



2021 Sustainability and Climate Action Plan (S/CAP) Update Report

April 19, 2021



- Review the 2021 Sustainability and Climate Action Plan (S/CAP) Update Report
 - 2019 GHG Inventory
 - Business as Usual Forecast
 - Preliminary results of the Impact Analysis
- Discuss policy tools for further refinement that could be included in the revised S/CAP
- Provide direction on next steps for S/CAP Engagement

Sustainability and Climate Action Plan Goal: 80 x 30



ENERGY

Christine Tam



MOBILITY

Sylvia Star-Lack
Rebecca Atkinson



ELECTRIC
VEHICLES

Shiva Swaminathan
Hiromi Kelty
Mike Nafziger



WATER

Karla Dailey
Karin North



CLIMATE
ADAPTATION &
SEA LEVEL RISE

Julie Weiss
Christine Luong



NATURAL
ENVIRONMENT

Walter Passmore
Pam Boyle Rodriguez
Karin North



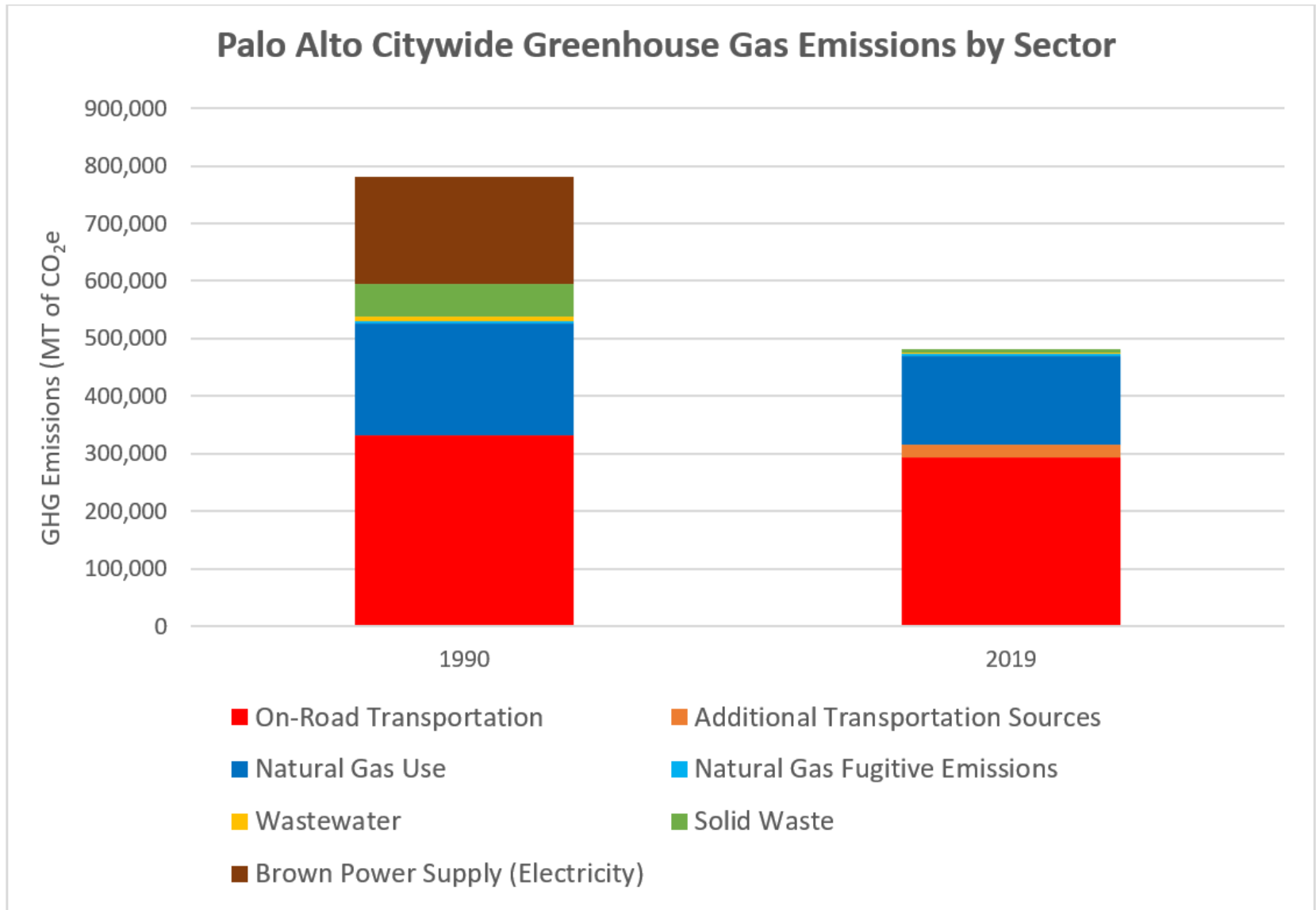
ZERO WASTE

Paula Borges
Maybo AuYeung
Wendy Hediger

