project:<br>8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ | 1 |

**Comment:**

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No new development projects will result from the implementation of the CAP although infill, mixed-use, and transit-oriented development is encouraged. It is possible that construction activities associated with new mixed-use or transit-oriented development projects or residential and commercial retrofit and renovation projects recommended by the CAP would require use of potentially hazardous construction materials, such as paints and solvents. However, such projects would be required to comply with applicable utility, building, and safety codes designed to reduce hazards to the public and environment. Compliance with existing regulations and standards would result in a less-than-significant impact.

2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Please refer to (1) above. Impacts would be less than significant.

3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The CAP does not propose new development in the City which would emit hazardous emissions or require handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would result.

4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Where surface or subsurface contamination may be a concern, project applicants are required to prepare an environmental assessment. The assessment would include, but not be limited to: (a) Identification of potential sources of contamination caused by past or current land uses; and (b) evaluation of non-point sources of hazardous materials, including agricultural chemical residues, fuel storage tanks, septic systems, or chemical storage areas.

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. All development projects would require an assessment of potential hazardous materials, along with a description of the hazard(s) and remedies to avoid or minimize any impacts to acceptable levels. Therefore, the impact would be less than significant.

5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

There are no projects proposed within the CAP that would negatively affect operation of an airport, caused by height, light interference, or land use incompatibility. Therefore, no impact would result.

6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The City is not within the vicinity of a private airstrip. Therefore, no impact would result.

7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. According to standard development review procedures for project applications, individual projects would be reviewed prior to approval by the Fire Department. The CAP does not include recommendations that would physically interfere with the City's Emergency Operations Plan or any established emergency evacuation plan. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. Furthermore, CAP policies are consistent with the Milpitas General Plan Safety Element policies to reduce risk of loss, injury or death involving wildland fires. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

.

| IX. HYDROLOGY AND WATER QUALITY | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☐ | ☒ | 1,2 |
| 3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site? | ☐ | ☐ | ☐ | ☒ | 1,2 |
| 4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site? | ☐ | ☐ | ☐ | ☒ | 1,2 |
| 5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 6) Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☒ | ☐ | 1,2, 14 |

| IX. HYDROLOGY AND WATER QUALITY | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ | 1, 2, 14 |
| 9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 10) Be subject to inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ | 1,2 |

**Comment:**

1) Violate any water quality standards or waste discharge requirements?

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. Construction associated with these projects could increase erosion and adversely affect urban runoff. However, any new project resulting from the CAP would be subject to existing City standards requiring setbacks to creeks to protect water quality, and Stormwater Regulations for construction to prevent sediment from entering creek environments. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The CAP recommends numerous water conservation measures, which may result in reduced demand for water supplies, and an *increase* in groundwater supplies. The CAP does not recommend any strategy or measure that would require additional water supply that would be attained from groundwater and would not result in any future projects that would substantially interfere with groundwater recharge. Therefore, no impact would result.

3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?

The CAP does not recommend any strategy or measure that would directly or indirectly alter drainage patterns. No streams or rivers are anticipated to be altered. Therefore, no impact would result.

4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?

Refer to (3) above. No impact would result.

5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Refer to (1) above. Impacts would be less than significant.

6) Otherwise substantially degrade water quality?

Refer to (1) above. Impacts would be less than significant.

7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No new development projects will result from the implementation of the CAP, although infill, mixed-use, and transit-oriented projects are encouraged. Any such projects would be subject to the City's flood-control program and ordinance, which are designed to reduce flood hazards. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Refer to (7) above. Impacts would be less than significant.

9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Refer to (7) above. Impacts would be less than significant.

10) Be subject to inundation by seiche, tsunami, or mudflow?

The CAP does not recommend any future projects, strategies, or measures that would result in inundation by seiche, tsunami, or mudflow. Therefore, no impact would result.

| **X. LAND USE** | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ | 1, 2 |
| 2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ | 1, 2 |
| 3) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ | 1, 2, 4 |

**Comment:**

1) Physically divide an established community?

The CAP does not propose any structures, land use designations or other features (i.e., freeways, railroad tracks) that would physically divide an established community. The CAP does not recommend any strategy or measure that would physically divide the community. Rather, the CAP includes strategies and measures to improve connectivity within Milpitas and to promote alternative transportation methods. Therefore, no impact would result.

