

CITY OF ALBANY CITY COUNCIL AGENDA STAFF REPORT

Agenda Date: October 7, 2019

Reviewed by: NA

SUBJECT: Climate Action and Adaptation Plan Draft

REPORT BY: Claire Griffing, Sustainability & Resilience Manager

SUMMARY

This agenda item continues the discussion of the draft Climate Action and Adaptation Plan.

STAFF RECOMMENDATION

That the Council provide feedback and direction regarding the draft Plan for incorporation into the final Plan.

BACKGROUND

The Council held a study session to discuss the draft Climate Action and Adaptation Plan on September 16, 2019 and continued the item to the October 7th meeting for further discussion. At the meeting, members of the public commented on all-electric new construction reach codes, recommended updating the carbon neutrality target year, suggested wording changes, and proposed including additional actions to support solar and electric vehicle adoption.

DISCUSSION

The attached draft Climate Action & Adaptation Plan was developed after an extensive community engagement process. The draft Plan lays out a prioritized, strategic, and phased approach, focusing on four main strategies to reduce emissions and adapt to a changing climate:

- 1. Activate, share, and electrify transportation: This section focuses on increasing active transportation and switching vehicles to all-electric over time.
- 2. **Electrify new and existing buildings:** With Carbon-Free electricity supplied by EBCE, this goal attempts to prohibit new natural gas infrastructure and phase out the use of natural gas in existing buildings over time through incentives and education.
- 3. **Facilitate a carbon-free economy:** To address Albany's emissions from consumption, this section focuses on waste reduction and the sharing economy.
- 4. **Accelerate resilience for all:** Adapting to climate change will require expanding the City's capacity to prepare for extreme weathers while increasing infrastructure resilience through green infrastructure along with other methods.

The Plan prioritizes actions that are feasible, cost-effective, and demonstrate Albany's leadership in climate action. Implementation of the Plan relies on leveraging resources such as regional partnerships and existing programs to be successful. An Implementation Plan will accompany the CAAP, and will include deliverables, detailed approach, a responsible entity and key partners, a detailed timeframe for implementation, and potential funding sources for each action.

SUSTAINABILITY IMPACT

The actions laid out in the updated Climate Action and Adaptation Plan will help bring the City of Albany closer its emissions reduction targets. The Plan focuses on enhancing environmental quality, improving public health, and building a resilient community.

FINANCIAL IMPACT

Many of the actions in this Plan have associated costs, but most will be supported by regional partnerships, through PG&E and EBCE ratepayer funds, as well as grant funding. The separate Implementation Plan will address specific funding sources for each action, when applicable.

Attachments

- 1. Council Staff Report 9-16-2019 on Draft Climate Action and Adaptation Plan
- 2. Draft Climate Action and Adaptation Plan
- 3. Public Comments Received as of 7-19-2019
- 4. Public Comments Received for 9-16-2019 Council Study Session
- 5. Draft Council Minutes Excerpt 9-16-2019



CITY OF ALBANY CITY COUNCIL AGENDA STAFF REPORT

Agenda Date: September 16, 2019

Reviewed by: NA

SUBJECT: Climate Action and Adaptation Plan Draft – City Council Study Session

REPORT BY: Elizabeth Carrade, Sustainability Coordinator

Claire Griffing, Sustainability & Resilience Manager

SUMMARY

This agenda item introduces the draft Climate Action and Adaptation Plan, which prioritizes actions that support low-carbon transportation choices, reduce the use of natural gas in the built environment, discourage carbon-intensive consumption habits, and promote climate adaptation and resilience.

STAFF RECOMMENDATION

That Council:

- 1. Receive a presentation regarding the draft Climate Action and Adaptation Plan; and
- 2. Provide feedback and direction regarding the draft plan for incorporation into the final plan

BACKGROUND

Through the Albany City Council's Strategic Vision, the City is committed to fostering a healthy and sustainable urban village by advancing actions that promote climate stability. In 2007, the Council formed a Sustainability Committee (now Climate Action Committee) to advise on greenhouse gas (GHG) reduction strategies. In 2010, the Council adopted a Climate Action Plan (CAP), which outlined a course of action for the City to reduce emissions 25% by 2020. Strategies focused on six sectors: building energy strategies, transportation and land use, waste reduction, green infrastructure, water conservation, and food and agriculture. Through energy and water use improvements, waste reduction efforts, a focus on active transportation, and a new carbon-free default electricity supply from EBCE, the City has successfully decreased community wide emissions by 33%—exceeding the 2020 goal.

In March 2018, Council approved issuance of an RFP for consulting services for the development of a new Climate Action and Adaptation Plan (CAAP), which will guide the City towards its emissions reduction goals outlined in the General Plan: 60% GHG reductions by 2035, and net zero emissions by 2050. Through a competitive bid process, the City selected Cascadia Consulting Group in June of 2018 to develop the new Plan. The interview process included members of the Climate Action Committee.

DISCUSSION

Plan Development

The attached draft Climate Action & Adaptation Plan was developed after an extensive community engagement process, which included two community surveys, a public workshop, four stakeholder focus group meetings (topics included business, rental properties, transportation, and green infrastructure), meetings with and presentations to Albany community groups, and City staff interviews. During the public comment period, the draft CAAP was presented to the following advisory bodies: Traffic and Safety Commission; Planning and Zoning Commission; Social and Economic Justice Commission; Parks, Recreation, an Open Space Commission; Economic Development Committee. The City's Climate Action Committee identified, assessed, and formalized the goals and strategies of the CAAP at ten of their meetings throughout the process. All Climate Action Committee meetings were open to the public, with opportunities for public comment. Topic area-focused subcommittees also conducted more detailed review and analysis of topics including transportation, resilience, consumption, and electrification.

Major themes that emerged from the community engagement process include promoting active transportation, electrifying buildings and vehicles, and encouraging smarter consumption. The public also requested that the City prioritize actions that maximize trees and green space and benefit public health. These themes guided development of the objectives and strategies that make up the Plan.

Results from the initial survey, workshop, stakeholder meetings, and Climate Action Committee feedback were used to develop an initial list of strategies and actions in April 2019. This list was shared with local agency stakeholders and the Climate Action Committee. The refined list was incorporated into the first draft of the CAAP, which was open for public comment from June 21-July 19 (see Attachment 3 for a full list of public comments received).

The draft Plan lays out a prioritized, strategic, and phased approach to reducing emissions within Albany and achieving carbon neutrality by 2050. This draft focuses on four main strategies to reduce emissions and adapt to a changing climate:

- 1. **Activate, share, and electrify transportation:** This section focuses on increasing active transportation and switching vehicles to all-electric over time.
- 2. **Electrify new and existing buildings:** With Carbon-Free electricity supplied by EBCE, this goal attempts to prohibit new natural gas infrastructure and phase out the use of natural gas in existing buildings over time through incentives and education.
- 3. **Facilitate a carbon-free economy:** To address Albany's emissions from consumption, this section focuses on waste reduction and the sharing economy.
- 4. **Accelerate resilience for all:** Adapting to climate change will require expanding the City's capacity to prepare for extreme weathers while increasing infrastructure resilience through green infrastructure along with other methods.

The Plan prioritizes actions that not only significantly reduce greenhouse gas emissions, but are feasible, cost-effective, and demonstrate Albany's innovation and leadership in climate action.

Implementation of the Plan relies on leveraging resources such as regional partnerships and existing programs to be successful. In addition to assessing the emissions reduction impact, cost, and timeframe of each action, co-benefits including public health, equity, resilience, feasibility, and leadership potential were assessed.

An Implementation Plan will accompany the CAAP, and will include deliverables, detailed approach, a responsible entity and key partners, a detailed timeframe for implementation, and potential funding sources for each action. The Implementation Plan is meant to be a working document, updated regularly as priorities, funding, and technologies change. Success will be measured by implementation status of these actions, through key performance indicators, and a greenhouse gas inventory to be updated every 3-5 years.