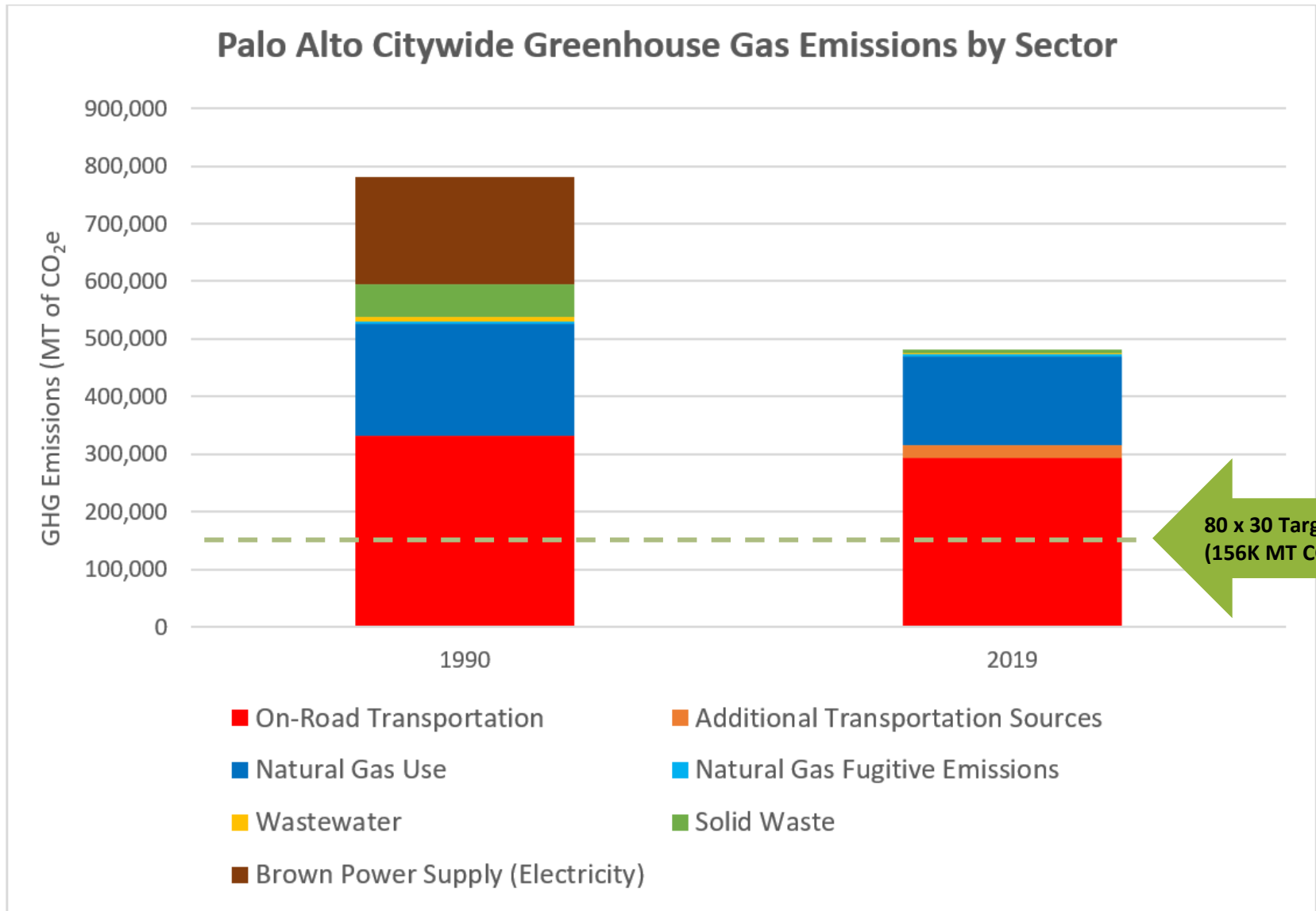


1. Technical Analysis
2. Policy Development
3. Near-Term Programs

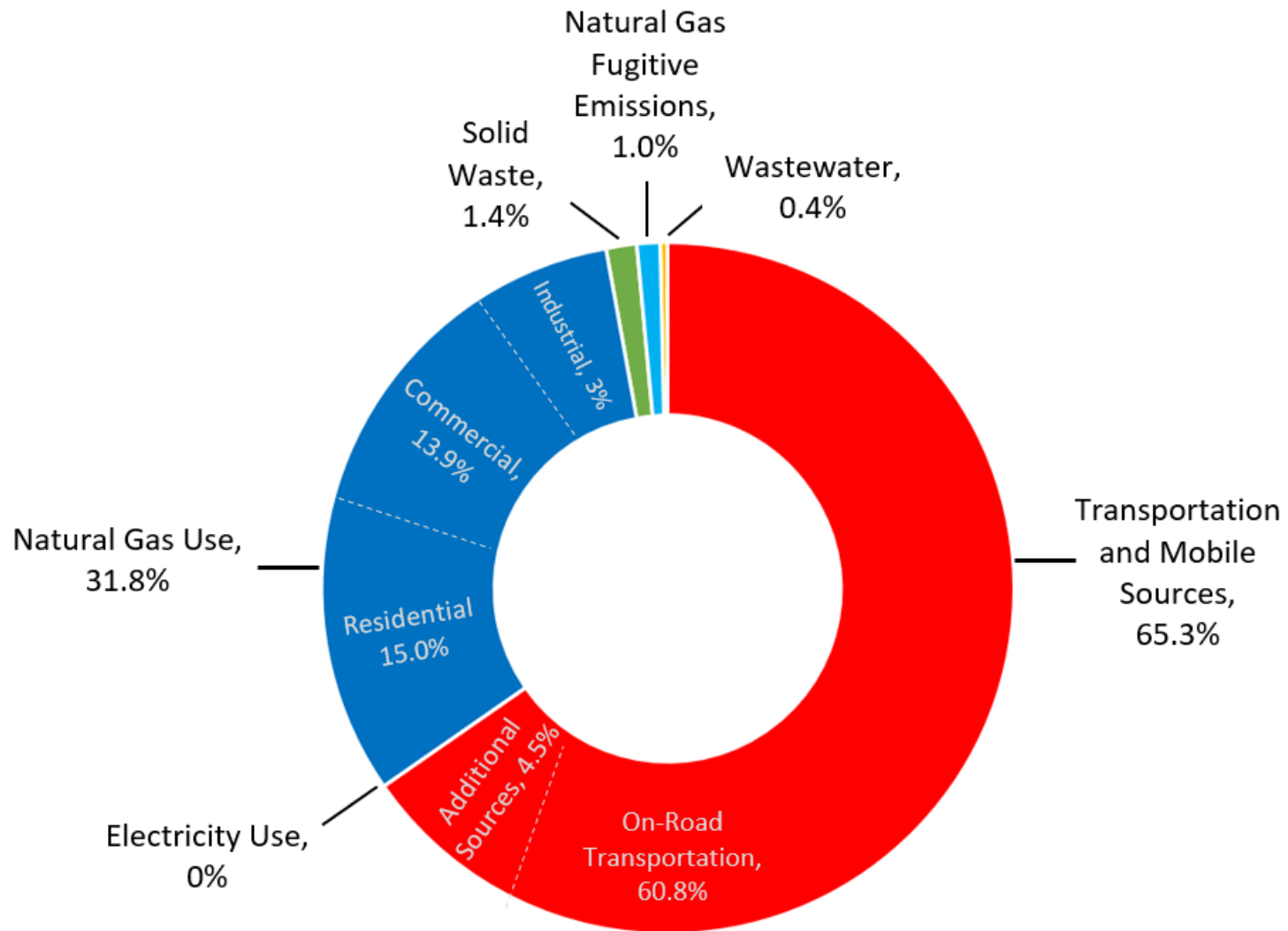
Palo Alto GHG Emissions Down ~38.2%



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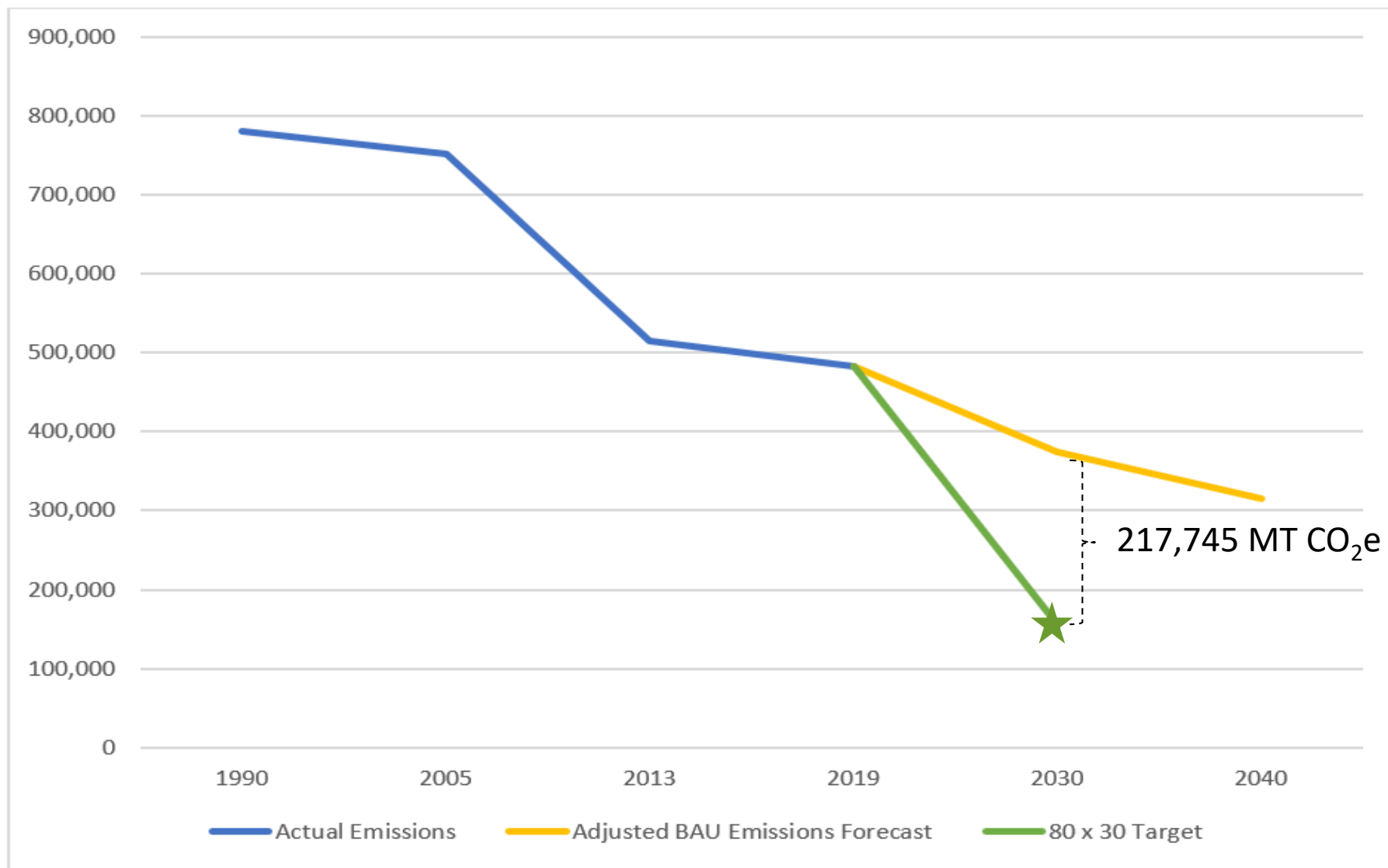


