City of Mission Viejo City Council February 27, 2024

Climate Change Mitigation



LIGHTING & SOLAR

•• Rooftop Solar at City Hall - City Hall building has a total of 426 solar panels which help produce a portion of the electricity the building uses +/- 20%

• City recently moved to "Solar APP' permitting (online/ same day permitting for all residential solar applications) (\$60,000 grant)

LIGHTING & SOLAR

- All City facilities utilize energy-efficient (LED) lighting
- Park security lighting is energy-efficient LED lighting
- All holiday lighting is energy-efficient LED
- Traffic lights use LED lights
- Staff currently using grant funding to replace old ceiling fluorescent light fixtures at City Hall with energy-efficient LED fixtures to further reduce energy consumption (between 30 & 50%)



URBAN FORESTRY & GREEN BUILDING

- The City has been designated (for many years) a Tree
 City USA (reflects educational outreach, volunteerism, and urban reforestation)
- City has +/- 55 Parks and the Urban Forest inventory is 45,000
- City has a Homeowner's Guide to Water Conservation and Drought-Tolerant plants
- City removed invasive non-native vegetation along
 Oso Creek in the Civic Core area



URBAN FORESTRY & GREEN BUILDING

Twice-annual **Compost Workshop** – Residents learn how to turn green waste and food waste into compost

 Annual Earth Day Event – volunteers get to plant trees & shrubs along City trails & City parks; attend a Green Expo to learn about the environment and ways to protect it



CLEAN & EFFICIENT ENERGY/GHG Reduction

- City recently moved to ENERGOV permitting and plan check; an online paperless system
- City Hall has computerized AC system for maximum energy efficiency
- All City swimming pools have "variable speed drives" for pool pumps, for maximum efficiency
- For well over a decade, City has had an "energy
 efficiency" fee waiver program (i.e. waives permit
 fees) for solar, tankless water heaters, etc.



CLEAN & EFFICIENT ENERGY/GHG Reduction

- City adopted Green Building & Energy Building Codes;
- Housing Rehabilitation Program: Interest-free loans & grants for dual panes windows, insulation, weather stripping, etc.
- Staff has long encouraged use of green building materials in new private construction- some LEED certified buildings in city
- City offers Zoom/Teams meetings with Applicants
- Remote work options in place for some employees



CLEAN & EFFICIENT ENERGY

ELECTRIC VEHICLES & CHARGING STATIONS

- Stations in commercial parking lots increasing in MV, with more stations expected to come online in near future
- City received \$66,940 Grant from AQMD to install EV Chargers at a City facility
- City received \$20,000 Grant from AQMD for the purchase of two EV vehicles
- Public-use EV charging station will be included at Los Osos development
- All City Pool cars are Electric
- City Vehicle Fleet includes Electric, Hybrid, CNG vehicles (& gasoline)
- MV Shuttle Services are readily available



CLEAN & EFFICIENT ENERGY

TRAFFIC SIGNALS - Out of 115 traffic signals in City, 107 are synchronized.

- Improved travel times, reduced delays and congestion, & successive green lights for drivers
- Direct benefits to motorists & environment: time and cost savings;
 lower fuel consumption; reduction of greenhouse gas (GHG) emissions
 & air pollution.
- Based on Alicia Parkway synchronization project, there is estimated annual fuel reduction of approx. 334,450 gallons or \$1.3 million.
- Reduced fuel consumption results in reduced carbon dioxide emissions
- Reduction in carbon dioxide emissions from the above calculated fuel savings is approximately 3,415 tons per year.



RECYCLING

- 100% of green waste is Recycled
- Twice-annual E-Waste & Household Hazardous Waste
 Collection Event all materials collected are diverted
 from the landfill
- Twice-annual Document Shredding Event shredded paper materials are diverted from the landfill
- Annual Compost Giveaway event Compost from Tierra
 Verde, the facility that processes the organic waste collected Mission From MV residents

RECYCLING

- Annual Children's Environmental Fair April 2024 Educates
 over 650 third graders annually on importance of recycling,
 protecting the watershed & other environmental stewardship topics
- City received \$133,000 grant from CalRecycle to assist with implementation of SB1383 programs & equipment that encourages diversion of recyclables and organic waste from the landfill
- City receives about \$24,000 annually from CalRecycle through
 Bottles and Cans grant for equipment & programs that encourage
 recycling.
- City using these funds to purchase and install water bottle refill stations at City public parks



WATER CONSERVATION

- 90% of all City irrigation uses reclaimed water & utilizes drip irrigation when appropriate
- City park restrooms have waterless urinals
- City irrigation controllers use Computerized Central Irrigation
 System
- City received water conservation grants for the removal of waterthirsty turf from median islands. Medians were re-landscaped with water-thrifty plants; i.e. Marguerite Parkway, Crown Valley Parkway, and Trabuco Road
- Turf removal grants accompany Park Play Area Rehabilitation projects
- Oso Creek Golf Course uses Recycled water to irrigate

WATER CONSERVATION

WATER & CITY POOLS

- Staff remotely monitors pool conditions for energy and chemical usage, which reduces waste
- City utilizes pool covers to save energy: less gas needed to heat the pools, less evaporation & fewer pool chemicals
- Water heaters at Sierra and Montanoso recreational centers
 have energy efficiency ratings and recently upgraded filter
 media resulting in less backwashing & less water usage overall
- Recreation facilities are implementing more water bottle fillup stations



SUSTAINABILITY ACTION PLAN (AKA CLIMATE ACTION PLAN -CAP)

- The City of Mission Viejo has an existing Sustainability Action Plan in place
- This is a tool that: 1) implements the General Plan, and in particular, the Conservation/ Open Space Element https://cityofmissionviejo.org/departments/community-development/planning/general-plan and 2) provides strategies to reduce GHG emissions.
- Mission Viejo's SAP has goals and targets for greenhouse gas reduction:
 https://cityofmissionviejo.org/sites/default/files/Sustainability%20Action
 %20Plan.pdf



Thank You!!



