Climate Action and Adaptation Plan Study Session

November 2, 2021

Environmental Commission Subcommittee:

- Bruno Delagneau
- Raashina Humayun
- Don Weiden

EcoShift Consulting:

- Ben Fordham
- Zach Youngerman
- Kristin Cushman

CAAP Leads:

- Departments
- Commission Reps

Stakeholders

Community Engagement

Two Public Surveys

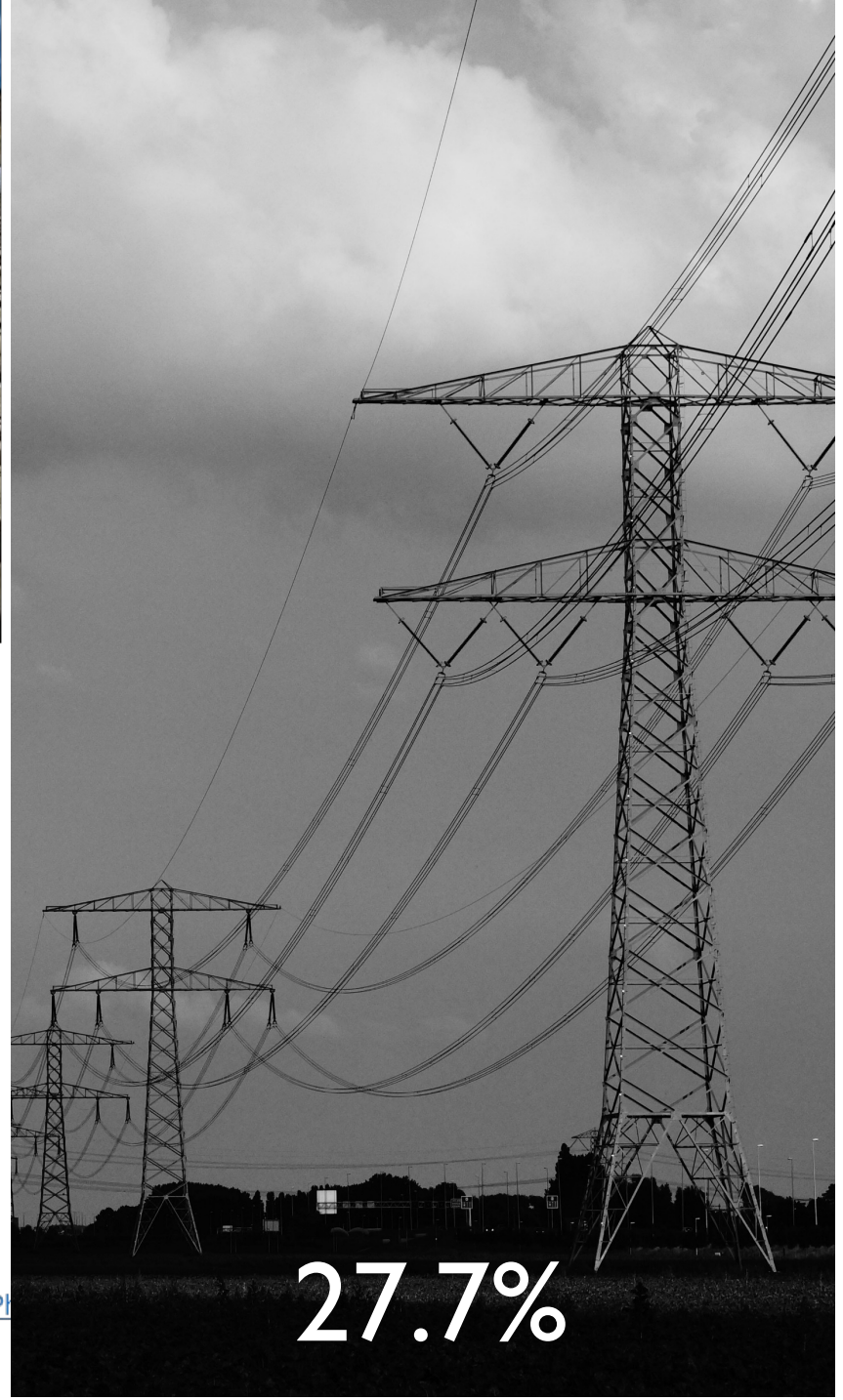
Public Workshop

Focus Groups

Monthly Updates


52.2%

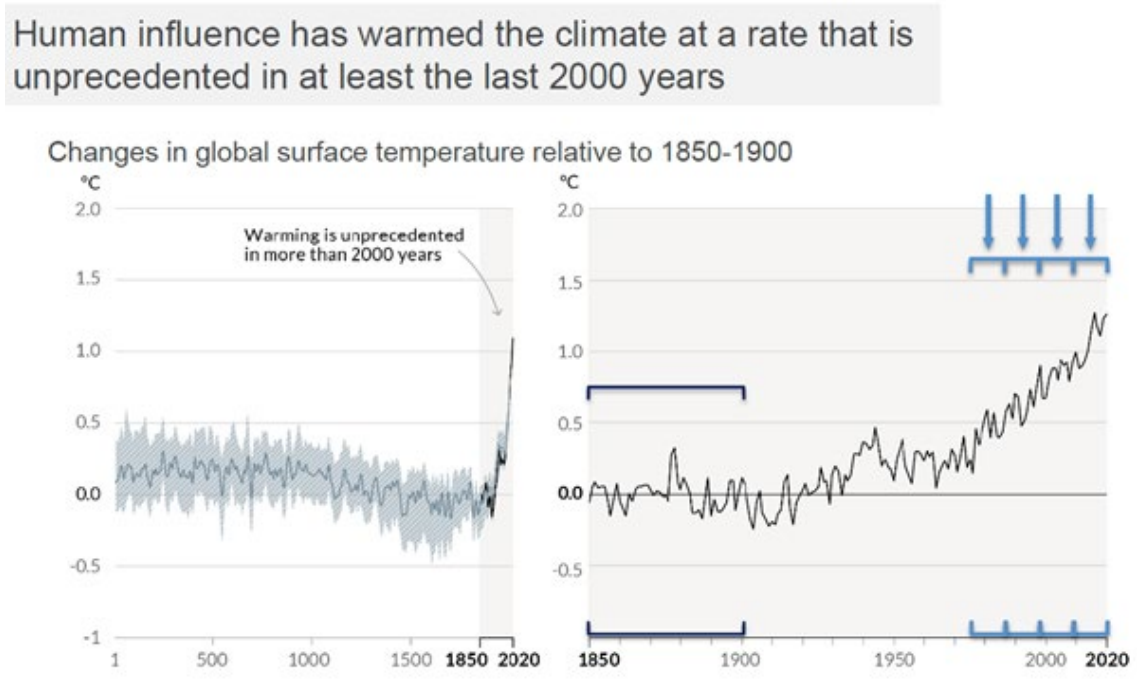

Action Needed:67.3%
Engaged and Informed: 76.1%


27.7%

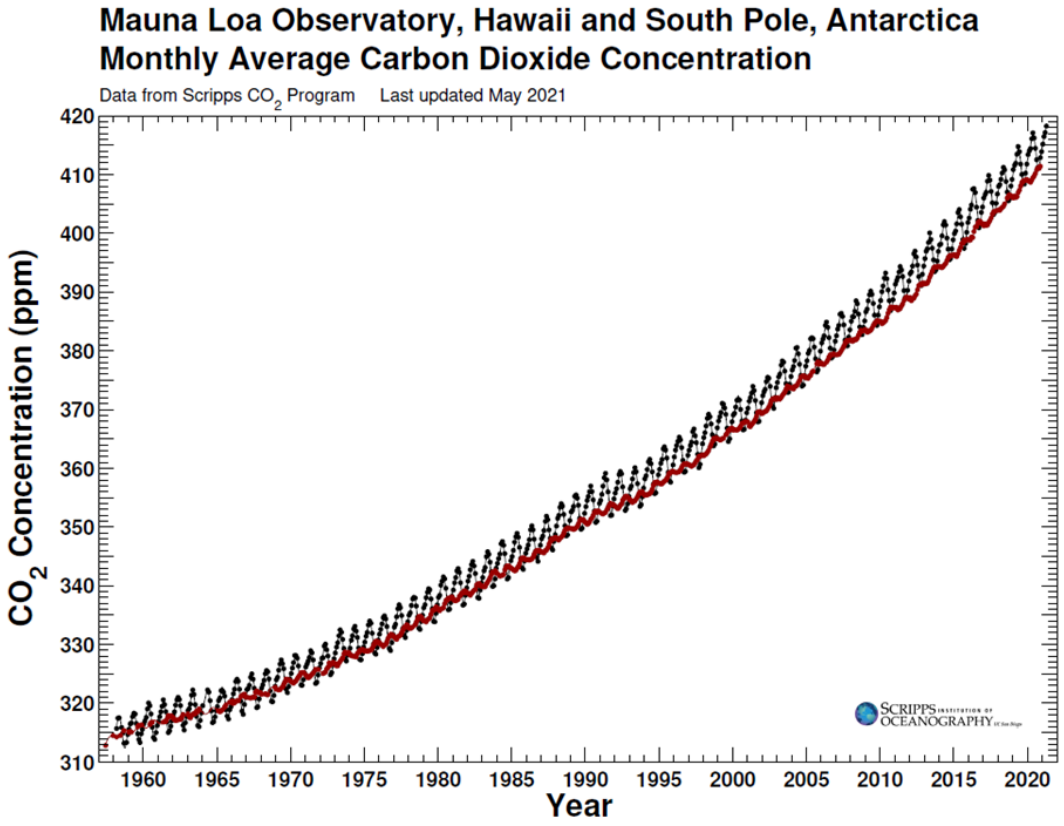

Very Concerned: 74.3%
Negative Effect on Health:71.6%


54%

Urgent Action Needed



IPCC 2021



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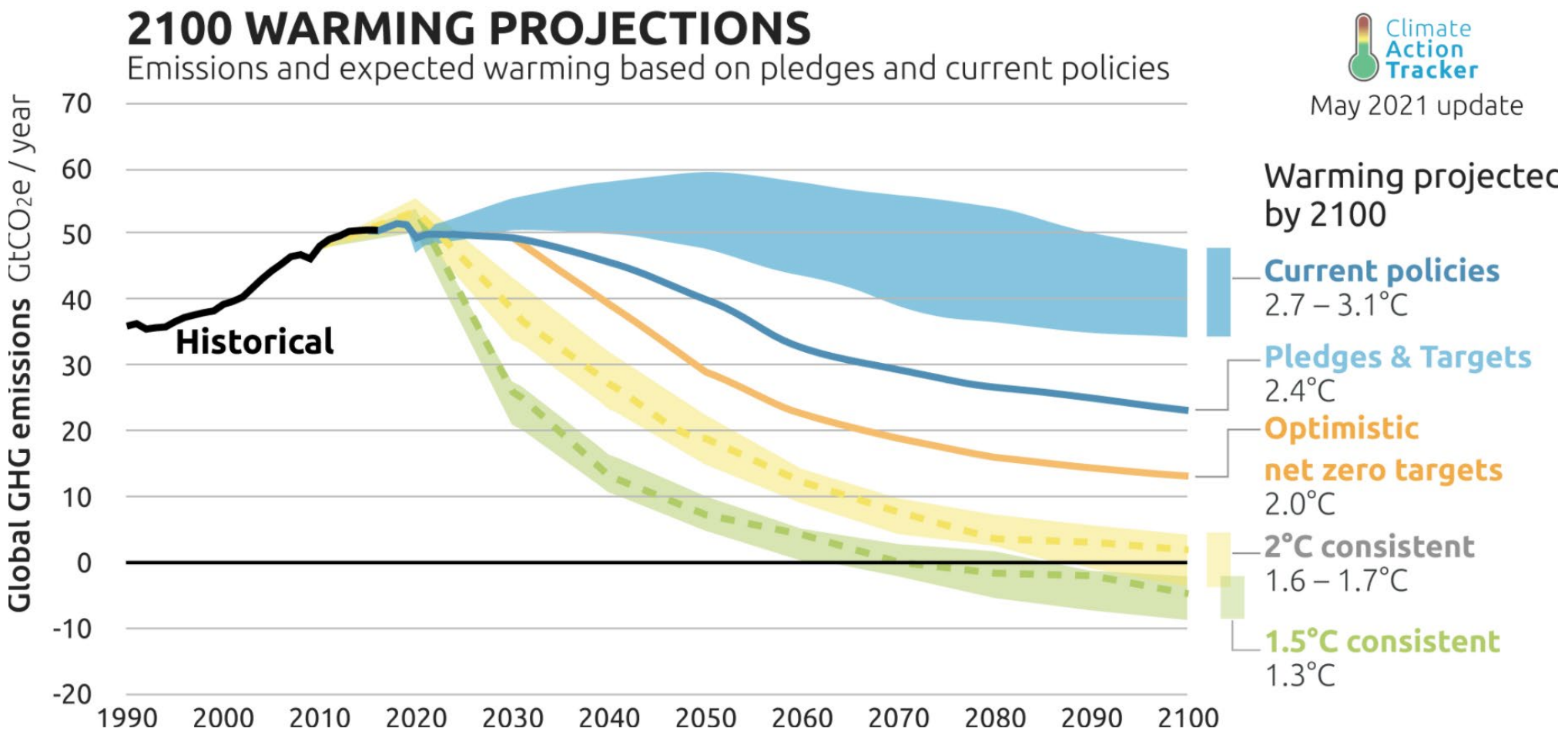

Vision:

"To place Los Altos on an accelerated, sustainable path to carbon neutrality by advancing bold and effective climate policies."