GHG Emission Sources in Palo Alto

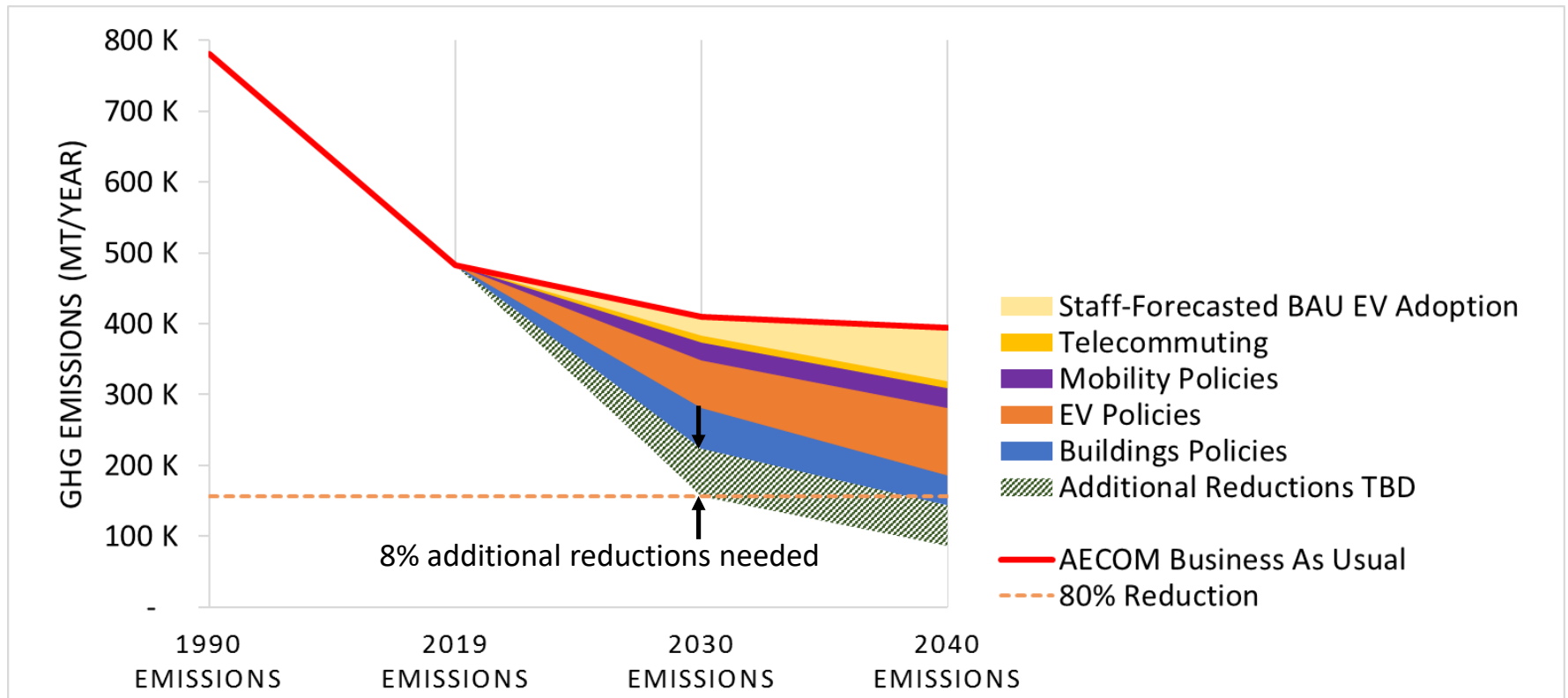


Source: 2019 Palo Alto Municipal Operations & Community GHG Emissions

Adjusted “BAU” GHG Forecast and 80 x 30 Target



Analysis Results: Effect of Policies vs. BAU



Outcomes Needed by 2030



- Commute travel is reduced 10% via telecommuting



- Vehicle Miles Traveled (VMT) are reduced 8% to 11%



- 85% of all Palo Alto new vehicle purchases are EVs (up from 30%) for a vehicle fleet that is 44% EVs (50% in single-family households, 33% in multi-family)



