



# Community Advisory Committee

Member Agencies'

CAP Goals, Priorities & Initiatives

September 9, 2021

# City of Solana Beach

- In 2010: **139,216** metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>)
- **Five Sectors**
  1. Transportation (63%)
  2. Electricity (20%)
  3. Natural Gas (11%)
  4. Solid Waste (3%)
  5. Water Consumption (2%)

# Solana Beach CAP Goals

- GHG reduction targets:
  - ✓ 15% below 2010 by 2020
  - ✓ 50% below 2010 by 2035

# Four Strategies

- **Strategy 1: Transportation**

- 11 different measures. Total estimated GHG reductions of 19,632 MTCO<sub>2</sub>e/year if all were implemented

- **Strategy 2: Electricity and Natural Gas Measures**

- 8 different measures. Total estimated GHG reductions of 21,214 MTCO<sub>2</sub>e/year if all were implemented.

- **Strategy 3: Waste and Water Measures**

- 5 different measures. Total estimated GHG reductions of 4,184 MTCO<sub>2</sub>e/year if all were implemented.

- **Strategy 4: Carbon Sequestration (Urban Tree Planting)**

- 1 measure. Total estimated GHG reductions of 986 MTCO<sub>2</sub>e/year if implemented.

# Top 5 Measures

**Measure T-1:** Increasing electric vehicles and alternative fuel vehicles in the region (Reduction=17,495 MTCO<sub>2</sub>e)

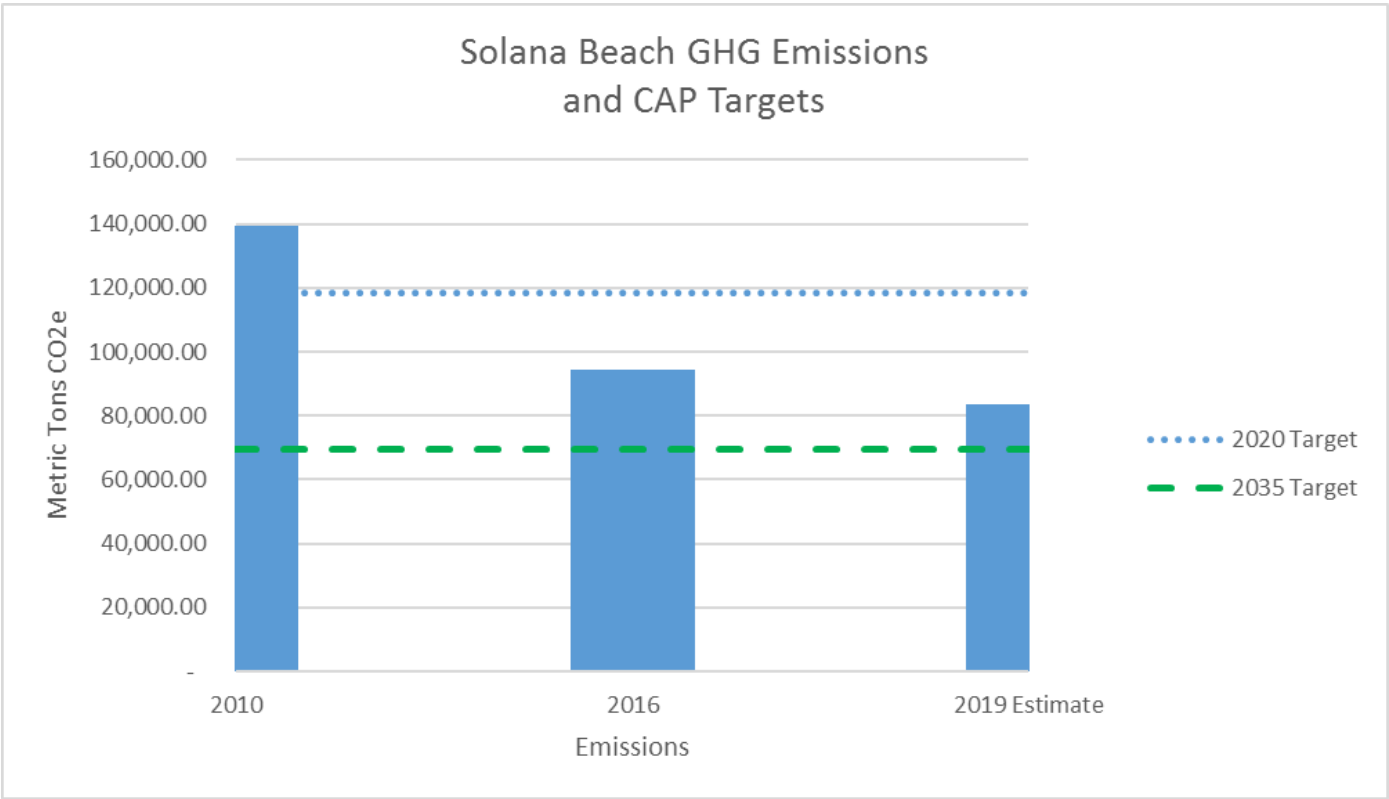
**Measure E-1:** Implementing Community Choice Aggregation (Reduction=10,466 MTCO<sub>2</sub>e)