Mission:

"The mission of our Climate Action and Adaptation Plan is to preserve the unique character of Los Altos and enhance its natural environment, while improving the quality of life and health of its people by supporting transformative change in the areas of climate, resilience and equity."

CAP 2013 Progress

Los Altos Climate Action Plan (CAP)

- 2013 CAP was adopted
- 2005 Baseline year for GHG Emissions (182,830 MTCO2e)
- Goal was to achieve a 15% reduction in emissions by 2020 (155,410 MTCO2e)
- ~44 Measures included in the areas of:

Transportation

Energy

Resource Conservation

Green Community

Municipal Operations

CAP 2013 Progress

Emissions Comparison Table

Community	2005 emissions	2018 emissions	% change	Emissions reduction (MTCO2e)
Transportation & Mobile Sources	96,610	71,531	-26%	25,079
Solid Waste	3,950	2,653	-33%	1,297
Water & Wastewater	2,250	1,063	-53%	1,187
Commercial Energy	20,070	7,535	-62%	12,535
Residential Energy	59,950	35,661	-41%	24,289
Community total	***182,830***	***118,443***	***-35%***	***64,387***
Total	**182,830**	**118,443**	**-35%**	**64,387**
2020 target		*155,410*	*-15%*	

CAP 2013 Progress

Emissions Comparison table

Municipal Operations	2005 emissions	2018 emissions	% change	Emissions reduction (MTCO2e)
Buildings & Facilities	428	135	-68%	293
Street Lights & Traffic Signals	130	<1	100%	130
Vehicle Fleet	420	327	-22%	93
Employee Commute	697	446	-36%	251
Solid Waste Facilities	197	172	-13%	25
Water & Wastewater Treatment Facilities	3	5	67%	(2)
Process & Fugitive Emissions	20	21	5%	(1)
Government total	***1,895***	***1,106***	***-42%***	***789***