2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The CAP proposes strategies and measures to reduce GHG emissions. Implementing the CAP may require some modification of existing City policies, including the General Plan and Zoning Regulations. However, proposed CAP strategies and measures would generally result in greater avoidance or mitigation of environmental effects, as the CAP is designed to mitigate adverse environmental impacts associated with global climate change. For these reasons, although some changes to existing City policies and plans would result from adoption of the CAP, the intent is beneficial. Therefore, the impact would be less than significant.

3) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The CAP is consistent with applicable habitat conservation plans or natural community conservation plans. Therefore, no impact would result.

| XI. MINERAL RESOURCES | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ | 1, 4 |
| 2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ | 1, 4 |

**Comment:**

1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No significant mineral resources are located in the city. Therefore, no impact would result.

2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Refer to (1) above. No impact would result.

| XII. NOISE | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project result in: | | | | | |
| 1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ | 1, 6 |
| 2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ | 1, 6 |
| 3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ | 1, 6 |
| 4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ | 1, 6 |
| 5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ | 1, 6 |
| 6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ | 1, 6 |

**Comment:**

1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

While the CAP does not recommend any new project, strategy, or measure that would generate excessive amounts of noise, construction activity associated with recommended energy efficiency retrofits in residential or commercial buildings, new mixed-use or transit-oriented development projects, expansion of bicycle and pedestrian facilities, and installation of distributed renewable energy systems could possibly result in temporary increases in noise levels.

However, any construction associated with these activities would be required to comply with the City's Noise Ordinance and regulations designed to reduce noise from construction activities. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Similar to the evaluation within item (1), temporary construction activities resulting from implementation of CAP measures and actions could potentially result in excessive groundborne vibration or groundborne noise levels for a temporary period of time associated with recommended redevelopment, energy efficiency retrofits in residential or commercial buildings, expansion of bicycle and pedestrian facilities, and installation of distributed renewable energy systems. However, construction activity vibration levels for projects resulting from the CAP would be similar to those of ongoing activities in the urban environment, and would not be excessive. Therefore, this would be a less-than-significant impact.

3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No substantial permanent increase in local traffic volumes is anticipated as a result of recommendations from the CAP. Thus, no substantial permanent increase in ambient noise levels related to travel activity is expected. Conversely, the CAP includes numerous recommendations designed to reduce the number and length of vehicle trips in Milpitas, which could lead to a *decrease* in ambient noise levels. Therefore no impact would result.

4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Refer to item (1). Impacts would be less than significant.

5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Milpitas is not located within an airport land use plan. Therefore, no impact would result.

7) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Milpitas is not located within the vicinity of a private airstrip. Therefore, no impact would result.

| XIII. POPULATION AND HOUSING | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ | 1, 2, 8 |
| 2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ | 1 |
| 3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ | 1 |

**Comment:**

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The CAP includes strategies and measures to reduce GHG emissions. Proposed measures include encouraging transit-oriented development and retrofitting existing residential and commercial buildings to make them more energy efficient. The City includes two Specific Plans that envision a total of 11,000 dwelling units and 300,000 square feet of commercial space. Other potential development sites outside of these areas are small and few.

The CAP does not propose any new housing units or non-residential square feet beyond those already anticipated in the City's general and specific plans. Commercial and residential energy efficiency retrofits that may occur as recommendations from the CAP would update homes already located in Milpitas to make them more energy efficient and would not be likely to include additions that make homes larger and accommodate more people. Therefore, the impact would be less than significant.

2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Although CAP strategies and measures encourage energy efficient retrofits for existing homes and encourage new mixed use and transit-oriented development projects, homes would not be displaced. Possible future development activities would likely lead to a greater mix of uses within the City's commercial corridors and would result in more homes. Replacement housing would not be necessary. Therefore, no impact would result.

3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Refer to (2) above. No impact would result.

| XIV. PUBLIC SERVICES | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project:<br>1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | | |
| Fire Protection? | ☐ | ☐ | ☒ | ☐ | 1 |
| Police Protection? | ☐ | ☐ | ☒ | ☐ | 1 |
| Schools? | ☐ | ☐ | ☒ | ☐ | 1 |
| Parks? | ☐ | ☐ | ☒ | ☐ | 1 |
| Other Public Facilities? | ☐ | ☐ | ☒ | ☐ | 1 |

**Comment:**

1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire Protection?

