

# CLIMATE CHANGE BY THE NUMBERS

## What is Climate Change?

A worldwide scientific consensus has emerged that emissions of certain pollutants are causing the sun's heat to be trapped rather than reflected back into space, causing a global average increase in temperature. The result is a potentially significant regional change in climate, such as increased storm frequency, drought and sea level rise. In California, climate change indicators measured over the past 100 years such as air temperature, annual Sierra Nevada snow melt and sea level rise all indicate that California's climate is warming. Emissions of carbon dioxide (CO<sub>2</sub>) are the leading cause of climate change—also known as global warming—with other air pollutants including methane, nitrous oxide and hydrofluorocarbons also contributing. The burning of fossil fuels through activities such as driving, flying, heating homes or power generation results in CO<sub>2</sub> emissions.

## ARE YOU AFFECTING CLIMATE CHANGE?

### U.S. Impacts on Climate Change

**6.6**

AVERAGE NUMBER OF TONS OF GREENHOUSE GASES EMITTED BY ONE PERSON IN ONE YEAR

**3.4**

PERCENTAGE INCREASE OF EACH PERSON'S GREENHOUSE GAS EMISSIONS BETWEEN 1990 AND 1997

**1.7 BILLION**

TONS OF CARBON PRODUCED ANNUALLY TO FUEL ALL U.S. VEHICLES

**25**

PERCENTAGE OF WORLDWIDE GREENHOUSE GAS EMISSIONS PRODUCED BY THE U.S.

**4**

PERCENTAGE OF WORLD POPULATION REPRESENTED BY THE U.S.

### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (AQMD) CLIMATE CHANGE PREVENTION

**12**

Number of hydrogen fueling stations co-funded by AQMD and located throughout Los Angeles, Orange, Riverside and San Bernardino counties offering a CO<sub>2</sub>-free alternative fuel produced from domestic resources

**45**

Number of available ultra-low emission vehicle models—which come in a wide range of sizes, price ranges and styles from SUVs to sedans

**286**

Number of diesel school buses the AQMD has helped replace with new compressed natural gas buses, a low-emission alternative to gasoline- and diesel-burning buses

### California Impacts on Climate Change

**58**

PERCENTAGE OF CALIFORNIA ELECTRICITY THAT COMES FROM FOSSIL FUELS

**2020**

TARGET YEAR FOR STATEWIDE EMISSIONS TO DECREASE TO 1990 LEVELS

**30**

TARGET PERCENTAGE DECREASE IN GREENHOUSE GAS EMISSIONS FROM NEW VEHICLES IN CALIFORNIA IN 2016

**200,000**

NUMBER OF JOBS THAT NEW GREENHOUSE GAS REDUCTION TECHNOLOGIES COULD CREATE BY 2020

**9**

NUMBER OF NATIONS WITH GREATER EMISSIONS THAN CALIFORNIA

**6**

PERCENTAGE OF U.S. EMISSIONS FROM CALIFORNIA



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# IS CLIMATE CHANGE AFFECTING YOU?

**1**

DEGREE IN FAHRENHEIT AVERAGE TEMPERATURES ROSE IN THE U.S. DURING THE 20TH CENTURY



**2-10**

ADDITIONAL DEGREES FAHRENHEIT THE NATIONAL ACADEMY OF SCIENCES PREDICTS GLOBAL TEMPERATURES COULD RISE BY THE END OF THIS CENTURY



**10**

PERCENTAGE OF SNOW COVER DECLINE SINCE THE 1960s, SUGGESTED BY SATELLITE DATA



**100**

PERCENT INCREASE IN THE NUMBER OF CATEGORY 4 AND 5 (MOST DESTRUCTIVE) HURRICANES OVER THE PAST 30 YEARS

## Minimize Your Impact on Climate Change

**45-55**

AVERAGE MILES PER GALLON OF A 2007 HYBRID COMPACT SEDAN. TO FIND OUT ABOUT AVAILABLE LOW-EMISSION HYBRIDS, VISIT [WWW.CLEANAIRCHOICES.ORG](http://WWW.CLEANAIRCHOICES.ORG)

**500**

NUMBER OF POUNDS OF CO<sub>2</sub> EMISSIONS PREVENTED BY ADJUSTING YOUR THERMOSTAT TWO DEGREES LOWER IN THE WINTER AND TWO DEGREES HIGHER IN THE SUMMER

**7,400,000**

NUMBER OF TONS OF CO<sub>2</sub> EMISSIONS REDUCED FROM THE USE OF PUBLIC TRANSPORTATION IN THE U.S. TO FIND OUT MORE ABOUT PUBLIC TRANSPORTATION IN LOS ANGELES, ORANGE, RIVERSIDE AND SAN BERNARDINO COUNTIES, VISIT [WWW.MTA.NET](http://WWW.MTA.NET), [WWW.OCTA.NET](http://WWW.OCTA.NET), [WWW.RIVERSIDETRANSIT.COM](http://WWW.RIVERSIDETRANSIT.COM), OR [WWW.OMNITRANS.ORG](http://WWW.OMNITRANS.ORG)

**43**

NUMBER OF NEW CARS DRIVEN FOR ONE YEAR NEEDED TO EQUAL EMISSIONS FROM A SINGLE GASOLINE-POWERED MOWER IN A TYPICAL YEAR'S USE. PARTICIPATE IN ONE OF AQMD'S ELECTRIC LAWN MOWER EXCHANGES, WHERE FOR ONLY \$100 YOU CAN EXCHANGE YOUR HIGHLY POLLUTING GAS MOWER FOR A ZERO-EMISSION ELECTRIC MODEL

**35**

AMOUNT IN DOLLARS CALIFORNIANS CAN SAVE ANNUALLY BY SWITCHING TO A COMPACT FLUORESCENT LAMP, WHICH LASTS 10 TIMES LONGER AND USES 66 PERCENT LESS ENERGY THAN A CONVENTIONAL LIGHT BULB

## HYBRID VEHICLES



**9,350**

Number of hybrid vehicles sold in the U.S. in 2000

**205,749**

Number of hybrid vehicles sold in the U.S. in 2005

**10**

Number of available 2007 hybrid models

**4,800**

Pounds of CO<sub>2</sub> emissions each person can prevent per year by reducing waste and limiting use of electricity and personal transportation



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