

# HORIZON 2035

## CAP RECONCILIATION DRAFT

January 2011

# Format Followed

## Limitations:

Address GHG reduction and control measures

*“...the framework for regional targets for GHG reductions, and improved regional planning to meet them”*

## Draft Framework

### ▣ GOALS

*Statements of end vision*

### ▣ POLICIES

*Areas to be tackled which in combination will result in achieving the Goal.  
Specific directions with measurable results.*

### ▣ ACTION

*The collection that we began with organized below the Policies they address.  
Precise list of clean actions remains to be discussed.*

# Format Followed

## ▣ GOALS

*Goals are long-range, broad and comprehensive targets. Goals are not necessarily measurable or achievable; rather, they describe a desired end- state community condition.*

Example:

**Sunnyvale will have a forest canopy over all landscapes and hardscapes.**

## ▣ POLICIES

*Policies describe context and rationale of desired outcomes. Policies are focused and specific; they may be created, altered or discarded by City Council. Policies must only be consistent with adopted long-range goals of the General Plan.*

Example:

**Sunnyvale's forest canopy will grow by 5% per year.**

## ▣ ACTION

*Action strategies are short-range in nature. The action strategies are specific proactive steps to achieve the goals following the instructional guidelines. They are the critical link between long-range planning and current-decision making.*

Example:

**Five trees will be planted in Sunnyvale for every tree cut down in Sunnyvale until we've run out of places to plant trees.**

# Goal and Policy Areas

**1**

LAND USE PLANNING

**2**

CIRCULATION AND  
TRANSPORTATION

**3**

ENERGY CONSUMPTION

**4**

BUILDINGS AND  
CONSTRUCTION

**5**

ENERGY PORTFOLIO

**6**

MATERIAL AND WATER  
CONSUMPTION

**7**

LANDSCAPES AND  
HARDSCAPES

**8**

COMMUNITY  
ENGAGEMENT

# Goal and Policy Areas

## 1

### LAND USE PLANNING

**LU - Utilize land use and planning tools to reduce or eliminate trips in order to complete the activities of our everyday lives.**

#### 1.1 Parking

To promote alternative modes of transportation, reduce the amount of free or unrestricted parking available within the city to XX% of paid parking spaces.

#### 1.2 Transit-Oriented, Higher Density, Mixed-Use Development

Facilitate development in designated core and corridor areas that is transit-oriented, higher density, and mixed-use in order to establish a modal split of XX% non-single occupant vehicle use from core and corridor areas by 2035.

#### 1.3 Local Commerce

Increase the amount of locally generated and consumed goods in order to decrease VMT and promote healthier communities.

#### 1.4 Jobs near residence

Provide incentives that result in reduction or elimination of commute miles

#### 1.5 Distribute Services

Encourage wider distribution of grocery and stores such that every neighborhood village contains the required services

**OS - Provide local resources that support the natural processes and that provide rest and relaxation opportunities**

#### 1.6 Open Space.

Increase the amount of open space in the community consistent with the Land Use General Plan. .

#### 1.7 Distribute Services .

Provide availability and access to outdoor space including public space on private property within 400 yards of any residence.

# Goal and Policy Areas

## 2

### CIRCULATION AND TRANSPORTATION

**TRM -Modify the transportation infrastructure such that bicycling, walking, and transit are viable options regularly used by all Sunnyvale residents .**

#### 2.1 Bicycle, Pedestrian and Transportation Design Elements.

Create streets and connections that facilitate bicycling, walking, and transit use throughout the City in order to increase the modal split such that automotive trips represent less than 50% of trips as traveled annually. .

#### 2.2 Bicycle, Pedestrian and Transportation Travel Operations. .

Prioritize safe, efficient and convenient access for non-automotive travel to destinations in and outside of Sunnyvale in order to increase the modal split such that automotive trips represent less than 50% of trips as traveled annually. .

#### 2.3 Transit

Facilitate the use of public and private transit such as buses, Caltrain, Amtrak, and shuttles to and from Sunnyvale and within the City so that transit is a viable alternative for the daily transportation needs of most Sunnyvale residents and workers.

#### 2.4 Employer Programs.

Reduce single occupant vehicle trips to major employers (100 employees or more) at 50%, or lower, in Sunnyvale annually.

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#### 2.5 School Commutes.

Encourage carpooling, bicycling, walking and transit access to elementary, middle and high schools so that the number of car trips is no more than 20% of the number of students at any school.

#### 2.6 New-Style Circulation Zone

Developments including multi-parcel developments need not have auto access to every building .

### **TRI - Minimize the environmental impact of vehicular travel**

#### 2.7 Clean Alternative Motor Vehicles and Fuels.

Promote the use of clean alternative motor vehicles and fuels to reduce emissions from vehicular travel so that 50% of motor vehicles on Sunnyvale streets, are alternatively fueled.

#### 2.8 Car sharing

Promote the use of carsharing in Sunnyvale in order to establish and maintain at least one viable car share operation within the City by 2020 which serves neighborhoods, commercial, and industrial centers. .

#### 2.8 Stationary Motorized Vehicles

Less than 10% of Sunnyvale motorized vehicles will produce emission while stationary.

# Goal and Policy Areas

**3**

## ENERGY CONSUMPTION

**EC - Per capita energy consumption is 80% below 2005 levels by increasing efficiency and conservation.**

### 3.1 Lighting Efficiency

Increase the use of efficient indoor and outdoor lighting technologies to reduce energy consumption associated with lighting by 80%

### 3.2 Financing Energy Efficiency

Provide funding options for upfront project costs that are paid back by recipients as energy savings are achieved

### 3.3 Auditing of Energy Savings Opportunities

Identify biggest energy users within the city, work with them to reduce consumption

### 3.4 Transparency of Use

Organizations with over XX employees or regular users must have an identified energy auditor who provides an annual report for publication.

