Climate Smart San José: Pathway to Carbon Neutrality by 2030

Transportation & Environment Committee
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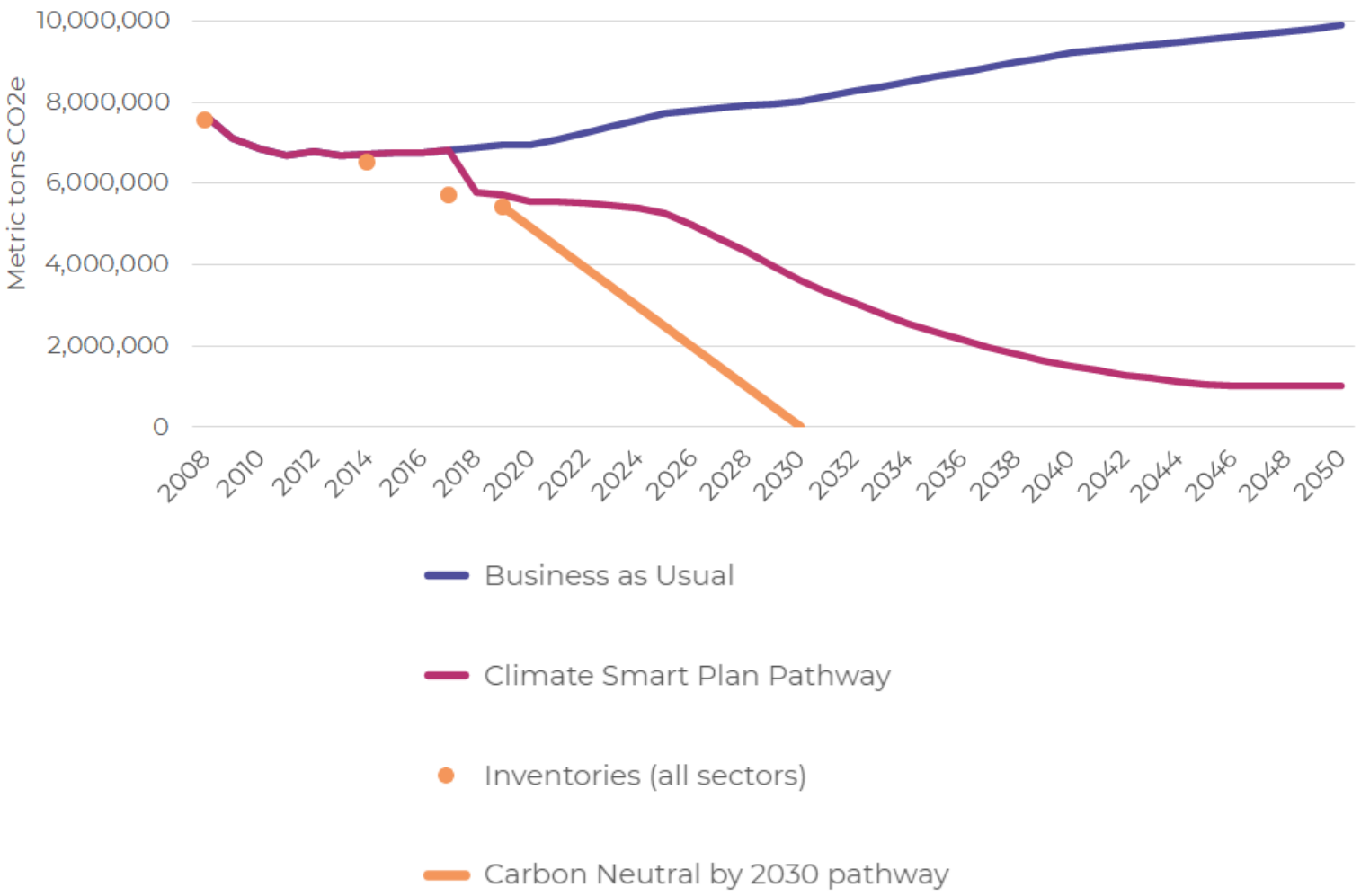
BACKGROUND

- Climate Smart San José plan (2019)
  - Aligned with Paris Agreement
  - Focused on energy, water and mobility
- Science indicates we must do more, faster, to avoid significant and irreversible impacts
- Council adopted aspirational goal of carbon neutrality by 2030
  - Directed staff to return with Climate Smart acceleration strategies in June 2022



VISION

San José will become a better, stronger and more resilient community by accelerating climate action and moving to carbon neutrality by 2030.