- 40% of commuter trips into Palo Alto and 30% of visitor trips are made in EVs, 35% total (Currently 3%)



- Virtually all single-family gas appliances and virtually all commercial rooftop HVAC units are electrified



- Significant additional multi-family and commercial building electrification and other emissions reductions to be determined



Costs of Emissions Reduction Actions



- Other commercial and multi-family actions are expensive – at least those analyzed so far.



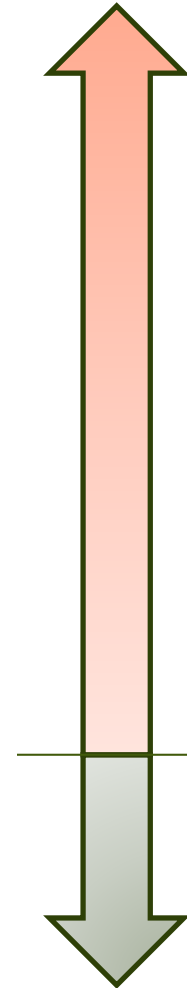
- Other single-family appliances like cooktops and clothes dryers are more expensive, but unlock other savings



- Lowest cost building electrification is single-family space and water heating and commercial rooftop HVAC.



- Alternative commute and electric vehicle programs are a net savings



Most costly
(\$600-\$1800/MT)

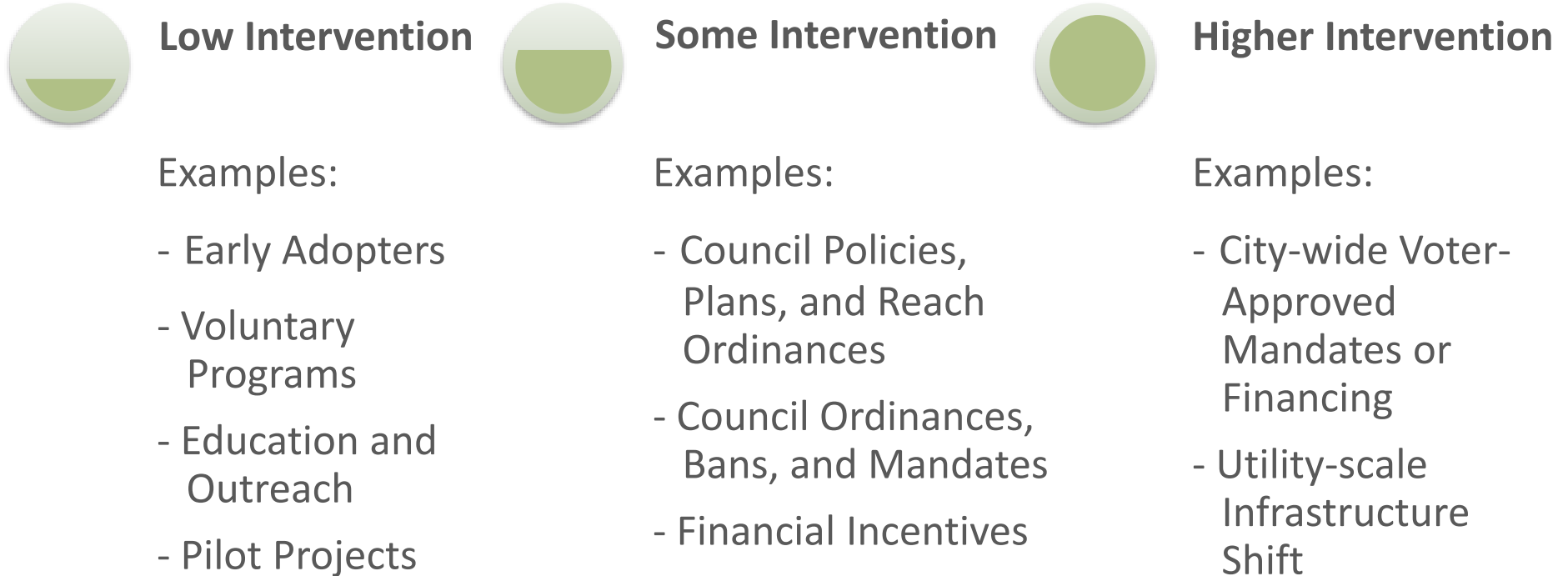
More costly
(\$200-\$600/MT)

