

# Sustainable Programs, Policies and Projects

## Greenhouse Gas Emissions/Climate Change

- **Torrance “1 Mile, 1 Charger” Project (May also fall under Alternative Fuel)** – publicly accessible electric vehicle charging infrastructure project (2015/2016)
  - o Community Development/Community Services/General Services
  - o As of 3/23/2018 - 20,319 charging sessions:
    - 59,869 kg of GHG gases saved
    - Equivalent of planting 2,111 trees that will grow for 10 years.
- **South Bay Business Environment Coalition (Green Business Category)**
- **South Bay Council of Government’s South Bay Environmental Services Center**
  - o Business Initiatives
  - o Cash for Kitchens
  - o Waterbrooms
- **Green Business Network (Green Business Category/Energy Efficiency)**
  - o Current Grant to provide resources for small business owners to ensure environmental compliance
- **Designated as a Tree City in 2018 as part of Tree City USA program (Air Quality/Resource Protection)**
  - o Commitment to high level of tree maintenance and urban forestry.
  - o 37,940 trees maintained by City

## Water Quality

- **Madrona Marsh: Water Biofiltration (Natural Resource Protection)**
  - o Installed wetland treatment system to reduce nutrient loads to Marsh
    - Moves stormwater runoff from roads through a biofilter to improve watery quality and the ecosystem at Madrona Marsh.
  - o Project Completed
- **Clean Bay Restaurant Program**
  - o On-going Program to encourage restaurants to implement more Best Management Practices (BMP) than required
- **Walnut Basin Storm Water Recharge and Enhancement**
  - o Project will divert urban runoff and stormwater back into Walnut Basin
  - o Project will reduce nutrient and toxics pollution to Machado Lake
- **Low Impact Development (LID) Ordinance – water diversion/conservation**
  - o Citywide program to require Developers to install on-site BMPs to infiltrate or treat stormwater from their project sites
- **Green Streets Project**
  - o Project would install BMPs in City parkways to infiltrate or treat stormwater from streets east of El Nido Park
  - o Project submitted at Regional Project with Beach Cities for grant funding

## **Water Conservation**

- **Conservation Classes – held at libraries and at Madrona Marsh Nature Center**
  - **Water** (Educating the public on ways to conserve water)
- **Transit Facility Remodeling Project – Phase 1**
  - Jan 2016: Conversion to Low-Flow Toilets
    - Savings to Date: \$2,500 Annually on Water
- **Water Education Programs**
  - Turf Removal Classes
  - California-Friendly Landscape Trainings
  - Native Plant Gardening classes
  - Greywater Reuse Workshops
  - Living Wise School Program
  - Rainwater Collection Exhibit at Madrona Marsh Nature Center
  - Bio remediation/Urban Runoff exhibit at Madrona Marsh Sump
- **Water Sustainability/Reduction of Imported Water (Goal to become 80% water independent)**
  - **Regional Brackish Desalination Feasibility Study/Project**
    - Goal is eliminate the brackish plume in our local groundwater basin. May result in siting of an additional groundwater Desalter located in Torrance.
  - **Van Ness Wellfield Project**
    - Additional three wells in North Torrance – tentative date 2021
- **Water Conservation/Reduction Incentives**
  - Water Efficient Appliances and Fixture
  - Water Retention and Capture Fixtures (Rain Barrels/Gardens)
- **North Torrance Well Field Project**
- **Airport Storm Water Infiltration (Water Quality)**
- **Recycled Water Projects**
  - Completed February 2018 – Expansion of Goldsworthy Desalter
  - On Site Recycled Water Retrofit Project proposed for sites along WBMWD Anza Lateral Project

## **Solid Waste/Recycling**

- **Big Belly Trash Receptacles**
  - Looking to purchase up to 5 Big Belly Trash Receptacles by Summer of 2019.
  - Big Belly Trash Receptacles will be placed around the Regional Transit Center
- **Recycling Market Development Zone**
- **Waste Reduction - Methane/Landfill Reduction**
- Possible Future Solid Waste/Recycling Projects:

- Refuse and Recycling in Public Spaces (Solid Waste/Recycling)
  - Hire Third Party Vendor to place, service, and maintain refuse/recycling containers in public spaces.
  - Funded through advertising on Refuse/Recycling Containers
- Establish Regional Hazardous Waste Collection Site (Solid Waste/Recycling)
  - Potential partnership with County and/or Refinery.