Commitments to help us achieve our vision:

- Engaging our community throughout the planning process
- Making all voices heard

FOCUS AREAS

Transportation

Buildings

Power Source

The Pathway focuses on three key areas, which together generate **85 percent** of the greenhouse gas (GHG) emissions in San José.

KEY STRATEGIES

The Pathway identifies four key acceleration strategies toward carbon neutrality by 2030:

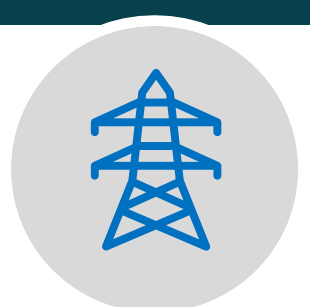
Transportation

Move to Zero-Emission Vehicles

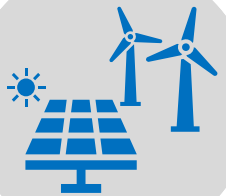
Reduce the Miles We Travel in Our Vehicles by at Least 20%

Buildings

Switch Our Appliances from Fossil Fuel to Electric



Power Source

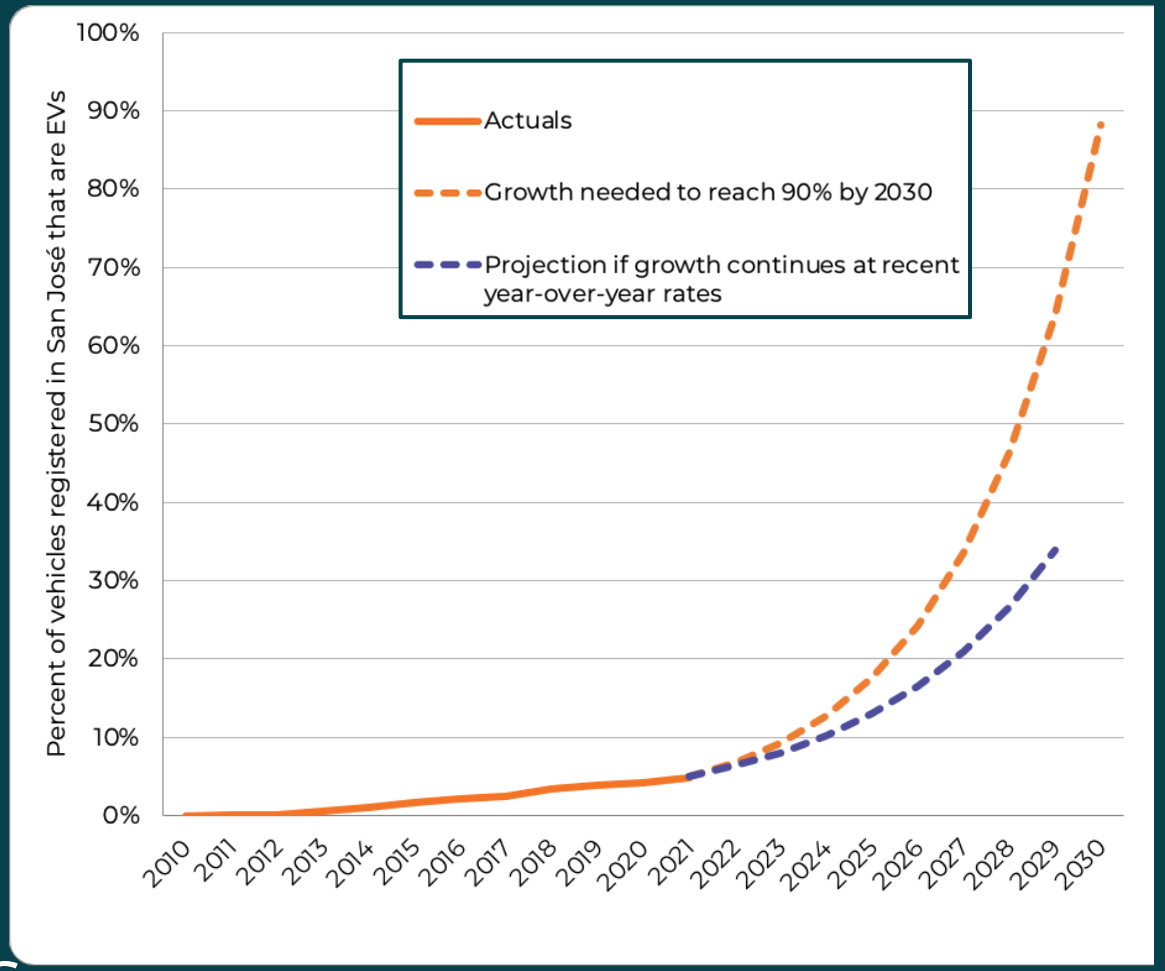


Power Our Community with 100% Carbon-Neutral Electricity

STRATEGY 1: MOVE TO ZERO-EMISSION VEHICLES

Key Data Takeaways:

- Focus should be on passenger vehicles, as well as trucks and commercial vehicles
- Need to significantly accelerate pace of electric vehicle (EV) adoption and buildout of EV infrastructure



Pathway includes supporting actions to increase EV charging and EV awareness and uptake

STRATEGY 2: REDUCE VEHICLE MILES TRAVELLED BY 20%

Key Data Takeaways:

- Reducing vehicle miles travelled (VMT) to current 2030 Climate Smart goal will require significant focus
- Development choices made from now to 2030 will have lasting VMT and GHG effects

Pathway includes supporting actions to improve and encourage transportation mode-shift.

STRATEGY 3: SWITCH APPLIANCES TO ELECTRIC

Key Data Takeaways:

- Focus should be on residential space and water heating
- Existing programs and incentives can support transition
- Low-income communities will require assistance
- Solar and appliance replacement at end-of-life can improve economics

Pathway includes supporting actions to guide equitable building electrification and streamline implementation