**4**

## BUILDINGS AND CONSTRUCTION

**BU - Energy consumed and GHG released per square foot as the result of construction and operation of buildings each is at 80% below 2010 levels**

### 4.1 New Construction and Remodels

Require green building practices in 100% of new residential and commercial development and remodels that results in zero net GHG emission in all new buildings

### 4.2 Existing Building Retrofits

Reduce the total energy use of all buildings built before 1990 by 25%

### 4.3 "Cool" Roofs and Pavements

Reduce the amount of dark, non-reflective roofing and paving material in order to mitigate the urban heat island effect and reduce energy associated with heating and cooling.

# Goal and Policy Areas

5

## ENERGY PORTFOLIO

**EP - The entire electric energy collection portfolio is satisfied by renewable sources**

### 5.1 Renewable Energy Portfolio

Increase the renewable energy portfolio of electricity delivered to Sunnyvale so that 50% of delivered energy comes from renewable sources by 2035

### 5.2 Local Small-Scale Renewable Energy

Expand the electric energy portfolio for Sunnyvale so that 40% of energy used comes from local renewable sources by 2025.

### 5.3 Selecting Renewables

Sunnyvale residents and businesses can easily transition to a renewable energy portfolio because price parity is achieved with fossil fuels

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## MATERIAL AND WATER CONSUMPTION

**W - Through reclamation and conservation reduce GHG produced from water delivery and (water) waste treatment from 2010 levels by 40% per capita**

### 6.1 Water GHG content

Decrease the amount of GHG emitted as a result of filtering, moving, and treating water used within Sunnyvale by 30% by 2020

### 6.2 Water Conservation

Reduce indoor and outdoor potable water use in residences, businesses, and industry by 20% by 2020.

### 6.3 Water Recovery

100% of sewer water is recycled

**LW - Less than 5% of municipal waste stream goes to landfill**

### 6.1 Materials Management

Eliminate the use of all common materials that are not recyclable or that are cost ineffective to recycle

### 6.2 Recycling and Composting

Increase the amount of waste recycled and composted by 1% per year according to the City's Zero Waste Strategic Plan

# Goal and Policy Areas

## 7

### LANDSCAPES AND HARDSCAPES

#### UF -Expand Urban canopy in Sunnyvale

##### 7.1 Urban Forestry

Increase the number of shade trees planted within the community and protect the existing tree stock in order to achieve a tree canopy of at least 80% in 2035 over paved spaces

##### 7.2 Reduce Heat Island Effect

Use Natural mechanisms to reduce heat island effects, capture water, and capture CO2 from the atmosphere

##### 7.3 Appropriate Foliage

Clarify codes and policies to maximize the preservation of the largest longest living trees and insure the expansion of the urban forest over time as appropriate for the site

#### HS -Materials used in making hardscapes shall be GHG neutral

##### 7.4 Durable Paving Options

All new pavement and other hardscape will have a usable life of at least 50 years.

##### 7.5 Reflective materials - Heat Island Effect

Paving materials will reflect XX% of the incident radiation

# Goal and Policy Areas

## 8

### COMMUNITY ENGAGEMENT

**CA - Community members are knowledgeable about GHG Emissions and are all taking actions to reduce them.**

#### 8.1 Community Outreach and Involvement

Educate and involve the community regarding actions they can do at home to reduce energy, water, waste, and fuel consumption so that 30% of participants have changed their behavior each year as a result of this measure.

#### 8.2 School Education and Involvement

Educate local school children about climate change and ways that they and their families can reduce greenhouse gas emissions so that an annual feedback survey shows that 30% of households with school children are actively utilizing GHG emissions reductions strategies taught at school

#### 8.3 Provide examples of what can succeed

Through selected projects and efforts to improve City Operations, demonstrate how sustainability efforts are possible and successful.

#### 8.3 Measuring ourselves

Make comparison an intrinsic part of consumption . Bring awareness of how our consumption compares to other communities, regions, and others in our neighborhood

#### 8.5 Partnerships for Outreach

Use the City's Sustainability Commission and coordinator as a structure to coordinating with other groups for volunteers, residents, and other organizations to help achieve Sunnyvale's sustainability goals

#### 8.6 Active Business Involvement

Sunnyvale staff actively engage with Sunnyvale businesses to identify areas for GHG reduction and financial savings.

# Moving Beyond the Draft

- ▣ Present work focused on Goals and Policies
  - In 8 working sessions (25 hours) Working Group focused only clarifying the Goals and Policies
  - Previously published Actions were used as the input
- ▣ More work is required to refine wordings and establish targets
  - *“Organizations with over \_\_\_ employees...”*
  - *“...water used within Sunnyvale by 30% by 2020”*
  - *“Use Natural mechanisms to reduce...”*

# Moving Beyond the Draft

- ▣ Weaknesses remaining
  - Inconsistent wording and direction in Actions
  - Much overlap between Actions  
Ex: Transportation mode topics
  - Substantial gaps in Actions in high some high impact areas  
Ex: Addressing Industrial uses
- ▣ Work for other forums (perhaps even beyond Horizon 2035)
  - Actions need to be pruned
  - Additional actions need to be crafted to address high impact areas



# Moving Beyond the Draft