**Measure E-2:** Installing 10.8 megawatts of residential rooftop solar photovoltaic systems (Reduction=5,858 MTCO<sub>2</sub>e)

**Measure W-1:** Diverting 90 percent of solid waste from landfills, with an 85 percent capture rate (Reduction=3,389 MTCO<sub>2</sub>e)

**Measure E-4:** Installing solar hot water heaters at commercial spaces (Reduction=2,811 MTCO<sub>2</sub>e)

# SANDAG SNAPSHOT & EPIC INVENTORY



# CAP UPDATE 2022

Future measures likely to focus on:

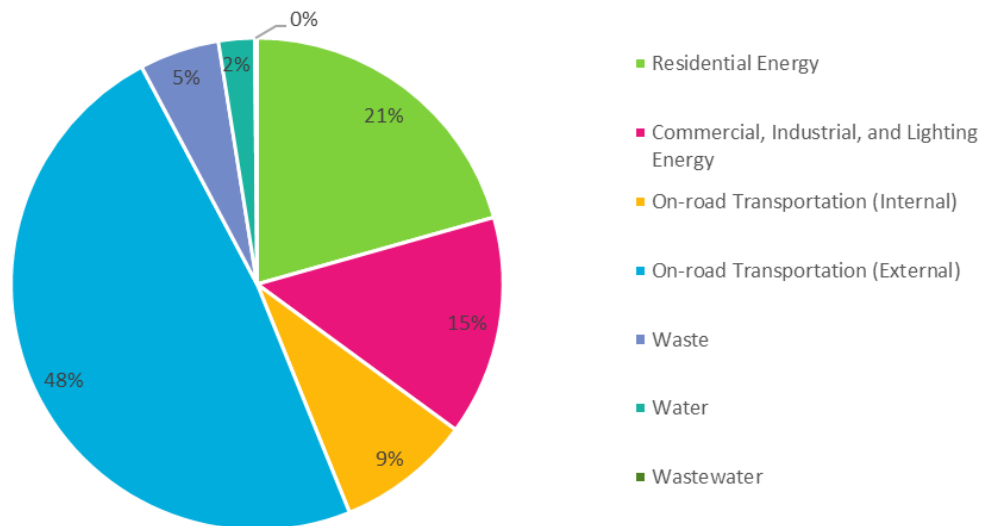
- Increasing EV Infrastructure
- Grid resiliency
- Battery storage
- Increasing renewable energy sources
- Improving energy efficiency in existing and new buildings
- Electrifying buildings

# City of Del Mar

- Adopted Climate Action Plan in June 2016
- 2012 baseline greenhouse gas (GHG) emissions inventory

