Federal Utility Partnership Working Group

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This paper presents Southern California Edison's integrated blueprint for California to reduce greenhouse gas emissions and air pollutants. Realizing the blueprint will reduce the threat of climate change and improve public health related to air quality. It is a systematic approach and each measure is integrated with — and depends upon — the success of the others. To be successful, California must approach implementation as an integrated package, applying resources across the board where most effective.

**EXECUTIVE SUMMARY**

Climate change and all pollution pose serious threats. Worldwide sea levels are rising, while drought and severe weather are threatening vulnerable populations. In California, while significant progress has been made to improve air quality, too many communities continue to be exposed to high levels of pollution and to experience high instances of asthma and other air-quality-related health issues.

California continues its leadership in addressing climate change and air pollution. The state's previously set GHG goals call for a 40 percent reduction in GHG emissions from 1990 levels by 2030 and an 80 percent reduction in emissions of methane, nitrous oxides, and other gases by 2050 (Figure 1). Air quality goals include a 90 percent reduction in emissions from 1990 levels in some of the state's most polluted areas by 2022. Meeting these ambitious clean energy and clean air goals requires fundamental changes over the next 12 years and beyond.

The electric sector is at the forefront of the fight against climate change in California and today accounts for only 19 percent of the state's GHG emissions. The transportation sector (including rail, road, and air travel) is the electric sector and more than 80 percent of the air pollution in California.

The Clean Power and Electrification Pathway is an integrated approach to reduce GHG emissions and air pollution by taking action on three California economic sectors: electricity, transportation, and buildings. The Pathway identifies policies and programs that work together to produce the most cost-effective and feasible path forward among the options we studied.

The Pathway will help California achieve its climate goals and significantly reduce today's health-harming and fossil fuel pollution in local communities. By 2030, it calls for:

- an electric grid supplied by 30 percent carbon-free energy,
- more than 7 million electric vehicles on California roads, and
- using electricity to power up to one-third of space and water heaters, in increasingly energy-efficient buildings.

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Change in California GHG Emissions

Source: CARB
Cleaning the power system

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Thank you