Greenhouse Gas Emissions Inventory and Targets

The main purpose of a greenhouse gas inventory is to understand the primary emissions sectors to help prioritize actions, to determine progress toward the City's goals, and to communicate that progress to the public. The most recent inventory was calculated by Rincon consultants as part of the CAAP planning process. Despite growth in Albany's economy and population, the community greenhouse gas emissions have been declining over time. Overall, emissions decreased by 27% from 2005 to 2017. When taking into consideration the emissions reduced from opting electricity accounts into EBCE's carbon-free electricity service, it is estimated that the City has reduced overall emissions by 33%. Albany's 2017 per-capita GHG emissions were 3.1 MTCO₂e per person, compared to a U.S. average of 15.8 MTCO₂e per person. Greenhouse gas emissions stemmed mainly from building energy use (electricity and natural gas consumption) and transportation (passenger vehicles, commercial trips, and buses).

In addition to a traditional greenhouse gas emissions inventory, the CAAP includes a consumption-based emissions inventory that identifies the average Albany household's footprint associated with the consumption of goods and services. This addition was made because the goods and services that are consumed by Albany residents and visitors—such as clothing, furniture, meat and dairy, and air travel—represent a considerable source of greenhouse gas emissions, regardless of whether the goods and services are originally produced in Albany.

Greenhouse Gas Emissions Reduction Targets

Recent scientific studies demonstrate that it is imperative to significantly curtail global GHG emissions in order to reduce the most adverse risks and impacts of global climate change. In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a report stating that in order to avoid the worst impacts of climate change, "deep emissions reductions" are necessary, requiring "rapid, far-reaching and unprecedented changes in all aspects of society." The vitality of land and ocean ecosystems, food and water supply, human health, and economic growth are all at risk if global GHG emissions are not curtailed to keep warming under 1.5 degrees Celsius.

The Paris Agreement that emerged from the 2015 United Nations Framework Convention on Climate Change sets a goal of dramatically reducing GHG emissions and requires that

signatories establish and report on emissions reduction targets. When the United States announced it would cease participation in the agreement in 2017, the City signed onto the "We Are Still In" declaration to support climate action.

The State of California has long been a leader in taking action on climate change, beginning with California Assembly Bill 32, the Global Warming Solutions Act of 2006, requiring statewide GHG emissions reductions to 1990 levels by 2020, and to a level 80% below 1990 levels by 2050. More recently, in September 2018, California Governor Brown signed Executive Order B-55-18, committing California to achieving carbon neutrality no later than 2045, and achieving and maintaining net negative emissions thereafter. While Executive Order B-55-18 has yet to be converted into law through legislature, it aligns with the deep and rapid decarbonization called for under the Paris Agreement and the IPCC Special Report.

At their meeting on July 17, 2019, the Committee discussed revising greenhouse gas emissions reduction targets to exceed State goals. The following table outlines current greenhouse gas emissions targets of relevant agencies.

Agency	Year	Target
Albany General Plan	2035	60% below 2004 levels
	2050	Carbon neutral (100%)
Climate Action Committee	2035	90% below 2004 levels
Proposal	2040	Carbon neutral (100%)
State of California	2050	80% below 1990 levels
	2045	Carbon neutrality
		(uncodified)
	2030	40% below 1990 levels
City of Berkeley	2050	80% below 2000 levels
City of Fremont	2045	Carbon neutrality (100%)
City of Piedmont	2050	80% below 2005 levels
City of El Cerrito	2035	30% below 2005 levels
City of Emeryville	2030	40% below 2004 levels
	2050	80% below 2004 levels

SUSTAINABILITY IMPACT

Environmental Quality

The actions laid out in the updated Climate Action and Adaptation Plan will help bring the City of Albany closer its emissions reduction targets. The Plan focuses on enhancing environmental quality through actions that improve air quality, restore creeks, conserve water, reduce waste, and increase natural infrastructure and habitat throughout the City. Increasing green infrastructure (such as tree) sequesters carbon from the atmosphere while providing shade, urban beautification, and wildlife habitat.

Public Health & Community Resilience

Specific actions in the draft Plan have co-benefits, such as the potential to improve public health and create a more resilient community. Reducing reliance on fossil fuels for transportation enhances public health by reducing localized air pollution from internal combustion engines, while active transportation promotes healthy lifestyles while reducing costs. Reducing reliance on fossil fuels for energy and transportation brings economic resilience benefits, as consumers are no longer subject to price fluctuations in natural gas and petroleum markets. Renewable energy with storage enhances grid resilience as well. Reducing natural gas use in homes, schools, and workplaces can improve indoor air quality, earthquake and fire safety, and reduce the City's overall hazard potential.

FINANCIAL IMPACT

Many of the actions in this Plan have associated costs, but most will be supported by regional partnerships, through PG&E and EBCE ratepayer funds, as well as grant funding. Plan implementation will require significant staff time, bolstered by the CivicSpark Fellowship Program (eleven-month AmeriCorps fellowship program administrated by the Local Government Commission for local government climate and resilience capacity building projects) and volunteers. The separate Implementation Plan will address specific funding sources for each action, when applicable.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS

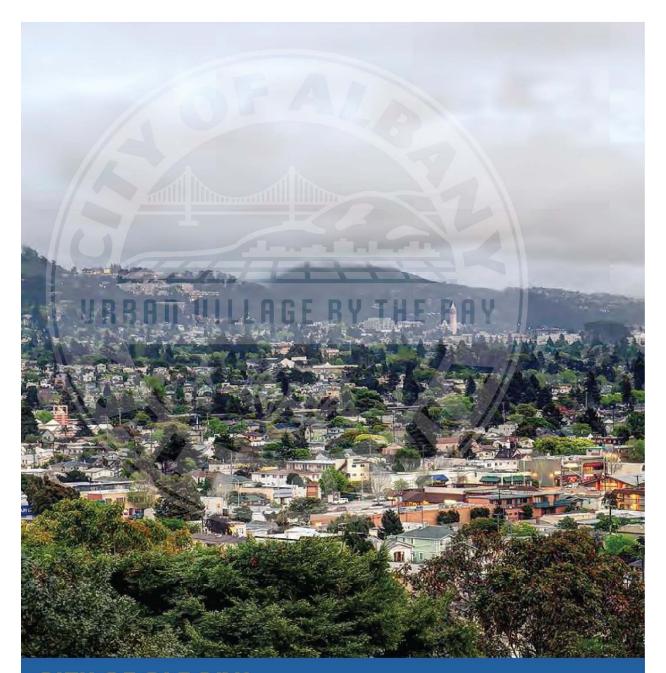
Staff has determined that this project is categorically exempt from environmental review under CEQA guidelines under section 15307, "Actions by regulatory agencies for protection of natural resources," and the general rule at section 15061(b)3 because it can be seen with certainty that there is no possibility that the proposal may have a significant effect on the environment. Staff will prepare a categorical exemption provided under CEQA Guidelines upon adoption of the Plan.

NEXT STEPS

The Climate Action Committee is scheduled to review and provide additional feedback on the draft CAAP and accompanying Implementation Plan at their meeting on September 18th. The current public comment period is open until September 18th, at which point staff and consultants will work to incorporate feedback and draft a final version of the Plan for review by the Climate Action Committee and the City Council in mid-October.

Attachments

- 1. Draft Climate Action and Adaptation Plan Draft
- 2. Public Comments Received



CITY OF ALBANY CLIMATE ACTION AND ADAPTATION PLAN

SEPTEMBER 2019 | DRAFT

Table of Contents

Acknowledgments	2
A Message from the City of Albany	
Introduction	6
Why Plan for Climate Change?	6
The Plan at a Glance	8
Understanding Albany's Emissions	10
Climate Change in Albany	10
Albany's Greenhouse Gas Emissions	10
Risk and Vulnerability	16
Progress to Date	19
Building on a Foundation	19
Collaboration and Partnerships	20
Partnership Spotlight: East Bay Community Energy	2
Carbon-Free Albany	22
Plan Goals	23
Greenhouse Gas Reduction Targets	23
Communitywide Goals	25
Plan Development	28
Building it Together	28
Community Engagement	29
Alignment with Other City Plans	32
A Critical Pathway	33
Strategies and Actions	34
Summary of Strategies and Actions	34
How to Read the Strategies and Actions	35
Strategy 1: Activate, Share, and Electrify Transportation	37
Strategy 2: Electrify New and Existing Buildings	4
Strategy 3: Facilitate a Carbon-Free Economy	45
Plan Implementation	52
Appendix A. What You Can Do	55
Appendix B. Partners and Roles	57

Acknowledgments

City Council

Rochelle Nason, Mayor Peggy McQuaid, Vice Mayor Michael Barnes, Council Member Peter Maass, Council Member Nick Pilch, Council Member