- 55,855 MTCO<sub>2</sub>e

1. Transportation (57%)
2. Electricity (35%)
3. Waste (5%)
4. Water (2%)
5. Wastewater (<1%)





# City of Del Mar

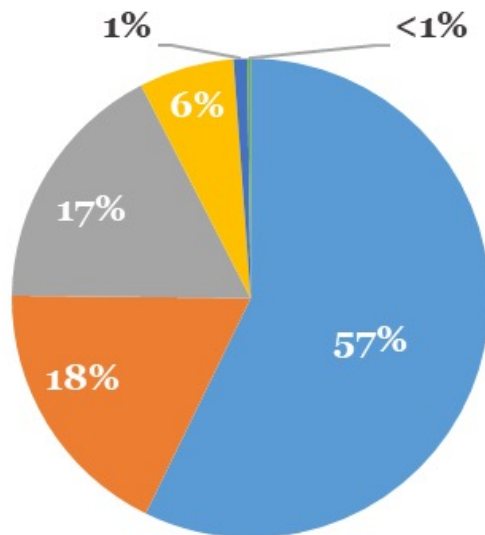
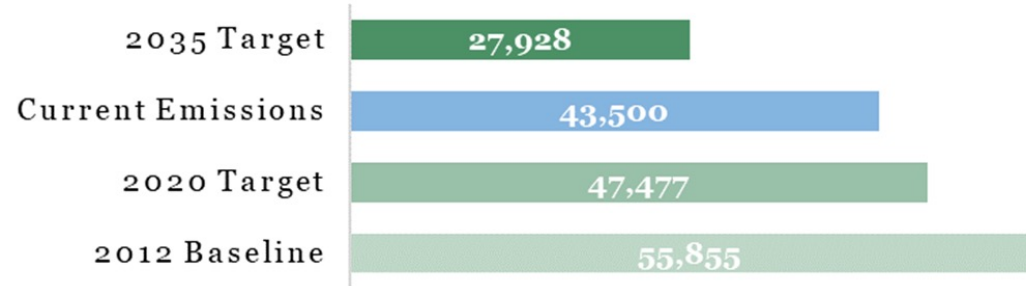
- GHG reduction targets:
  - 15% below 2012 by 2020
  - 50% below 2012 by 2035
- Renewable energy goals:
  - 50% by 2020
  - 100% by 2035



# City of Del Mar

- Current Progress

Del Mar GHG Emissions (MTCO<sub>2</sub>e)



2016 GHG Inventory Distribution (%)

- On-Road Transportation
- Electricity
- Natural Gas
- Solid Waste
- Water
- Wastewater

# City of Del Mar

- 22 **Goals** in four (4) **Sectors**:
  1. **Energy and Buildings** (7 strategies; 5,859 MTCO<sub>2</sub>e reduction potential)
  2. **Water and Waste** (5 strategies; 1,864 MTCO<sub>2</sub>e reduction potential)
  3. **Transportation** (9 strategies; 8,893 MTCO<sub>2</sub>e reduction potential)
  4. **Urban Tree Planting** (1 strategy; 234 MTCO<sub>2</sub>e reduction potential)
- Plus eight (8) social equity strategies
- Remaining reductions achieved through climate action at the regional and state level

# City of Del Mar

- Key GHG Reduction Measures with Nexus to CEA:
  - **Goal 7:** Renewable Energy Supply
    - 50% renewable electricity supply in 2020 and 100% by 2035
    - Strategy – Implement a Community Choice Aggregation Program (complete!)
  - **Goals 1 & 2:** Residential and Non-Residential Photovoltaics (PV)
    - Install 2MW PV by 2020 and 2.5 MW PV by 2035
  - **Goal 3:** Residential Energy Efficiency (EE) Retrofits
    - 20% energy reduction in 10% homes by 2020; 30% reduction in 20% by 2035
    - CAP also includes EE retrofit goals for multi-family properties and businesses
  - **Goal 16:** Increase Vehicle Miles Traveled (VMTs) by Electric Vehicles (EVs)
    - 15% total VMT driven by EVs by 2020; 30% by 2035

# City of Carlsbad

- Adopted CAP in 2015 with General Plan update
  - Implementation includes building codes and electric vehicle charging infrastructure
- Updated CAP in 2020
  - 2012 GHG inventory baseline
  - State and regional guidance for GHG emission forecasts and reduction targets
  - Added Clean Electricity measure
- Comprehensive CAP update beginning 2021