As discussed under “Population and Housing,” CAP recommendations could result in construction of new infill, mixed-use, and transit-oriented projects. All new construction is subject to the City’s General Plan growth management regulations and fire service standards. Therefore, compliance with existing regulations and standards and would not create unanticipated demand on fire protection services. This impact would be less than significant.

b) Police Protection?

As discussed under “Population and Housing,” CAP recommendations could result in construction of new infill, mixed-use, and transit-oriented projects. All new construction is subject to the City’s General Plan growth management regulations and police protection standards. The possible increase in population that may occur as a result of implementation of the development recommendations of the CAP would not increase the demand for police protection service to the extent that new police protection facilities would be required. Therefore, compliance with existing regulations and standards and would not create unanticipated demand on police protection services. This impact would be less than significant.

c) Schools?

As discussed under “Population and Housing,” CAP recommendations could result in construction of new infill, mixed-use, and transit-oriented projects. The possible increase in population that may occur as a result of implementation of the development recommendations from the CAP would not increase the demand for school-related service to the extent that new school facilities would be required. If such facilities were required, payment of impact fees for construction of new school facilities would constitute sufficient mitigation for school facility impacts, consistent with state law. Therefore, impacts would be less than significant.

d) Parks?

The CAP recommends additional parkland to increase carbon sequestration from trees, plants and untilled soil. Construction of new parkland is subject to General Plan policies in the Parks and Recreation Element, as well as engineering design standards, which prevent substantial adverse physical impacts. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

e) Other public facilities?

As discussed under “Population and Housing,” CAP recommendations could result in construction of new infill, mixed-use, and transit-oriented projects. The possible increase in population that may occur as a result of implementation of the strategies from the CAP would not be expected to increase the demand for libraries or other governmental services to the extent that new facilities would be required. Therefore, compliance with existing regulations and standards and would not create unanticipated demand on other public facilities. This impact would be less than significant.

| XV. RECREATION | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ | 1, 4, 8 |
| 2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ | 1, 4, 8 |

**Comment:**

1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The CAP promotes expansion of the City park network, which would create more opportunities for users and less concentrated impact on existing parks and recreational facilities. Therefore, no impact would result.

2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The CAP recommends additional parkland to increase carbon sequestration from trees, plants and untilled soil. Construction of new parkland is subject to General Plan policies in the Parks and Recreation Element, as well as engineering design standards, which prevent substantial adverse physical impacts. Therefore, compliance with existing regulations and standards would result in a less-than-significant impact.

| XVI. TRANSPORTATION/TRAFFIC | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | ☐ | ☐ | ☒ | ☐ | 1, 3 |
| 2) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☒ | ☐ | 1, 3 |
| 3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ | 1 |
| 4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ | 1 |
| 5) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ | 1 |
| 6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☐ | ☒ | 1 |

**Comment:**

1) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Implementation of CAP strategies would increase the availability of transit service for Milpitas residents, add additional bicycle and pedestrian facilities, and discourage single-occupancy vehicle use. Achieving each of these goals would reduce traffic loads, which would reduce the number of vehicle trips, volume to capacity ratio, and intersection congestion within the City. New infill, mixed-use, and transit-oriented development projects recommended within the CAP would be designed specifically to reduce vehicle trips and place more people within walking distance of commercial uses and public transit. Furthermore, no proposed strategy would directly increase traffic in relation to the existing traffic load and capacity of the street system. Therefore, the impact would be less than significant.

2) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Refer to (1) above. Impacts would be less than significant.

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The CAP does not include any strategy or measure that would directly or indirectly affect air traffic patterns. Therefore, no impact would result.

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?

The CAP does not include any strategy that would promote the development of hazardous road design features or incompatible uses. Rather, the CAP promotes the development of new bicycle and pedestrian facilities built to current standards, which would provide greater safety for pedestrians, bicyclists, and drivers. Therefore, the impact would be less than significant.

5) Result in inadequate emergency access?

The CAP recommends strategies and measures that would increase safety for drivers, pedestrians, and bicyclists and seeks to reduce the number of automobiles on Milpitas streets, both of which could make access for emergency vehicles easier and more efficient. No strategy proposed in the CAP would result in the development of uses or facilities that would degrade emergency access. Therefore, the impact would be less than significant.