Climate Action Committee

Thomas Cooper, Committee Member Eric Larson, Committee Member Allison Marten, Committee Member Nick Peterson, Committee Member Stephanie Siehr, Vice Chair Samantha Smithies, Chair Max Wei, Committee Member Kate Breeding, Committee Member

Committees & Commissions

City of Albany Traffic & Safety Commission
City of Albany Planning & Zoning Commission
City of Albany Social & Economic Justice Commission
City of Albany Economic Development Committee
City of Albany Parks, Recreation, & Open Space Commission

City Manager

Nicole Almaguer, City Manager Isabelle Leduc, Assistant City Manager

City of Albany Staff

Jeff Bond, Community Development Director Mark Hurley, Public Works Director Justin Fried, Transportation Planner Claire Griffing, Sustainability & Resilience Manager Elizabeth Carrade, Sustainability Coordinator Chelsea Polevy, CivicSpark Climate Fellow Bianca Hutner, CivicSpark Climate Fellow

Prepared By

Cascadia Consulting Group Rincon Consultants

Photography

Doug Donaldson Stephanie Warner, SJW Photography

A Message from the City of Albany

We Have a Climate Emergency

Global climate change poses an existential threat and a global humanitarian climate emergency, and we share the responsibility to mitigate emissions to reduce the impact of our changing climate, including the threat of rising sea levels and hotter summers. Albany and other cities around the globe, are challenged with the momentous responsibility of reducing greenhouse gas emissions to stabilize the global climate while preparing for the effects of climate change.

Our Progress

Through the Albany City Council's Strategic Vision, we are committed to fostering a healthy and sustainable urban village by advancing action against climate change and implementing programs to further environmental conservation in Albany. Part of the effort to protect Albany's environment includes ensuring long term sustainability and resilience from climate change and its effects Through energy and water use improvements, waste reduction efforts, and clean technology innovations, we have already decreased local emissions by 33%—exceeding the City's 2020 emissions reduction goal. Albany's default electricity supply is now carbon-free based on action taken by the Albany City Council.

Looking Forward

Albany is a small city with big sustainability goals. The City aims for 60% reductions in greenhouse gas emissions by 2035 and net zero emissions by 2050. This Plan aims to focus on innovative policies and programs to meet these new goals.

Climate and Community

This Plan was developed with the goal of prioritizing climate mitigation and adaptation strategies that offer additional community benefits, such as public health improvements, environmental conservation, and urban beautification. It is also important to acknowledge that climate action is an investment in our community and our local economy. We cannot ignore the financial, social, and environmental costs of inaction. It is also important to us that our actions to address climate change do not negatively affect our vulnerable populations. This is why we took equity and affordability into our consideration of each action.

If not now, when? If not Albany, who?

While our community is small, we see our size as a strength rather than a weakness. We have the ability, and responsibility, to act quickly to reduce carbon pollution. In fact, we believe we can be a leader in the fight against climate change, and this plan is the first step toward positive change. We want other cities, large and small, to look to us as an example and scale up the innovative actions we choose to pilot.

It Takes a (Urban) Village

Every person in Albany has a role in helping the City meet its climate action goals. As a member of our community, we hope you will participate actively to reduce your carbon footprint, taking advantage of the resources provided by the City and other agencies. Together, we can work to achieve Albany's ultimate goal of getting to zero carbon emissions by 2050. We thank you for choosing to live, work, or play in Albany, and for your partnership in working to ensure a vibrant and sustainable urban village now and into the future.

OUR VISION: ALBANY IN 2050

Albany is a leader in climate action and works together as a community to ensure a vibrant, healthy, and sustainable urban village that is livable, equitable, and resilient for all.



LIVABLE

- Albany is safe, healthy, and sustainable. Both people and natural systems thrive.
- Clean, locally sourced renewable energy powers our buildings, buses, and cars, improving local air quality.
- Our economy thrives on low-carbon, low-waste goods and services. Community members actively share resources.



EQUITABLE

- Every resident has easy access to a walkable, bikeable, and affordable neighborhood with ample green space, active and affordable transportation, and a robust sharing economy.
- Plentiful local green jobs employ and serve many. The economic benefits of sustainability are shared across the community.
- Equity drives our sustainability. Initiatives are developed in collaboration with communities of color and those most at-risk to climate change's impacts.



RESILIENT

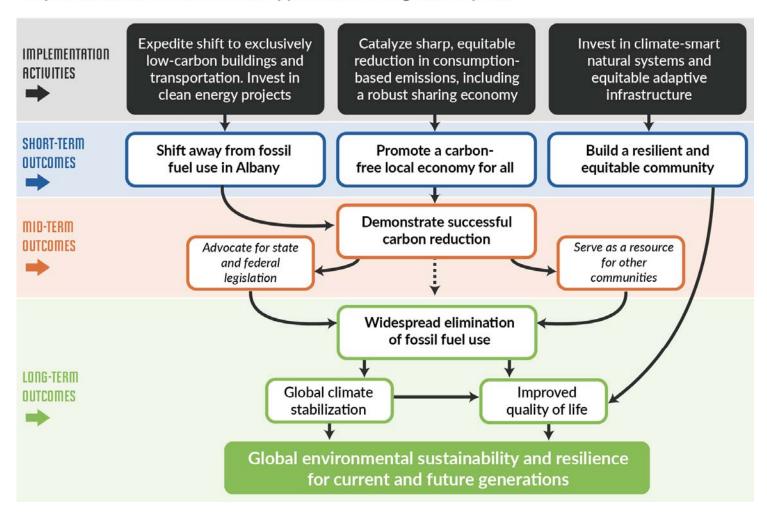
- People and living systems are resilient to the local effects of climate change. They have the resources and support to withstand extreme heat, wildfire, smoke, sea level rise, and flooding.
- Our locally sourced renewable energy supply can provide reliable excess power in the event of a power failure.



- Community members are highly involved in sustainability activities.
- The community embraces public transportation systems that are connected within Albany and enable sustainable travel to neighboring cities.
- Albany connects with other pioneering cities, both regionally and globally, to stabilize our climate.

ALBANY IN 2050: HOW WE'LL GET THERE

As we boldly work toward our vision, we hope Albany's pioneering climate action will inspire others to act and have a ripple effect with global impact.



Introduction

Why Plan for Climate Change?

Climate change is happening. Throughout the remainder of the 21st century, the climate is projected to grow substantially hotter, and precipitation patterns are expected to be less consistent with more intense rainfall. Inland flooding from a 100-year storm could compromise assets along Codornices Creek and the railway, including portions of the I-580 and I-80 freeways near the border with Richmond and south of Buchanan Street. Without taking significant action to address the rise of global temperatures, Albany could face considerable economic, public health, and public safety consequences from these climate-related risks.

Climate scientists overwhelmingly agree that an increase in greenhouse gases in the atmosphere—carbon dioxide (CO₂) in particular—is causing the steady increase in global temperature, and that the activities of burning carbon-based fossil fuels—coal, oil, and natural gas—is the primary cause of this warming trend. Climate change is already leading to large-scale problems including ocean acidification and rising sea levels; more frequent, extreme, and damaging weather events such as heat waves, storms, heavy rainfall and flooding, and droughts; more frequent and intense wildfires; disrupted ecosystems affecting biodiversity and food production; and an increase in heat related deaths. Rising sea levels, reduced snow pack in the Sierras, and extreme weather are issues that are beginning to affect the San Francisco Bay Area. By mid-century, the local area could see three to four times as many extreme heat days as we do today with the potential for related increases in hospitalizations and deaths, especially for vulnerable populations such as seniors, young children, low-income households.

These impacts carry real economic costs. According to a recent study, every ton of carbon that enters the atmosphere costs the economy \$400. This cost can add up quickly—according to this figure, total global emissions in 2017 cost the world economy \$15 trillion.¹ These expenses can be avoided, however, by reducing greenhouse gas emissions and preparing for climate change impacts. Many of the top solutions for reducing climate pollution have a payback period of less than 10 years, and researchers have estimated that, if the U.S. implemented the full range of solutions needed to avoid the worst climate change impacts, it would save the U.S. economy over \$74 trillion.²

To avoid these climate impacts, it is imperative to drastically reduce greenhouse gas emissions. This will require major and immediate transformation of the way we live our lives. Behavior and technologies will need to shift, including serious action in the energy, transportation, and consumer sectors. While this transformation will be challenging, it is important to note that ambitious climate action can bring a variety of community benefits, such as more jobs and improved health.