Community (Includes Municipal Operations)	2005 emissions	2018 emissions	% change	Emissions reduction (MTCO2e)
Transportation & Mobile Sources	96,610	71,531	-26%	25,079
Solid Waste	3,950	2,653	-33%	1,297
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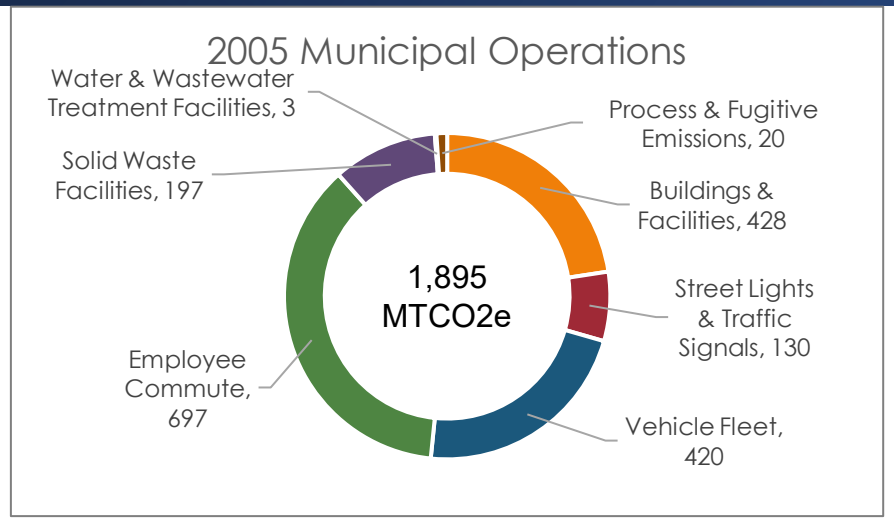
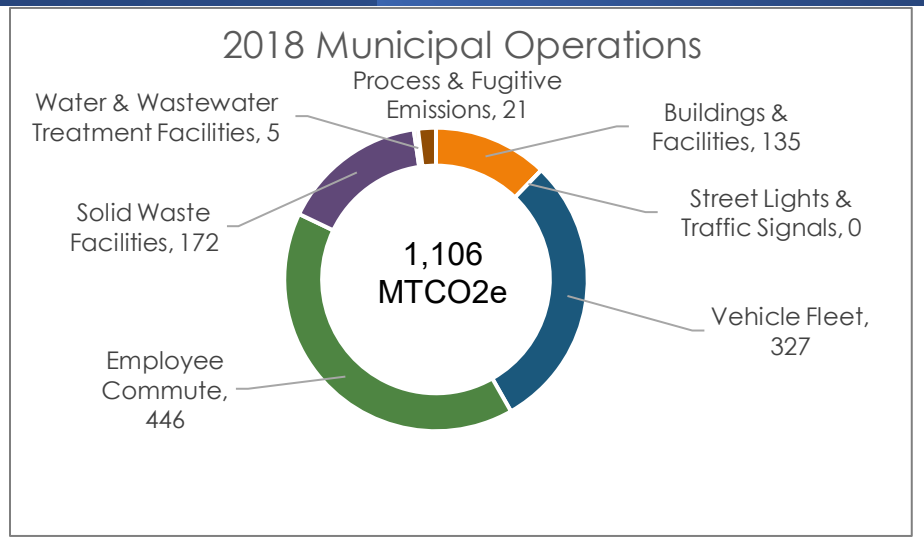
Community total	***182,830***	***118,443***	***-35%***	***64,387***

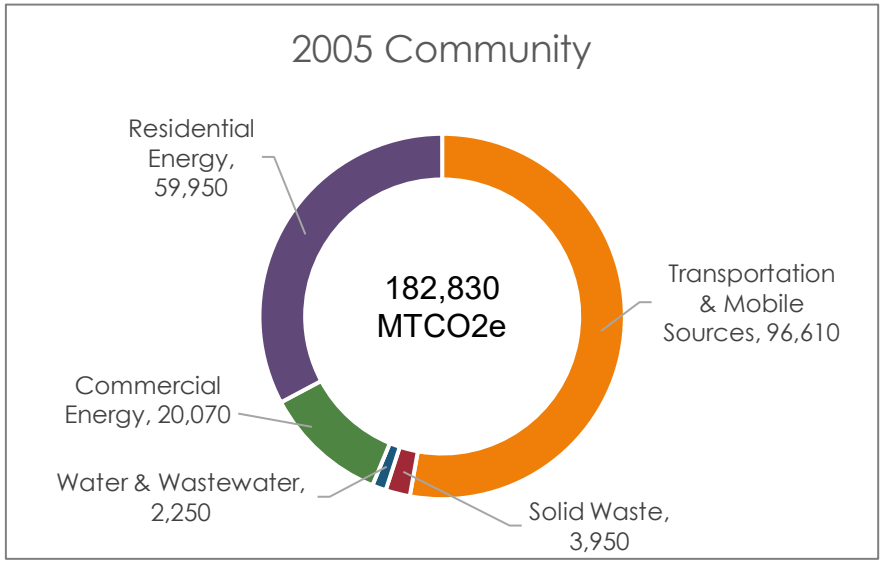
Total Community (includes Municipal Op)	**182,830**	**118,443**	**-35%**	**64,387**
2020 target		*155,410*	*-15%*	