### **Alternative Fuels/Modes of Transportation**

- **Regional Transit Center (Climate Change/ Air Quality)**
  - LEED Platinum Facility, if not Gold
  - Up to 12 electric vehicle charging stations
- **Transit Fleet Modernization**
  - Jul. 2016: Conversion to 100% Alternative Fuel Fleet. Savings from using CNG vs. Diesel powered buses. Transit is now using Renewable CNG Fuel.
  - Savings to Date: \$400,000 Annually on Fuel

### **Energy Efficiency**

- **Encourage Green Building/Assistance (May also fall under Climate Change)**
  - 10 staff members certified as Build It Green/ GreenPoint Rated Advisors - provide assistance to public
  - Permit Technicians, Plan Checkers and Building Inspectors trained in California Green Building Code
  - LEED Certifications for qualifying Developments
- **Communication and Information Technology (CIT)**
- **IT Facility – Server Virtualization (2010)**
  - CIT/General Services
  - Annual KW Savings: 26,546
  - Annual Savings: \$1,447
- **Conservation Classes – held at libraries**
  - **Energy** (Educating the public on ways to be energy efficient)
- **Madrona Marsh: Solar Roof Project** (May also fall under Greenhouse Gas emissions/Climate Change)
- **Green Business Program** (May also fall under Climate Change)
- **Solar Lighting for Bus Shelters** (May also fall under Climate Change)
- **Grant Application for Solar in low-income areas** (May also fall under Climate Change)
  - Providing safety at the regional level
  - \$180,000 grant for 500 solar lights on bus stops.
- **Transit Facility Remodeling Project – Phase 1** (May also fall under climate change)
  - Jan. 2016: Conversion to Energy Efficient Lighting and Light Sensors

- Savings to Date: \$34,000 Annually on Electricity
- **Citywide Light Emitting Diode (LED) Street Lights (10,000 street lights)**
  - Installation by SCE is scheduled for early 2018
  - Savings to Date: None - \$140,000 per year once installed
- **LED Overhead Street Name Signs lamp retrofit (2013)**
  - Savings: Approx. 85% with LED over previous fluorescent tubes
- **Civic Center Frontage LED Perimeter Lighting upgrades (2012)**
  - Savings: Approx. 85% using LED
- **Overhead safety lights at signalized intersections Citywide with Induction and LED retrofit (2011)**
  - Savings: Approx. 80-90% using induction and LED lamps over metal halide
- **LED retrofit at Traffic Signals Citywide approx. 125 locations (2010)**
  - Savings: More than 85% cost savings with LED over previous incandescent bulbs
- **General Services Energy Projects**
  - WALTERIA Library – Interior lighting (2010) (Energy Efficiency)
    - General Services/Community Services
    - Annual KW Savings: 7,597
    - Annual Savings: \$4,832
  - Well #9 – pump upgrade (2011) (Energy Efficiency)
    - General Services/Public Works
    - Annual KW Savings: 208,875
    - Annual Savings: \$20,239
  - General Services Building – HVAC Upgrade (2011) (Energy Efficiency)
    - Annual KW Savings: 32,888
    - Annual Savings: \$7,186
  - Street Safety Lights – Induction lighting (2011) (Energy Efficiency)
    - General Services/Public Works
    - Annual KW Savings: 282,992
    - Annual Savings: \$27,779
  - Police Department Parking lights/City Hall Parking Lights/Cultural Arts Center Parking Lights (2011) (Energy Efficiency)
    - General Services/Public Works
    - Annual KW Savings: 94,310
    - Annual Savings: \$17,154
  - Interior Lighting Upgrades (T12 to T18 lamps): Greenwood Park/Fire Station #1/Fire Station #2/Fire Station #3/Fire Station #4/Fire Station #5/Fire Station #6/Cultural Arts Center/Cable Building/City Yard/Armstrong Theater/Toyota Meeting Hall/Human Resources Building/Building and Safety/Fire Protection/Retired & Senior Volunteer Program (2012) (Energy Efficiency)

- General Services/Community Development/Fire Department/Human Resources
  - Annual KW Savings: 241,793
  - Annual Savings: \$43,980
- Interior/Exterior Lighting Upgrades (T12 to T18 lamps) City Yard/Airport/Teen Center/City Hall/De Portola Park/Entradero Park/Gunser Park/Hickory Park (2015) (Energy Efficiency)
  - General Services/Community Services
  - Annual KW Savings: 479,923
  - Annual Savings: \$74,907
- Interior LED lighting - Toyota Meeting Hall (2018) (Energy Efficiency)
  - General Services
  - Annual KW Savings: 16,741
  - Annual Savings: \$2,679
- Interior LED lighting - Wilson Park Gym (2017) (Energy Efficiency)
  - General Services/Community Services
  - Annual KW Savings: 26,718
  - Annual Savings: \$4,716
- Interior/Exterior LED lighting - Transit Center (2018) (Energy Efficiency)
  - General Services/Transit
  - Annual KW Savings: 125,300
  - Annual Savings: \$15,708
- Plunge Pool – VFD and Pump Motor Upgrade (In Progress/Seeking Funding) (Energy Efficiency)
  - General Services/Community Services
  - Future Annual KW Savings: 172,003
  - Future Annual Savings: \$18,920
- LED lighting Upgrades - City Hall/Library/Police Department (In Progress/Seeking Funding) (Energy Efficiency)
  - General Services/Community Services/Police Department/City Manager
  - Future Annual KW Savings: 837,954
  - Future Annual Savings: \$98,711
- **Streetlights – LED Electric Retrofit Project (May also fall under Energy Efficiency)**
  - LED Underground Lighting