¹ The costs of climate inaction (2018). Editorial article in the journal Nature. https://www.nature.com/articles/d41586-018-06827-x (accessed August 30, 2019).

² Hawken, Paul. (2017). Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming. New York, New York: Penguin Books.

The City of Albany has been a leader in the fight against climate change, having adopted a Climate Action Plan in 2010. The continued increase in global atmospheric CO₂ concentration requires broader, more powerful policies to supplement local and regional efforts to reduce emissions. As a small community with engaged community members, prosperous businesses, and strong leadership, Albany has both the ability and the responsibility to address climate change.

This City of Albany Climate Action and Adaptation Plan provides an ambitious and strategic pathway for reducing the community's greenhouse gas emissions and preparing for future climate change impacts - because if Albany doesn't do it, then who will?

What's in a Name: Greenhouse Gases, Carbon Emissions, or Carbon Pollution?

There are many names for the term—greenhouse gas emissions, greenhouse gas pollution, carbon pollution, or climate pollution. We use the terms interchangeably in this document to all refer to the gases that are emitted into the atmosphere that cause global warming. They include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), and are largely created by human activities such as burning fuel and disposing of solid waste.

The Plan at a Glance

The City of Albany is committed to reducing local greenhouse gas emissions to stabilize the global climate. The City is at risk from increased flooding, never-before-seen extreme heat, wildfire and smoke, and landslides caused by more heavy rainfall. This Climate Action and Adaptation Plan (CAAP) builds on the success of the City's first Climate Action Plan (CAP) and sets new targets—a 60% reduction in greenhouse gas emissions by 2035, carbon neutrality by 2050, and smart, equitable resilience investments to help us weather the unavoidable—to make sure Albany is livable, equitable, resilient, and engaged for generations to come.

Plan Development

Hundreds of Albany community members informed development of this Plan through community surveys, , public workshops, stakeholder focus groups, and ongoing engagement with community groups and City committees and commissions. The citizen-led Climate Action Committee and subcommittees identified, assessed, and formalized the Plan's goals and strategies.

A Comprehensive Plan

The City of Albany has already made great progress: The City has taken action that has reduced community greenhouse gas emissions 33% from 2005 to 2018. But more can be done. This Plan focuses on the most impactful and meaningful opportunities to address climate impacts and resilience. It prioritizes actions that not only significantly reduce greenhouse gas emissions, but are highly feasible, and demonstrate Albany's innovation and leadership in climate action.

Vision

Albany works together to ensure a vibrant and sustainable urban village that is livable, equitable, resilient, and engaged.

Goals

- 60% reduction in greenhouse gas emissions by 2035
- Carbon-neutral by 2050
- Smart, equitable resilience investments

Challenge

- Current estimated emissions: 53,000 MT CO₂e, largely from transportation and natural gas consumption.
- Climate risks include flooding, extreme heat, and wildfire.

Strategies



Activate, share, and electrify transportation

The City aims to eliminate fossil fuel use in the transportation sector by making it easy and affordable to choose to walk, bike, or take the bus, and to choose zero emission cars and trucks to move people and goods.



Electrify new and existing buildings

To reduce emissions from buildings, the City aims to eliminate natural gas appliances and infrastructure, and convert the energy supply to renewable electricity while maximizing local generation opportunities.



Facilitate a carbon-free economy

The City will catalyze a sharing community and economy, buy low-carbon products, and offer many ways to reduce waste and carbon emissions at home, work, and school.



Accelerate resilience

The City will store carbon in trees, soil, land, and buildings, and ensure that the built environment is equipped with battery energy storage and other resilience measures to make sure all are prepared and can overcome climate change's unavoidable impacts.

Implementation

An Implementation Plan will be developed. Each action includes deliverables, detailed approach, a responsible entity and key partners to lead them, a timeframe for implementation, and potential funding sources. Success will be measured by implementation status of these actions and through key performance indicators. The City must lead by example and will be responsible for oversight of this Plan and its implementation. Successful implementation will require engagement by the whole community and recognition of the needs and risks faced by the most vulnerable community members.

What Does Success Look Like?

The City of Albany aims to demonstrate that sharp and swift carbon reduction is possible, allowing the City to serve as a resource for other communities and advocate effectively for state and federal climate legislation. Ultimately, success will be seen through the widespread elimination of fossil fuel use, improved quality of life, and global climate stabilization that ensures a sustainable, resilient City for current and future generations.

Understanding Albany's Emissions

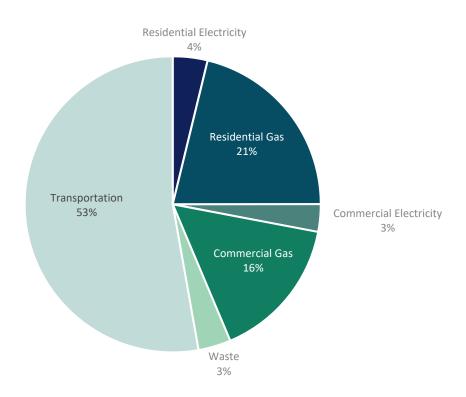
Climate Change in Albany

This section describes Albany's primary sources of greenhouse gases and the projected impacts climate change will have on the Albany community. While the best available science and information is presented here, the collective understanding of climate risks is evolving. Information will change over time, and with those changes, will bring new understanding of how impacts are interacting and may interact in the future. To stay ahead of this curve, this document takes a systems approach that recognizes the inherent connections and interdependence of climate, ecology, and people.

Albany's Greenhouse Gas Emissions

In 2017, Albany's greenhouse gas emissions stemmed mainly from building energy use and transportation (see Figure 2 below). Transportation emissions stem largely from passenger vehicles but also include commercial trips and buses. Building energy emissions result from electricity and natural gas consumption. Emissions from solid waste was the smallest source but represent only a small fraction of the global emissions related to the materials consumed by Albany community members.

Figure 1. Relative contributions to Albany's greenhouse gas emissions (2017).



In 2018, the City of Albany City Council took action to enroll the Albany community in Brilliant 100, a 100% carbon-free electricity source offered by East Bay Community Energy (EBCE). This change reduced Albany's greenhouse gas emissions by an estimated 3,884 MTCO2e—or 7% of 2017 emissions—per year. The remaining emissions in the building sector come from commercial, residential, and industrial natural gas use. Figure 3 below shows an estimate of the City's emissions now that electricity is 100% carbon free.

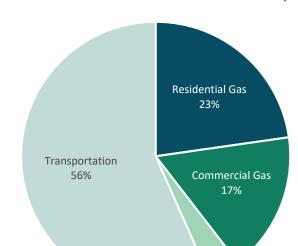


Figure 2. Estimated 2018 GHG emissions with 100% carbon-neutral electricity from EBCE.

Despite growth in Albany's economy and population, the community greenhouse gas emissions have been declining over time. Overall, emissions have decreased by 27% from 2005 to 2017 (see Figure 4 below). When taking into consideration the emissions reduced from opting electricity accounts into EBCE's carbon-free electricity service, it is estimated that the City has reduced overall emissions by 33%. Albany's 2017 per-capita GHG emissions were 3.1 MTCO₂e per person, compared to a U.S. average of 15.8 MTCO₂e.

Waste 4%

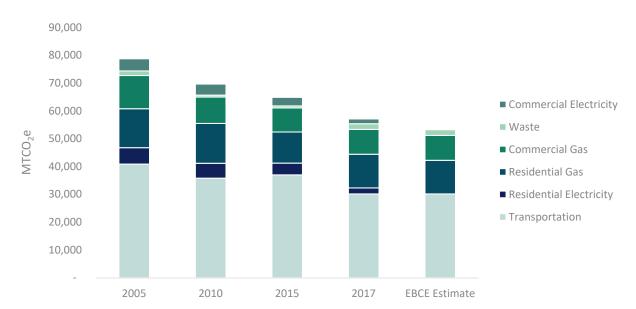


Figure 3. Albany community greenhouse gas emissions over time.

A forecast of Albany's community GHG emissions provides insight into how emissions in Albany may change over time (see Figure 5). The forecast includes projections for population growth, as well as reductions from state measures such as Title 24 building code standards, vehicle efficiency standards, and electric vehicle adoption.