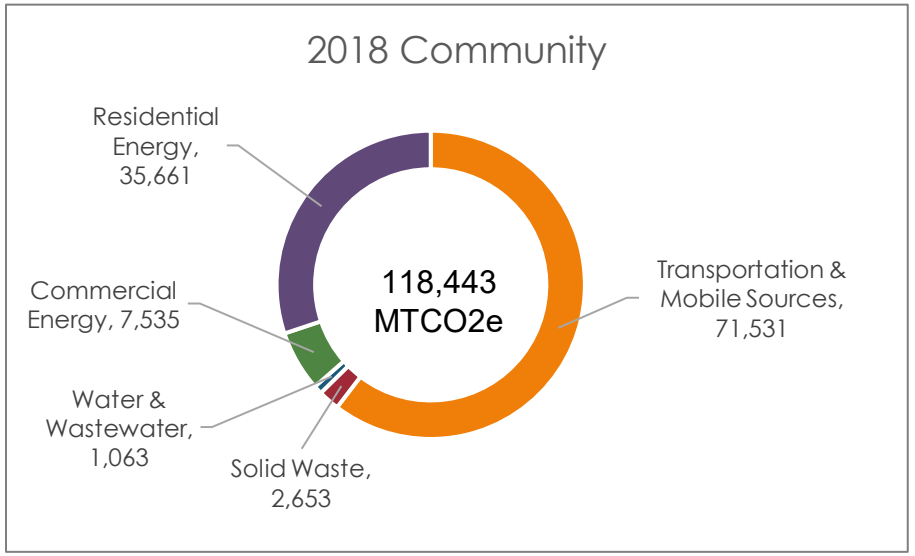
GHG Emissions

60% from Trans -- 96% from Trans + Res Energy+ Com Energy

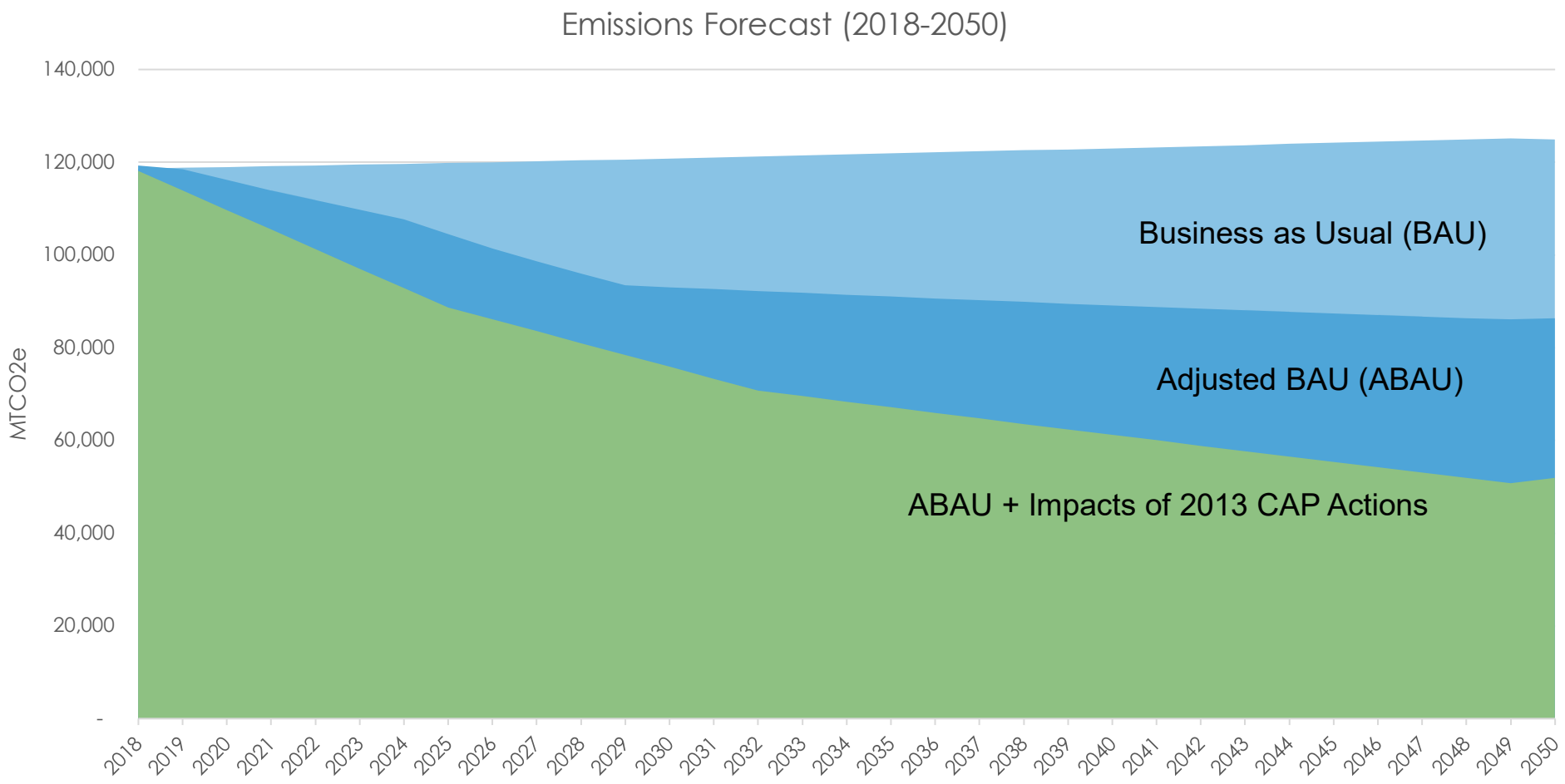








Projections: CAP 2013 will have limited future action



Local and International Targets

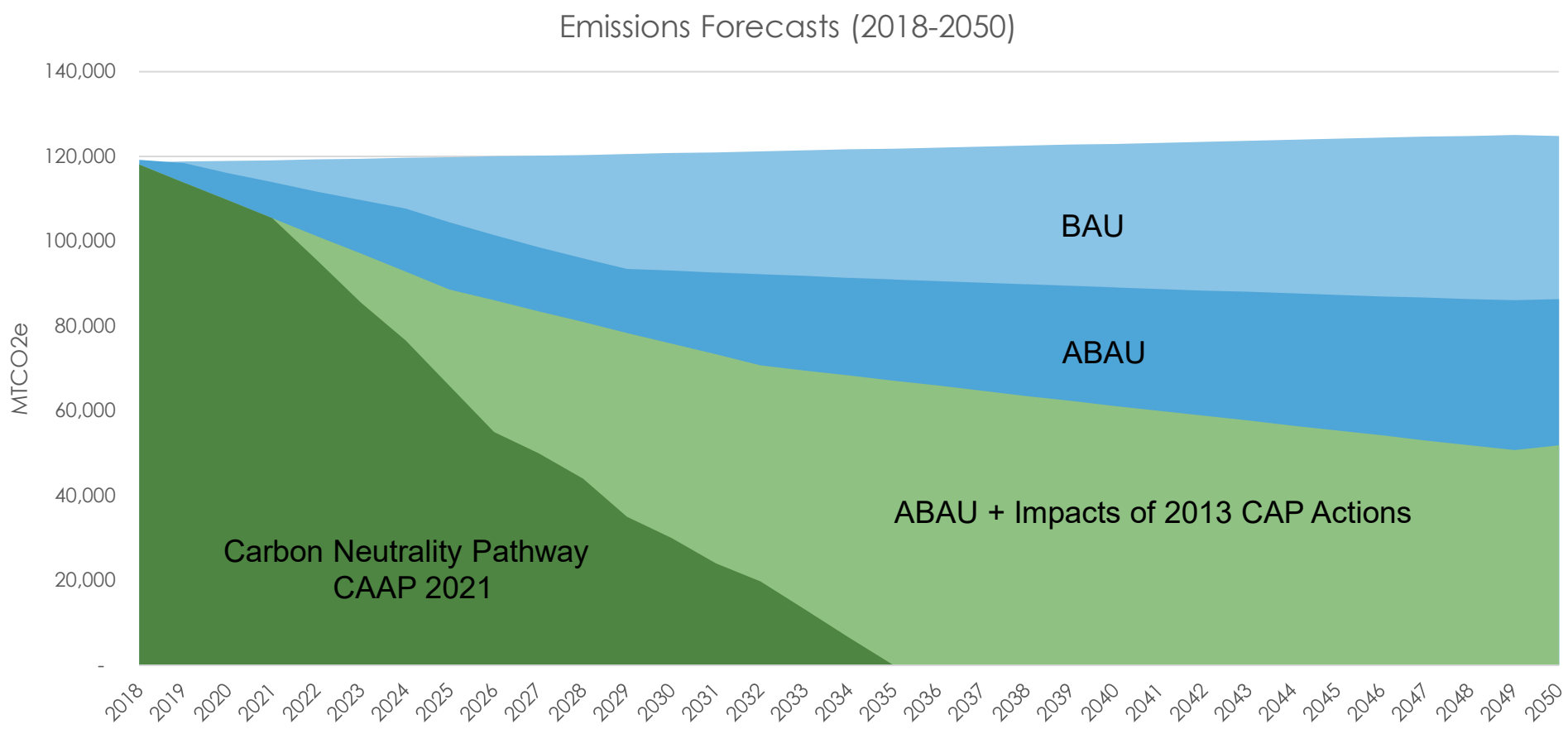
	Entity	Year	1st Target
International, National and State targets	U.S. NDC[1]	2021	50-52% below 2005 levels by 2030
	IPCC/U.S.	2020	net zero by 2050 at the latest
	Executive Order B-55-18[2]	2018	carbon neutral by 2045
	Senate Bill 32 (2016)	2016	40% below 1990 levels by 2030
Lcoal Targets	Menlo Park	2020	Zero Carbon by 2030
	Sunnyvale	2019	56% below 1990 levels by 2030
	Belmont	2017	50% below 2005 levels by 2035
	Los Altos Hills	2016	30% below 2005 levels by 2025
	Palo Alto	2016	80% below 1990 levels by 2030
	Mountain View	2015	26% below 2005 levels by 2025 37% below 2005 levels by 2030 48% below 2005 levels by 2035
	San Carlos	2021	40% below 1990 levels by 2030

[1]Nationally Determined Contribution

[2]Non-binding target

Our Goal: Achieving an 85% reduction of GHG Emissions from 2005 levels by 2030 and Carbon Neutrality by 2035

