

# SPARE THE AIR. COOL THE CLIMATE

A BLUEPRINT FOR CLEAN AIR AND CLIMATE PROTECTION IN THE BAY AREA



## FINAL 2017 CLEAN AIR PLAN



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

ADOPTED APRIL 19, 2017

robust natural environment and a prosperous and sustainable economy. The vision for 2050 can be briefly summarized as follows.

### Where We Live and Work: Buildings

*By 2050 the buildings in which we live, work, learn, shop and socialize will be energy efficient, and they will be heated, cooled, and powered by renewable energy.*

To eliminate the use of fossil fuels in buildings, we will need to:

- Maximize energy efficiency in both new and existing buildings. Stringent standards already apply to new buildings. However, efforts to retrofit existing commercial and residential buildings will need to be greatly expanded.
- Increase production of on-site renewable energy such as rooftop solar.
- Develop and deploy technologies for on-site energy storage.
- Switch from natural gas to clean electricity, or other renewable energy, for space and water heating, clothes drying, cooking, and other domestic uses.

To reduce emissions of particulate matter (PM) and black carbon, we will also need to eliminate wood burning.

### How and Where We Travel: Transportation

*By 2050 the transportation sector will be transformed. We will travel by a combination of electric vehicles, both shared and privately-owned; autonomous public transit fleets offering both fixed-route and flexible-route service; with a large share of trips by bicycling, walking and transit.*

- New development will need to offer safe and convenient access to jobs, shopping and services by transit, bicycle and walking.
- The majority of trips will need to be made by walking, bicycling, riding transit or sharing vehicles.

- Nearly 90 percent of the motor vehicle fleet will need to be zero emission. Heavy-duty vehicles will need to be powered by electricity, or by renewable forms of diesel or other low-carbon liquid fuels.
- New technologies and services will reduce the need for personal vehicle ownership. Car-sharing services, transportation network companies, and autonomous electric-powered vehicles will greatly reduce emissions of air pollutants and greenhouse gases from transportation.

### What We Produce: Sustainable Production

*By 2050 the Bay Area economy will be powered by clean, renewable electricity. The region will be a leading incubator and producer of clean energy technologies, and Bay Area industry will lead the world in the carbon-efficiency of our products.*

- A smart grid interconnecting renewable energy sources will be needed in order to provide nearly 100 percent renewable electricity.
- Bay Area industries will need to be powered by carbon-free electricity and biofuels.
- The carbon-intensity of products—the amount of carbon emissions associated with making a given product—manufactured in the region will need to be greatly reduced.
- The Bay Area will need to become a hub for the development and production of innovative renewable energy technologies, creating solid jobs requiring diverse education and skills.

### What We Consume: “Conscientious Consumption”

*By 2050, Bay Area residents will need to develop a low-carbon lifestyle. We will greatly reduce our personal GHG consumption (our “GHG footprint”) by driving electric vehicles, living in zero net-energy homes, eating low-carbon foods, and purchasing goods and services with low carbon content. Waste will be greatly reduced, any waste*