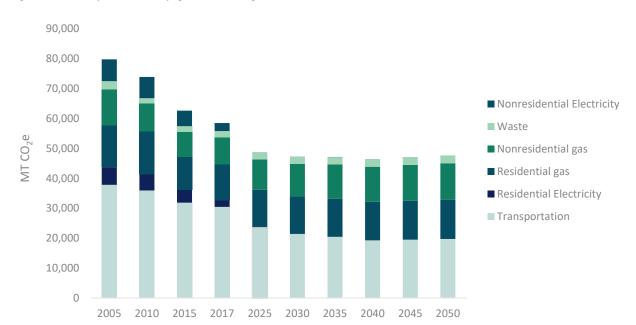


Figure 4. Albany community greenhouse gas emissions forecast from 2025 to 2050.

The results of the forecast show that due to state measures and the adoption of EBCE Brilliant 100, Albany's emissions will continue to decrease through 2040 before growth begins to increase emissions again through 2050. The forecast projects an estimated 41% reduction in community emissions by 2035, which falls short of the GHG reduction targets adopted by the City. This result suggests that Albany will need to take action to achieve its climate action goals, and cannot rely solely on state policy. As shown above, by 2025, the two major sources of emissions are projected to be residential and non-residential natural gas (46%) and transportation (49%). These three sectors alone make up 95% of Albany's expected greenhouse gas emissions. Therefore, greenhouse gas mitigation measures targeting these sectors and leveraging Albany's 100% carbon neutral electricity will be critical to reaching carbon neutrality by 2050.

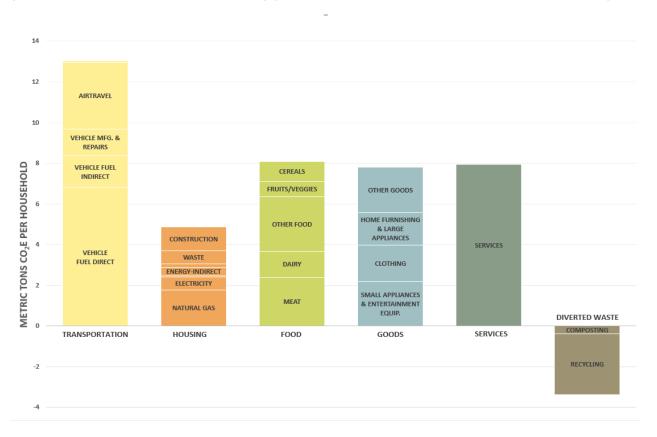
Consumption-Based Emissions

While the above community inventory data represents emissions directly tied to actions taken within Albany, there are also upstream emissions tied to the products consumed by the Albany community. Emissions from direct burning of fossil fuels make up a relatively minor fraction of the household's overall impact. The remaining significant portion of emissions are generated by food consumption, the purchase of goods and services, and the manufacturing of vehicles and building of homes (see Figure 5 below). Because the modern economy is highly integrated and global in scale, a significant portion of the goods and services consumed by the Albany community are produced in other states or nations. While these emissions are not included in the City's reduction targets of greenhouse gas inventory, this Plan does include strategies to address emissions from consumption with the understanding that their impact goes beyond Albany's borders.

The Bay Area Air Quality Management District (BAAQMD) collaborated with the Cool Climate Network at UC Berkeley to develop a consumption-based inventory of greenhouse gas emissions for the San Francisco Bay Area, based on the six greenhouse gases identified in the Kyoto Protocol: CO₂, methane, N₂O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The consumption-based inventory estimates the amount of greenhouse gases emitted in the production of goods and services from all over the world that are consumed by the Bay Area community. The inventory is based on a full life-cycle analysis of the emissions generated by the production, shipping, use, and disposal of each product consumed in the Bay Area, regardless of where the GHG emissions were released to the atmosphere. The inventory estimates emissions for several hundred categories of products within the five basic areas of transportation, housing, food, goods, and services:

- Transportation: Emissions embedded in motor vehicle production and maintenance, refining of gasoline and diesel, fuel combustion in motor vehicles, air travel, and public transportation. Emissions related to shipping or freight movement for a given product are included as a component of the emissions attributed to that product (either the housing, food, goods, or services sector, as appropriate).
- Housing: Emissions embedded in construction and maintenance of homes, residential energy use, water use and treatment, and waste disposal.
- Food: Emissions embedded in the production, processing, and distribution of food consumed both inside and outside the home.
- Goods: Emissions embedded in the production of the full range of consumer products, including home furnishings, clothing, personal care products, electronics, toys, books, etc.
- Services: Emissions embedded in the full range of services consumed by Bay Area households, including information and communication, financial services, health care, and education.

FIGURE 5. AVERAGE ALBANY HOUSHOLD CONSUMPTION-BASED GHG EMISSIONS BY CATEGORY (TOTAL = 41.4 MTCO₂E/YEAR/HOUSEHOLD) (SOURCE: BAY AREA AIR QUALITY MANAGEMENT DISTRICT).



This consumption-based inventory estimates emissions associated with the consumption of goods and services by a community. The consumption-based inventory includes the upstream and downstream impact of household activities, while the community inventory focuses on direct emissions associated with activities in the city (see Figure 6).

FIGURE 6. HOW THE ALBANY COMMUNITY INVENTORY RELATES TO THE CONSUMPTION-BASED INVENTORY.



Risk and Vulnerability

Albany faces several risks posed by current and anticipated future climate change, outlined below.

Flooding

Climate change is expected to exacerbate flooding through storms and more intense periods of rainfall. Albany is already moderately exposed in the event of a 100-year or 500-year flood: inland flooding from a 100-year flood could compromise assets along Codornices Creek and the railway, including portions of the I-580 and I-80 freeways near the border with Richmond and south of Buchanan Street.⁴ These events may become more likely to occur during this century.

Sea level rise can also increase coastal flooding. The projected higher tides and larger storms could lead to significant increases in both coastal and urban flooding and flood damage because higher water levels in tidal creeks and flood control channels will mean less capacity for rainfall runoff. While some creeks already flood when rainstorms coincide with high tides, rising sea levels are likely to cause flooding during smaller, more frequent rainfall events. Sea level rise could also disrupt regional transportation routes by inundating routes out of and around the city and public health services located outside the city such as wastewater treatment. By 2100, there is a 2% chance of annual flooding equivalent to 72 inches of sea level rise, compared to today's levels.

Extreme Heat

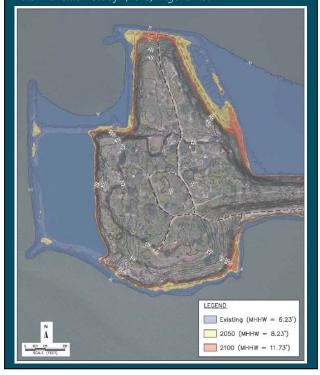
As greenhouse gas emissions increase, temperatures are expected to increase globally, placing growing stress on human health, water resources, energy systems, and other assets. Albany's climate is no

Spotlight: Neck & Bulb Flooding & Sea Level Rise

Sea level rise and more intense coastal storms could increase flooding and wind- and wave-driven erosion. These impacts could lead to temporary or permanent inundation of the waterfront park/Albany "Bulb", coastal habitat (rocky shorelines, lagoons, mudflats, sand beaches), and existing trail, bird watching, and other public recreation areas.

Inundated areas of the Albany Bulb today (blue); additional inundation expected by 2050 and by 2100 also shown.

MHHW: mean higher high water. Source: Albany Neck & Bulb Transition Study. (2015). Figure 2.5.