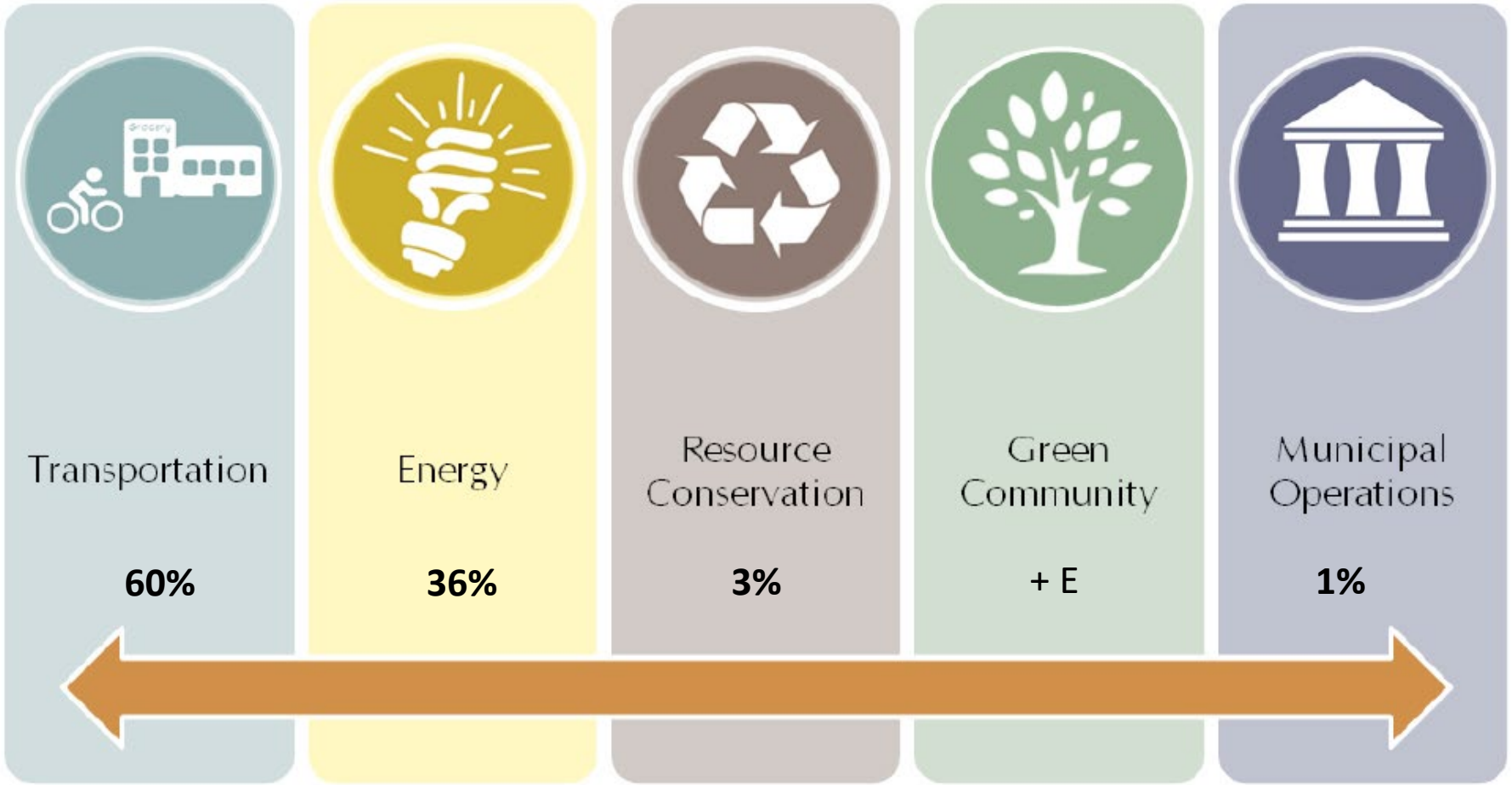
Projections: Carbon Neutrality Pathway



Update 2021 CAAP

Climate Action and Adaptation Plan

Mitigation Sectors and GHG Emissions



Transportation

Strategy 1: Reduce Single-Occupancy Vehicle Travel

Goal 1: Create a Walkable and Bikeable City (38 miles of bike lanes and 10 miles of pedestrian paths built)

- Fully Implement the 2021 Complete Streets Master Plan by 2035 ($$$, RRR)
- Create pedestrian-friendly downtown and commercial areas ($$$, RR)
- Develop a new Parking Management Strategy promoting VMT reduction ($, RR)

Goal 2: Promote Smart Growth Strategies (10% of population in high density housing)

- Prioritize Transit-Oriented Development ($, RRR)
- Develop work from home policies and incentives ($, RRR)

Goal 3: Create Shared Mobility Network (100% of population within 10-minute walk of transit)

- Develop an electric shuttle service and an ebike/escooter program ($$$, RR)
- Expand clean transit service ($, RR)

Transportation

Strategy 2: Electrify Transportation

Goal 1: Accelerate EV Adoption (60% EVs by 2035)

- Increase awareness of EV resources & incentive programs ($, RR)
- Actively promote EVs adoption and require dedicated EV parking ($, RR)

Goal 2: Install Community-Wide EV Supply Equipment (1-mile target for DCFC, 1 level 2 charger/2 cars)

- Increase Level 2 EV charging stations in commercial and multifamily areas ($, RR)
- Create a network of DC Fast Charging stations ($$, R)
- Double the current EV charging and pre-wiring requirements via Reach Code updates ($, R)

Energy

Strategy 1: Reduce Energy Consumption

Goal: Fund Energy Efficiency Incentive Programs (Energy audits and home upgrades per year)

- Perform residential and commercial energy audits ($$)
- Increase residential and commercial energy efficiency ($$, RR)

Strategy 2: Increase Solar Energy and Battery Storage

Goal: Adoption of Net Zero Buildings requirements (All new buildings net zero as of 2030)

- Strengthen community solar requirements ($,R)
- Establish community energy storage requirements (new buildings) (R)

Energy

Strategy 3: Facilitate Building Decarbonization

Goal 1: Require All-Electric New Buildings and Major Retrofits (150/year)

- Adopt bold Reach Codes expanded to include large additions, ADUs and major remodels ($, RR)

Goal 2: Increase Fuel Switching in Existing Buildings (470/year)

- Accelerate residential fuel switching ($, RR)
- Accelerate commercial fuel switching ($, RR)

Goal 3: Disincentivize methane gas (Supportive)

- Implement a Carbon Emission Permit for the use of methane gas

Resource Conservation

Strategy 1: Reduce Consumption and Waste

Goal 1: Continue to Decrease Waste (95% landfill diversion rate by 2035)

- Increase the landfill diversion rate (R)
- Adopt new ordinance to eliminate single-use plastics ($, R)
- Reduce waste from construction and building materials (R)

Goal 2: Promote a Circular Economy (Supportive)

- Promote sustainable food choices ($, R)
- Increase knowledge of responsible goods & services consumption ($, R)

Municipal Operations

Strategy 1: Operate Sustainable Municipal Buildings

Goal 1: Increase Building Efficiency (30% reduction by 2035)

- Audit appropriate City facilities and conduct comprehensive energy efficiency upgrades ($, R)

Goal 2: Develop Solar + Storage at City Facilities

- Build new City buildings to Net Zero standards ($, R)
- Retrofit existing buildings to add solar power and battery storage ($$, R)
- Build a microgrid for all city facilities and emergency buildings ($$, R)

Strategy 2: Reduce Municipal Vehicle Miles Traveled

Goal 1: Convert 100% City's Fleet to Electric Vehicles by 2030

- Develop a phase-out schedule to replace all City-owned fleet vehicles with electric versions ($, RR)

Goal 2: Develop guidelines for sustainable employee commute/business travel by 12/2022 ($, R)