# Baseline GHG Inventory and Targets

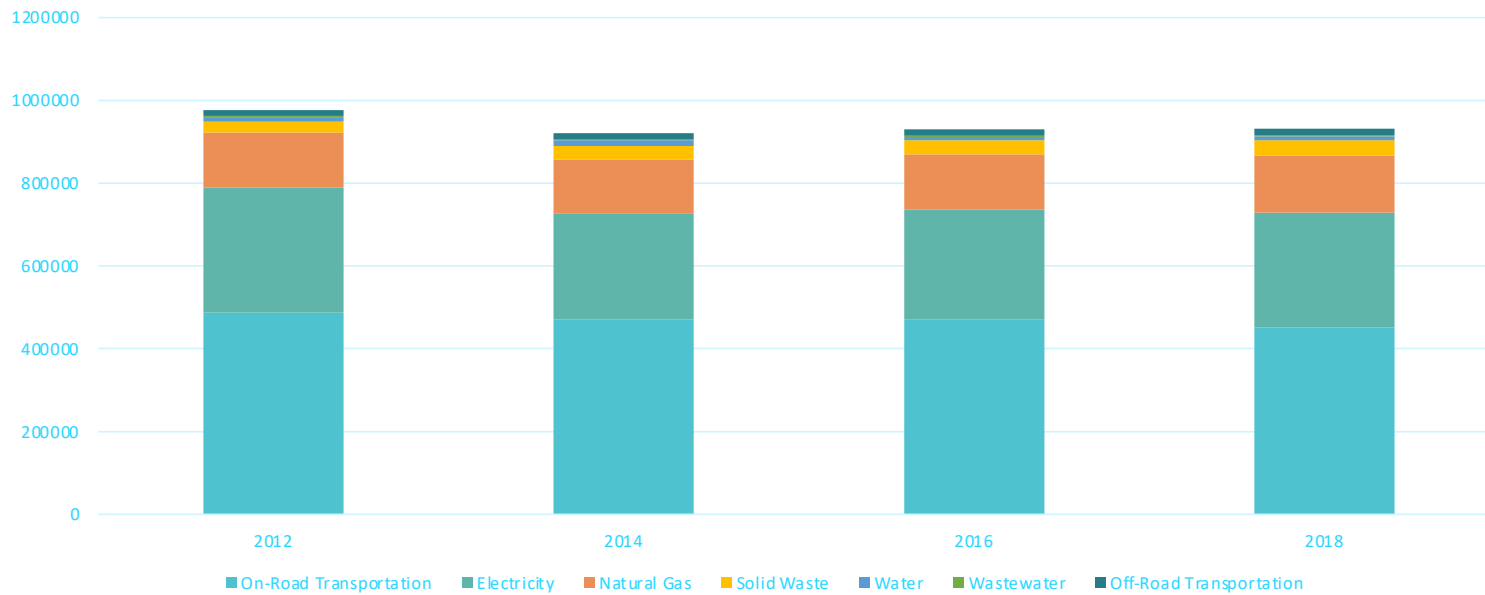
- 2012 baseline inventory = 977,000 MTCO<sub>2</sub>e
  - Transportation = 51.3%
  - Electricity/Natural Gas = 44.5%
  - Solid Waste = 2.5%
  - Water and Wastewater = 1.75
- GHG Reduction Targets
  - 4% below 2012 by 2020 = 939,000 MTCO<sub>2</sub>e
  - 52% below 2012 by 2035 = 472,000 MTCO<sub>2</sub>e

# Current GHG Reduction Strategy Areas

- Electricity
- Natural gas
- Transportation
  - Vehicle emissions
  - Vehicle miles traveled
- Water conservation
- Public outreach and engagement

# Community GHG Inventories

Community GHG Inventories  
2012, 2014, 2016, 2018  
(MTCO<sub>2e</sub>)





# Key Measures

- **Clean Electricity** - Increase the proportion of clean electricity in community energy consumption
  - 2035 reduction = 56,207 MTCO<sub>2</sub>e
- **Zero-emissions Vehicle (ZEV) Travel** – Promote increase in ZEV travel through EV charging infrastructure and fleet conversion
  - 2035 reduction = 49,912 MTCO<sub>2</sub>e
- **Energy Efficiency Retrofits** – Promote single and multifamily and commercial/industrial retrofits
  - 2035 reduction = 19,558 MTCO<sub>2</sub>e