 $^{^4}$ Four Twenty Seven Climate Solutions. (2017). Albany Climate Change Chapter: Draft Adaptation Plan. 85 pp.

exception. Temperatures are projected to increase 2-4°F throughout the City by mid-century, with daily maximum temperatures increasing by up to 9°F and up to 35 additional days of extreme heat (over 90°F) expected by the end of the century under the high emissions scenario (see Figure 1).⁵ Currently, Albany rarely experiences days over 90°F. Under these conditions, Albany could experience hotter and significantly drier.⁶

Landslides

Given Albany's topography and geology, rain-induced landslides are relatively unlikely even with a projected increase in risk factors for landslide. While most emergency assets and other key resources are located outside of landslide-prone areas, some assets east of Albany Hill and San Pablo Avenue are in areas that could be affected by future landslides that result from more intense rainfall.⁷

Wildfires

Increasing drought and temperature are projected to increase the area burned by wildfire by 77% throughout California under a high emissions scenario.⁸ However, it is unclear how Albany may be affected. While there are no emergency assets in wildfire risk zones and the overall area burned in and near Albany may decline, Sutter East Bay Medical Care and the Children's Center may be at risk due to their proximity to Albany Hill (moderate fire hazard severity) and the park entrance at the east end of Albany Bulb (moderate to high fire hazard severity).^{9,10} Additionally, both Golden Gate Fields and the freeway north of Buchanan Street are close to the park entrance.¹¹

Additionally, smoke from nearby wildfires makes its way into the city, posing public health risks from smoke exposure. With more wildfires projected in this century, populations vulnerable to smoke, such as those with heart and lung conditions, the very young and very old, those who work outside, and those who are pregnant are at increased risk of exposure to smoke-related health effects. Some of the tactics being considered to reduce wildfire risk, such as turning off electricity during periods of high risk, would also cut power to cooling centers. Air conditioning is more likely to be needed during periods of high fire risk because it is likely to be hot, so solutions to this risk need to be considered holistically.

 $^{^{5}}$ Four Twenty Seven Climate Solutions. (2017). Albany Climate Change Chapter: Draft Adaptation Plan. 85 pp.

⁶ University of Maryland, Center for Environmental Science. Map of "What will climate feel like in 60 years?". Data presented are for the high emissions scenario, with a direct line drawn between San Francisco and the location with similar future climate in Palos Verdes Estates. https://fitzlab.shinyapps.io/cityapp/ (accessed May 29, 2019).

 $^{^{7}}$ Four Twenty Seven Climate Solutions. (2017). Albany Climate Change Chapter: Draft Adaptation Plan. 85 pp.

Westerling, Anthony Leroy. (University of California, Merced). 2018. Wildfire simulations for California's fourth climate change assessment: Projecting changes in extreme wildfire events with a warming climate. California's Fourth Climate Change Assessment, California Energy Commission. Publication Number: CCCA4-CEC-2018-014. http://www.climateassessment.ca.gov/techreports/docs/20180827-Projections CCCA4-CEC-2018-014.pdf (accessed June 3, 2019).

⁹ CalAdapt's wildfire projection tool indicates the annual average of area burned may decline for Albany in the 21st century, compared to 1961-1990, under all available combinations of emissions scenarios (medium and high), four climate models (warmer/drier, cooler/wetter, average, complement), and population growth (low, central, high). https://cal-adapt.org/tools/wildfire/#climatevar=fire&scenario=rcp85&population=bau_mu&lat=37.90625&lng=-122.28125&boundary=locagrid&units=ha (accessed June 3, 2019).

¹⁰ Information on assets at potential risk from wildfire comes from the draft adaptation plan. Four Twenty Seven Climate Solutions. (2017). Albany Climate Change Chapter: Draft Adaptation Plan. 85 pp.

 $^{^{11}}$ Four Twenty Seven Climate Solutions. (2017). Albany Climate Change Chapter: Draft Adaptation Plan. 85 pp.

FIGURE 7. PROJECTED EXTREME HEAT DAYS IN ALBANY.

ANNUAL NUMBER OF DAYS ABOVE 90°F

Graphic adapted from Four Twenty Seven as represented on Vizonomy.

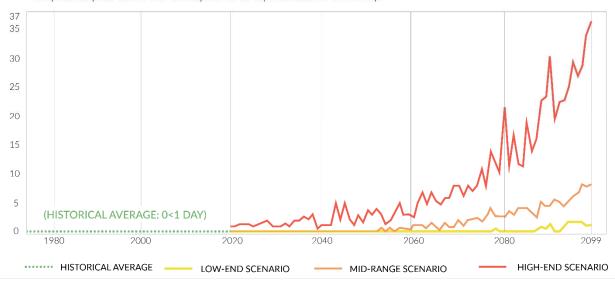


TABLE 1. CLIMATE HAZARD RISK SUMMARY FOR ALBANY IN 2100 (SOURCE: FOUR TWENTY SEVEN CLIMATE SOLUTIONS).

Climate Hazard	Exposure ¹	Summary
Inland Flooding	Medium	Significant ² exposure during 100-year (1 percent annual chance of occurrence) and 500-year (0.2 percent annual chance of occurrence) floods
Sea Level Rise	Medium	Significant exposure of regional resources likely by end of century with a 50-year or 2 percent annual chance storm surge (a combination of permanent and temporary flooding equivalent to 72 inches of sea level rise)
Temperature Change	Medium	Average temperatures projected to increase by 2 to 4 °F and extreme heat by 8 days per year by 2100 (90 °F +)
Precipitation Change	Low	Likely increase in intensity of events, limited change in overall rainfall
Rainfall-Induced Landslides	Low	Some emergency assets located in areas with "few landslides"
Wildfires	Low	No emergency assets located in high fire severity zones

Progress to Date

Building on a Foundation

This City of Albany Climate Action and Adaptation Plan builds on the significant progress already made by the City government and the Albany community. Albany joined the Alameda County Climate Protection Project and ICLEI in 2006. In 2007, the City Council formed a Sustainability Committee (now the Climate Action Committee) of Council appointees to advise Council on greenhouse gas reduction strategies and other sustainability initiatives. In 2008, the City received funding jointly with City of Piedmont from the Bay Area Air Quality Management District (BAAQMD) to fund the preparation of a Climate Action Plan (CAP). The Climate Action Committee met multiple times with the consultants to guide the development process, hosted community engagement events, and conducted surveys at community centers. The CAP was adopted by the City Council in April 2010. The CAP outlined a course of action for the City and the Albany community to reduce greenhouse gas emissions 25% by 2020. Successful implementation of the CAP has resulted in a 33% reduction in greenhouse gas emissions from 2005 to 2018.

Key actions in the City's 2010 CAP are either accomplished or in progress. Successful CAP programs have included commercial and residential energy efficiency partnerships, municipal building upgrades and LED streetlights, implementation of the City's Active Transportation Plan and Safe Routes to School Program, and execution of land use and waste reduction policies. The City continues to work toward greenhouse gas emissions reduction goals by implementing CAP measures that are in progress or ongoing, focusing specifically on energy efficiency upgrades, renewable energy, and clean and active transportation projects.

The City has also pursued several efforts to increase resilience. The Albany Neck & Bulb Transition Study considered anticipated sea level rise scenarios when selecting a suite of measures to improve public access, safety, recreation and art; enhance habitat; and protect shorelines. The Local Hazard Mitigation Plan provides detailed information about the City's exposure to climate and non-climate risks, information that is crucial to develop climate actions that respond to both climate and non-climate risks. The draft adaptation plan provides detailed information about climate hazards specifically, highlights where a regional approach to adaptation is needed, and identifies resilience actions that address climate change, existing hazards, and risks to some of Albany's most vulnerable populations.

Albany as a Leader in Climate Action

Cities like Albany have a critical role in mitigating and adapting to climate change. City-level action can be nimble, decisive, proactive, and grounded in the experiences of local communities.

Albany is a climate leader. The City has demonstrated this by supporting the Paris Climate Agreement, joining the Climate Mayors organization, and making significant progress on 2010 CAP measures, among other initiatives.

The City is well-positioned to take on even more, with its engaged community, walkable business district, and committed leadership. The City's strong regional partnerships, diverse transit options, and position within an innovative and well-resourced region will also support effective action. Additionally, Albany's large youth population is a particularly powerful voice. Two Albany High School students were members of the City's Climate Action Committee during the development of the Plan and provided meaningful input and insight throughout the planning process.

Individual community members, businesses, and the City of Albany together can continue to lead in climate action.

Collaboration and Partnerships

The City works with partners in the regional community, across the state, and around the globe. The City cannot achieve its climate goals alone. The City must promote innovative collaboration between public, private, and nonprofit organizations. Community groups and individuals also play a key role in climate mitigation and adaptation efforts. ¹²



¹² See Appendix C for more information on the City of Albany's partners and their roles.