Less costly
(<\$160/MT)

Break even

Net savings
(\$0 to-\$400/MT)

Spectrum of Tools for Achieving Climate Goals



Voluntary Market driven solutions  **Government driven solutions**

Potential Short-term Actions




- Expand residential emissions reductions programs to promote building and transportation electrification, enhance programs with technical assistance, direct installation, incentives, and/or on-bill financing.
- Targeted outreach to multifamily residential (MFR), renters and lower income residents, including assistance with charger installation for MFR buildings
- Establish business electrification programs, including EV charger installation and rooftop HVAC units
- Micro-mobility (E-Bike and E-Scooter) and on-demand transit service pilot programs
- Expand scope of transportation management association
- Reach Code Expansion (Non-Residential, Renovations)

Potential Mid-Term Actions



- Explore mandates to require end-of-life replacement of various gas appliances with all-electric versions, including mixed-fuel rooftop packaged HVAC systems and single-family residential space and water heaters
- Explore residential bill discount for registered EVs
- Explore plan to build 30 miles of Bicycle Boulevard /Traffic Calming facilities over next 20 years
- Explore ballot measures to implement other actions that could support the City's sustainability goals, such as carbon pricing, funding for emissions reducing activities, additional mandates, or withdrawal of gas from parts of the City

California's Goal:

80% **BELOW** 
1990 LEVEL
BY 2050

Palo Alto's Goal:

80% **BELOW** 
1990 LEVEL
BY 2030





1. Technical Analysis
2. Policy Development
3. Near-Term Programs



1. Continue to bring items directly to the City Council
2. Create an Ad Hoc Committee to assist staff as work is underway
3. Provide status reports on S/CAP work to the Finance Committee



1. Utilize City's Board, Commission and Committee (BCC) Structure



2. Stakeholders-Specific Roundtable Discussions



3. Community-Driven Working Groups



4. Community Meetings



5. Online Survey



6. Community Summit Series





- Scope and Goals



- Engagement Approach



- Resources

- Budget and Staffing



- Formality of Group

- Potential Brown Act Requirements



- Timeline



Subject to Council direction staff may need to come back for confirmation of actions needed.

- June-August 2021: Stakeholder-Specific Roundtables
- Early Fall 2021: Commission meetings on the S/CAP focus areas, potential select community meetings
- Early Winter 2021: Online survey and Summit Series
- December 2021: Final Draft S/CAP presented to Council
- Spring 2022: California Environmental Quality Act (CEQA) evaluation completed
- Spring 2022: S/CAP with CEQA Review and Sea Level Rise Adaptation Plan presented to Council for adoption

Council Action Requested:

1. Discuss and provide feedback to staff on policy tools that could be implemented in S/CAP analysis that would be included in the S/CAP engagement strategy for further refinement and eventual adoption of a revised S/CAP, and
2. Provide direction on stakeholder engagement for the S/CAP Update, and direct staff to develop and implement an S/CAP engagement strategy for S/CAP engagement tracks that includes outreach to City Board, Commissions and Committees, key stakeholders, and the community at large



SUSTAINABILITY & CLIMATE ACTION PLAN

Thank You!

Brad Eggleston, Director of Public Works

Jonathan Abendschein, Assistant Director Utilities
Resource Management

Christine Luong, Sustainability Manager

Acting Now for a Resilient Future