STRATEGY 4: 100% CARBON-NEUTRAL ELECTRICITY

Key Data Takeaways:

- SJCE already offers low-carbon power
- Should maintain and potentially grow SJCE's customer base
- Should monitor GreenValue enrollment and impact on goals
- Reaching goal requires deployment of both utility-scale and rooftop solar, paired with energy storage

Pathway includes supporting actions to procure additional renewables and storage, support grid resiliency and renewable service uptake, and increase onsite solar and storage.

LEADING BY EXAMPLE

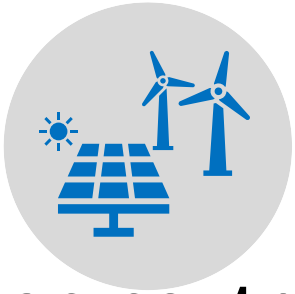
Key Data Takeaways:

- Municipal operations are minor contributor but under City's control
- Focus on employee commutes & buildings
- Within buildings, focus on Airport central utility plant
- Can move to 100% renewable electricity quickly via SJCE

Pathway includes supporting actions to support all-electric municipal buildings, address employee commutes and City fleet, and move to carbon-neutral electricity

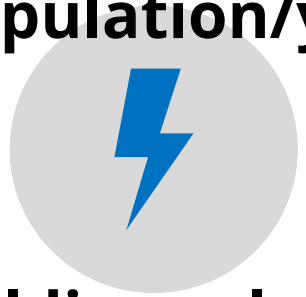
THE SCALE OF EFFORT REQUIRED

90% EVs =
~83K passenger EVs/yr. and
~7.5K public EV chargers/yr.



100% carbon-neutral power =
~650 MW of renewables, ~200-300 MW of storage, and ~200 MW of hybrid and/or green gas

20% VMT reduction/ service population =
~2% reduction in VMT/service population/yr.



100% buildings electrified =
~43K homes/ yr. and
~9.7M sq.ft. commercial space/ yr.

SUPPORTING RESOURCES

- Existing programs and incentives
- Public-private partnerships
- Significant federal and state funding to initiate and scale programs
- San José Clean Energy funding for programs anticipated to start in Fiscal Year 24-25

NEXT STEPS

- Broad public engagement and technical analysis to refine initial supporting actions
- Integrate into upcoming Climate Smart update
- Ongoing tracking and reporting of progress
- Secure funding

QUESTIONS