Partnership Spotlight: East Bay Community Energy

Albany's first Climate Action Plan identified joining a Community Choice Aggregation (CCA) Program as a priority for reducing greenhouse gas emissions. The Sustainability Committee (now Climate Action Committee) began evaluating the process and benefits of joining a CCA program in 2012. On November 21, 2016, the City Council approved a Joint Powers Authority Agreement to join EBCE.

In addition to joining EBCE, the Sustainability Committee and Council saw an opportunity to drastically decrease emissions from electricity in Albany: make EBCE's *Brilliant 100* service (100% carbon-free) the default electricity service for all municipal, commercial, industrial, and residential accounts in Albany. As a result, Albany saves an estimated 3,844 MTCO₂e each year, and eliminates nearly all greenhouse gas emissions associated with electricity within the City.

Albany's success in joining a CCA and opting up all residential, commercial, industrial, and municipal accounts laid the foundation for many measures that are included within this updated Climate Action and Adaptation Plan. For example, by focusing on switching natural gas appliances to all-electric appliances that can run on EBCE's 100% carbon-free electricity, Albany can further reduce its energy emissions and bring the City closer to carbon neutrality.





What is EBCE's *Brilliant 100* service?

EBCE's *Brilliant 100* electricity service is at least 40% renewable from solar and wind power, and 60% carbon-free electricity from large hydroelectric.

How does EBCE do it?







PG&E

deliver energy, repair lines, handle billing





CARBON-FREE ALBANY

In January 2019, the City launched <u>Carbon-Free Albany</u>, an interactive platform on which residents can calculate their own carbon footprint, discover resources that can help them reduce their footprint, and connect with neighbors and community groups to see what others in Albany are doing to go carbon-free. With Carbon-Free Albany, residents can take meaningful action to bring the City of Albany closer to its carbon emission reduction targets, and help staff achieve the measures outlined in the Climate Action and Adaptation Plan.

Carbon-Free Albany hosts information on the City's carbon reduction targets, the updated Climate Action and Adaptation Plan, and national, state, and local resources for individual carbon emissions reduction strategies. City staff can send emails and updates to site users, providing new resources as they become available.

The platform encourages actions that range in cost, complexity, and impact. Actions labeled "easy" include committing to carpooling, switching to LED lightbulbs, and reducing waste output. More challenging actions, but with greater emissions reduction potential, include switching to all-electric space and water heating, and purchasing or leasing an electric vehicle. Now that residential and commercial electricity customers in Albany receive carbon-free electricity from East Bay Community Energy, individual actions that reduce fossil fuel consumption within the city are important steps toward citywide carbon neutrality. The platform not only suggests these actions, but also hosts links to rebates, incentive programs, and technical assistance.

Carbon-Free Albany will serve as a platform for continued community engagement with the Climate Action and Adaptation Plan. Every person in Albany has a role in helping the City meet its climate action goals. We hope you will actively engage with the Carbon-Free Albany platform to reduce your carbon footprint. Together, we can work to achieve Albany's goal of reaching carbon neutrality by 2050. We thank you for choosing to live in Albany, and for your partnership in working to ensure a vibrant and sustainable urban village.

www.carbonfreealbany.org

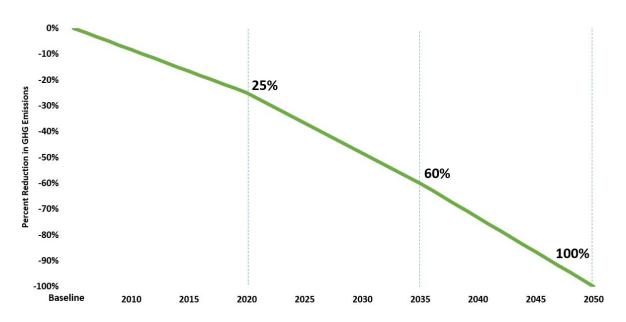
Plan Goals

Greenhouse Gas Reduction Targets

As part of the 2016 General Plan process, Albany adopted the following short- and long-term greenhouse gas reduction targets, compared to 2004 baseline emission levels:

- 60% reduction by 2035.
- Carbon neutrality by 2050.

FIGURE 11. GREENHOUSE GAS EMISSIONS REDUCTION GOALS FOR THE ALBANY COMMUNITY.



These goals build upon the goals of the Paris Agreement and the State of California, and position Albany to work on par with their peer communities:

- While part of the Paris Agreement, the United States had committed a goal to reduce emissions by 80% below 2005 levels by 2050.
- California has established targets to reduce emissions to 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050. Executive Order B-55-18 issued by Governor Jerry Brown calls for a new statewide goal to achieve carbon neutrality by 2045.
- The City of Berkeley's (CA) goal is both net-zero carbon emissions and an 80% emissions reduction by 2050 (vs. 2000 levels).
- The City of Piedmont (CA) also aims for an 80% greenhouse gas emissions reduction by 2050 (vs. 2005 levels).
- The City of El Cerrito (CA) plans to reach a 30% reduction in greenhouse gas emissions by 2035 (vs. 2005 levels).
- The City of Emeryville (CA) has greenhouse gas emissions reduction targets of 40% by 2030 and 80% by 2050.

What is Carbon Neutrality?

Albany defines carbon neutrality as achieving net zero greenhouse gas emissions caused by fossil fuel use within the City.

Albany has set a goal to achieve carbon neutrality by 2050. While this goal is challenging, it is not impossible. Ambitious reductions in greenhouse gas emissions will be required to reach carbon neutrality, but technological constraints may prevent reducing emissions to absolute zero by 2050. Therefore, in order to achieve carbon neutrality, every ton of CO_{2e} still emitted will be balanced with an equivalent amount of CO_{2e} removed, until the original emissions source is eliminated. CO_{2e} removal may come from a combination of carbon-sequestering natural systems and land management practices, as well as from carbon capture technology as it becomes available. Additionally, Albany has the opportunity to further reduce more global carbon emissions beyond the adopted definition of carbon neutrality through its consumption choices.

Achieving carbon neutrality will require the transformation of energy and transportation systems, a shift in consumer behavior, and investment in carbon removal technologies as they become available. It will involve individual and City actions, as well as advocacy on the regional and state level. Together, we can achieve carbon neutrality in the City of Albany.

Communitywide Goals

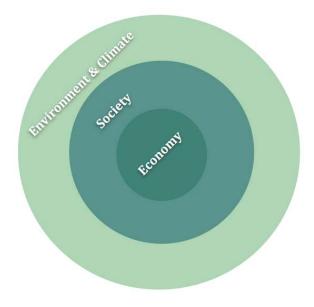
Implementation of this plan will result in significant emissions reductions, while enhancing community cobenefits and addressing pubic health, disaster resilience, affordability, and social equity.

What Sustainability Means

Sustainability is the intersection of social equity, economic stability, and environmental quality. Because of this, our sustainability programs aim to protect and enhance the three "E's" – the environment, the economy, and equity – to improve the well-being of current community members and future generations.



While sustainability can only be achieved by enhancing social equity, environmental quality, and the economy, these concepts also live within each other. A thriving local economy requires a stable and equitable social structure, which requires a healthy environment and stable climate.



Climate and Equity

Equity is central to addressing climate change. Many of the countries most responsible for contributing to global emissions, such as the United States, will not endure the worst impacts of climate change. Climate change disproportionately affects the most vulnerable in Albany and globally, including low-income populations, communities of color, those with disabilities, and those experiencing homelessness, many of whom do not have the resources or capabilities to protect, restore, or adapt to these changing conditions.

Enhancing equity includes promoting inclusion in the political process, expanding opportunity and equal access to public services, providing equal service quality, and striving for equitable outcomes in areas such as housing, education, health, and employment. The potential limitations or exclusions of a recommended action to a certain group of people must be minimized, including but not limited to all abilities, ages, races, ethnicities, sexual orientations, gender identifications, socio-economic backgrounds, or religious and cultural beliefs. That is why equity implications of every strategy in this CAAP were considered in the planning process. The City will continue to consider equity and affordability as the programs and policies that result from this CAAP are implemented.

How Equity is Considered in this CAAP

Equity is integrated throughout Albany's CAAP. For example, the following plan elements emphasize and address equitable climate action:

- An ambitious greenhouse gas
 emissions reduction target that
 acknowledges the responsibility of
 developed societies to minimize
 harmful impacts to those who did not
 contribute to the problem.
- Actions that focus on supporting vulnerable populations, who will disproportionately experience many climate change impacts.
- Including equity in prioritization criteria for evaluating potential actions.
- Progress indicators that track equitable implementation of the plan.
- An implementation plan that calls for equity to be considered in the execution phase of every action.