6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Supporting and increasing access to alternative transportation is a key objective of the CAP. The CAP would enhance adopted policies, plans, and programs supporting alternative transportation. Therefore, no impact would result.

| XVII. UTILITIES AND SERVICE SYSTEMS | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| Would the project: | | | | | |
| 1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ | 1,2 |
| 2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ | 1,2 |
| 7) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ | 1,2 |

**Comment:**

1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Implementation of the CAP could result in a small increase in population through infill, mixed-use, and transit-oriented development. However, the population increase would not create unanticipated demand for wastewater treatment that would exceed treatment requirements. Therefore, the impact would be less than significant.

2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Implementation of the CAP would not result in an unanticipated increase in population through infill, mixed-use, and transit-oriented developments. Thus, resulting needs for water, storm-water, and wastewater treatment would not increase substantially. No expanded or new treatment facilities would be required. Therefore, the impact would be less than significant.

3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Refer to (2) above. Impacts would be less than significant.

4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Refer to (2) above. Impacts would be less than significant.

5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Refer to (2) above. Impacts would be less than significant.

6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The CAP promotes recycling, and an increased waste diversion rate, both of which would reduce disposal of solid waste to landfills, thereby extending landfill capacity. Therefore, the impact would be less than significant.

7) Comply with federal, state, and local statutes and regulations related to solid waste?

The CAP would not recommend any strategy that would not comply with applicable solid waste regulations. Conversely, the CAP promotes recycling and includes actions to achieve and improve upon existing waste reduction goals. No impact would result.

| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE | | | | | |
|---|---|---|---|---|---|
| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact | Information Source(s) |
| 1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☐ | ☒ | 1-15, A |
| 2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☐ | ☒ | 1-15, A |
| 3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☐ | ☒ | 1-15, A |

**Comment:**

1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The CAP is a proactive strategy document that enables the City to maintain local control of implementing State direction (AB32 – the California Global Warming Solutions Act) to reduce GHG emissions to 1990 levels by 2020. GHG reduction strategies align with existing General Plan policies. Strategies in the document would improve, rather than degrade the quality of the environment, and the quality of life for human beings in Milpitas. No impact would result.

2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Having an adopted CAP will allow the City to streamline CEQA review process of certain projects. Senate Bill (SB) 97 amended CEQA to identify GHG emissions associated with a project as a potentially significant environmental impact but also allowed lead agencies to analyze and mitigate the effects of GHG emissions at a programmatic level, such as in a general plan, or as part of a separate plan to reduce GHG emissions (State CEQA Guidelines Section 15183.5). The CAP serves as the City's qualified GHG reduction plan, which allows the CAP to be used in the cumulative impacts environmental analysis of projects. The environmental review for each project must identify those requirements specified in the CAP that apply to the project, and if those requirements are not otherwise binding or enforceable, they should be incorporated as mitigation measures applicable to the project (State CEQA Guidelines Section 15183.5b). Therefore, no cumulatively considerable impacts would result.

3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Refer to (1) above. No impact would result

**SOURCES**
**General Sources:**

1. CEQA Guidelines - Environmental Thresholds (Professional judgment and expertise and review of project plans)
2. City of Milpitas General Plan (Land Use Chapter)
3. City of Milpitas General Plan (Circulation Chapter)
4. City of Milpitas General Plan (Open Space & Environmental Conservation Chapter)
5. City of Milpitas General Plan (Seismic and Safety Chapter)
6. City of Milpitas General Plan (Noise Chapter)
7. City of Milpitas General Plan (Housing Chapter)
8. City of Milpitas Zoning (Title XI)
9. California Department of Conservation, *Santa Clara County Important Farmland 2006,* Map. June 2005
10. Bay Area Air Quality Management District, CEQA Guidelines, June 2010
11. County of Santa Clara Department of Public Works, *Soil Map Sheet 19,* 1964
12. United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968
13. California Department of Conservation, *Geologic Map of the San Francisco-San José Quadrangle*, 1990
14. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085CIND0A, 06085C0058H, 06085C0059H, 06085C0066H, 06085C0067H, 06085C0068H, 06085C0069H.06085C0080H, 06085C0086H, and 06085C0087H*
15. Transit Area Specific Plan Final Environmental Impact Report, June 2008

**Project Related Sources:**

A. Project application and appendices.

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080, 21083.05, 21095, Pub. Resources Code; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.