CAAP Cross Cutting Actions & Adaptation

CROSS CUTTING ACTIONS

- Municipal Operations
- Building a Green Community

ADAPTATION

- Reducing Climate Risk
- Emergency Preparedness
- Towards a Resilient Community

Cross Cutting Actions - Municipal Operations

Integrate Climate Action and Adaptations in City Functions

Goal: **Incorporate CAAP into city policy, budget planning & Internal Standards**

- Account for climate change in all new city projects
- Incorporate climate preparedness into City programs & protocols
- Integrate CAAP goals into budget process

Cross Cutting Actions - Green Community

Strategy: Develop Nature Based Solutions

Goal 1: Expand green infrastructure and improve water resilience

- Develop citywide green infrastructure plan
- Create water efficient buildings and landscapes
- Implement water recycling and natural water harvesting systems

Goal 2: Expand natural environments and carbon sequestration

- Develop citywide natural environment plan
- Increase urban tree canopy
- Expand and enhance green wilderness, natural habitat and park area
- Pilot carbon farming strategies

Adaptation - Climate Risk

Understand and Reduce Physical Risk

Goal 1: Reduce Flood Risk

- Reduce stormwater runoff
- Manage flood plains
- Restore riparian ecosystems

Goal 2: Reduce Heat Risk

- Enact reflectivity/green standards for roofs and ground level surfaces
- Promote alternative building cooling strategies like shade trees & awnings

Adaptation – Emergency Management

Strategy: Integrate Adaptation into Emergency Preparedness & Response

Goal 1: Ensure Safety during extreme heat

- Develop heat alert system and heat management plan
- Implement heat safety protocols for outdoor work
- Expand public drinking water stations

Goal 2: Ensure safety during unhealthy air events

- Develop early warning system for air quality
- Distribute masks and filters to vulnerable populations

Adaptation - Resilient Community

Strategy: Educate and Protect Residents

Goal 1: Establish Resilience Hubs (10% population capacity)

- Upgrade existing buildings
- Construct new facilities where needed

Goal 2: Protect vulnerable community members

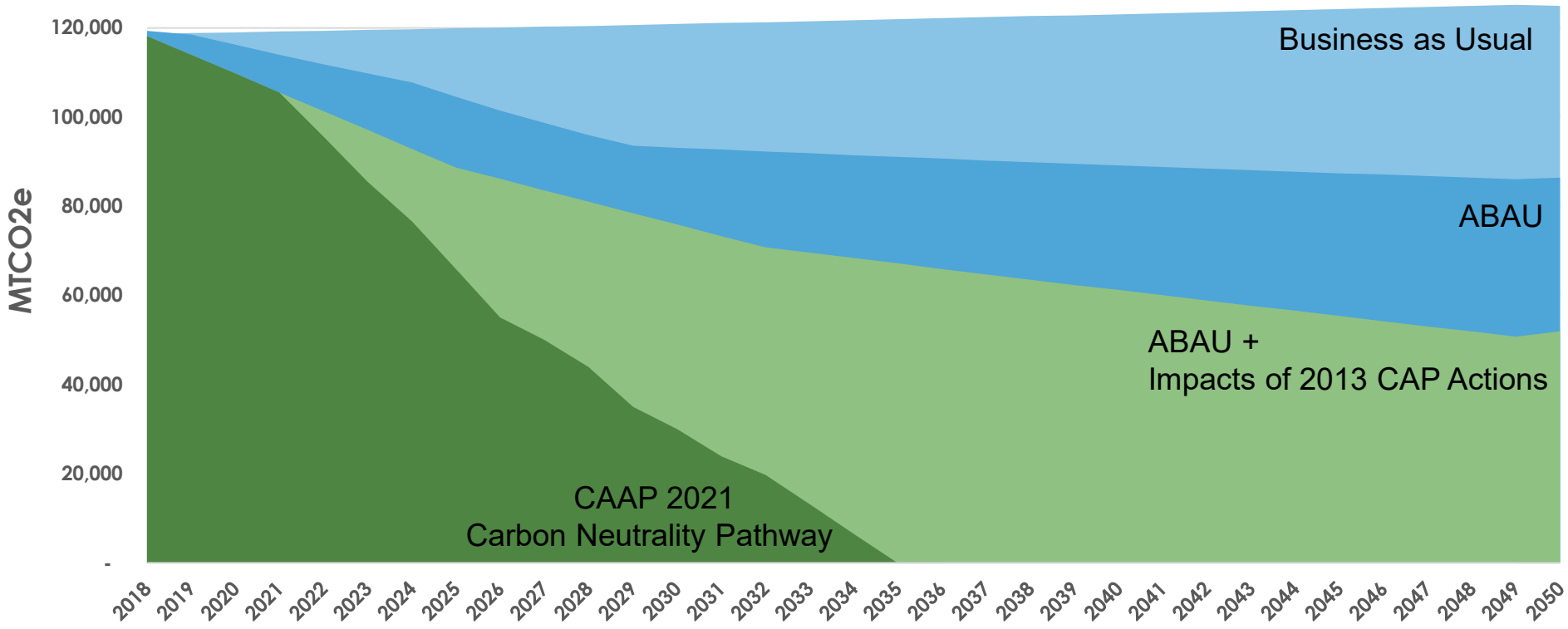
- Identify and protect vulnerable populations
- Engage and train caregivers

Goal 3: Improve Climate Literacy & Risk Understanding

- Update CERT to include growing climate hazards
- Launch a Community Climate Action Grant

Los Altos CAAP – 2021

85% reduction from 2005 levels by 2030
Carbon Neutrality by 2035



CITY COUNCIL PRIORITIES FY 2021-2023: The City of Los Altos will be a leader on environmental sustainability through education, and adopting and embracing policies, initiatives, and practices that advance this effort.

Thank You