Who is Most Vulnerable to the Impacts of Climate Change?

Inequity in our society means that some individuals are better able to respond to change—or stressors—than others. For example, those with lower incomes may have to make difficult choices between paying for heating or meeting other basic needs, and may not have access to quality healthcare. The elderly, undocumented migrants, or people from families with mixed immigrant status are less likely to leave their homes to seek aid.

While all populations are at risk of being impacted by climate change, certain groups are more vulnerable. The very young and very old, outdoor workers, those with pre-existing illnesses or weak social ties, those living on the street, and low-income communities may be especially sensitive to climate change related health impacts. This CAAP considers all these communities when discussing vulnerable communities and equity.

How Albany chooses to address climate change has ripple effects that extend far beyond the City borders. This CAAP seeks to identify and support disadvantaged communities that may have more trouble adapting to change within Albany and within the region more broadly.

Plan Development

Building it Together

This Plan represents the culmination of over a year-long, communitywide development process. In designing the planning process, the City sought to solicit local expertise, bring in diverse perspectives, and tie engagement into existing activities and processes. The goal was to craft a plan that reflects and leverages the shared vision and momentum of the community.

FIGURE 8. PLAN DEVELOPMENT TIMELINE (JULY 2018-OCTOBER 2019)



Key elements of the community engagement process included:

- Climate Action Committee and subcommittees: The City's Climate Action Committee (formerly Sustainability Committee) is a Council-appointed advisory body, consisting of seven members of the Albany community, which serves as a technical advisory committee regarding matters related to climate action. The Climate Action Committee met on an ongoing basis throughout the planning process to identify, assess, and formalize the goals and strategies of the plan. Topic area-focused subcommittees also conducted more detailed review and analysis of topics including transportation, resilience, consumption, and electrification. All committee meetings were open to the public, with opportunities for public comment.
- Community surveys: The City administered two online communitywide surveys: 1) an initial survey to gauge community priorities, concerns, and ideas and 2) a second survey that was distributed to solicit feedback on the draft plan.
- Public workshop: The City facilitated a public workshop in January 2019 to generate Albany-specific strategies and actions for the plan. The workshop included interactive stations covering a variety of climate-related topics that allowed participants to voice their preferences and present their ideas for mitigation and adaptation measures for the Plan.
- Stakeholder focus groups: City staff organized focus group meetings with four key stakeholder groups to determine priorities and feasibility of potential strategies: 1) landlords and property owners, 2) transportation stakeholders, 3) business associations, and 4) green infrastructure stakeholders.
- Community group engagement: City staff presented on the Climate Action and Adaptation Plan and the Carbon-Free Albany platform at several community group meetings.
- Engagement with City groups: The draft Climate Action and Adaptation Plan was presented to the Parks, Recreation, and Open Space Commission; Social and Economic Justice Commission; Traffic and Safety Commission; Planning and Zoning Commission; Economic Development Committee; the Climate Action Committee; and City Council. Feedback from these Committee and Commission meetings was incorporated into the final Plan.
- Channels of communication: The City communicated with community members throughout the planning process via the following channels: City website, enews, and enotifications; social media (Nextdoor & Facebook); CAP 2.0 email list; informational flyers at City Hall, Senior Center, Community Center; meetings and events

Community Engagement

This Climate Action and Adaptation Plan incorporates the Albany community's ideas and priorities, and the recurring themes that resulted from extensive community engagement during the planning process.

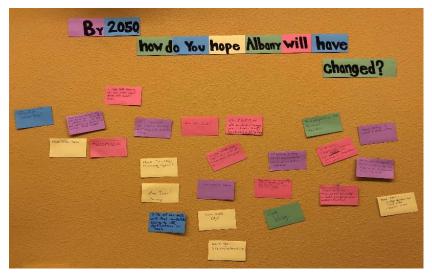


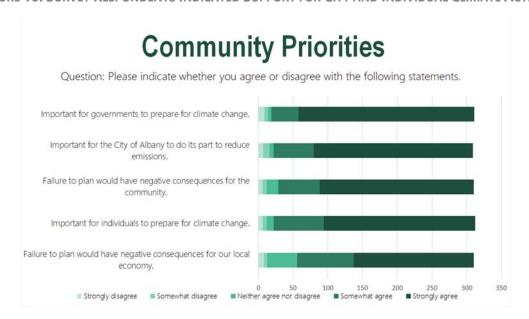
FIGURE 9. VISIONING EXERCISE FROM COMMUNITY WORKSHOP.

At the Climate Action and Adaptation Plan Community Workshop in January 2019, community members were prompted to envision Albany in 2050. The responses the City received painted a picture of a more walkable, bikeable, forested, and resilient Albany (see Figure 9). The comments received from this activity, as well as the comments received from surveys, stakeholder meetings, and at the Climate Action Committee meetings were instrumental in the development of the Climate Action and Adaptation Plan.

Community Priorities

The City collected over 300 responses to a community survey in the fall of 2018. The survey responses indicated that respondents agree that it is important for local governments, and the City of Albany specifically, to do their part to mitigate and prepare for the effects of climate change (see Figure 10).

FIGURE 10. SURVEY RESPONDENTS INDICATED SUPPORT FOR CITY AND INDIVIDUAL CLIMATE ACTION.

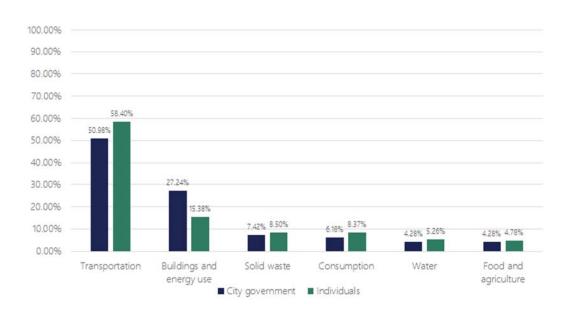


Survey responses also indicated that the respondents believe that the City of Albany's role in addressing climate change is to engage the Albany community in both public and private greenhouse gas emissions reduction, as well as consider public health, environmental impact, and minimization of resource use when developing the Climate Action and Adaptation Plan actions. The respondents also indicated that the City and its community members should prioritize decreasing emissions from energy use in buildings and the transportation sector (see Figure 11).

FIGURE 11. PRIORITIES FOR REDUCING GREENHOUSE GAS EMISSIONS FROM SURVEY RESPONDENTS.

Prioritization of Emissions Sectors

Question(s): How should the Albany City government prioritize the following efforts to minimize community greenhouse gas emissions? How should individuals prioritize the following efforts to minimize their impact on community-wide greenhouse gas emissions?



Recurring Themes

From both individual comments and general feedback, it became clear that the Albany community wants to address the following themes in the Climate Action and Adaptation Plan: active transportation, electrification, trees and green space, and smarter consumption. The themes that emerged at each stage of the planning process guided development of the objectives and strategies that make up the Plan, ensuring the Plan reflects the Albany community's vision for reducing emissions and achieving carbon neutrality by 2050.

Active Transportation

Members from the Albany community hope to transition to a walkable, bikeable City for all to reduce demand for gasoline-powered vehicles.

- > "World class bike infrastructure"
- "Use public transit of all types (BART, buses, bike share) and active transportation of all types (walking, biking, scooters) to keep your emissions low!"



Electrification

The Albany community recognizes the importance of reducing reliance on vehicles and appliances that run on carbon-emitting fuels such as gasoline and natural gas, both in the public and private spheres.

- "Support transition to e-vehicles"
- "Prohibiting natural gas in new buildings!"



Trees and Green Space

Community members emphasized that plants and trees are desirable because they not only sequester carbon from the atmosphere, but also provide many co-benefits such as shade, urban beautification, and wildlife habitat.

- "Albany needs more trees, both for climate change and beautification"
- "Plant & preserve the urban forest (trees)"



Smarter Consumption

The community highlighted the importance of understanding the lifecycle emissions of goods and services and communicating that to the wider community.

- "Consider where businesses/industry source materials to reduce GHG/waste preconsumption"
- "Participate in regional approach to reducing single-use plastics."



Alignment with Other City Plans

Climate change is a complex, cross-cutting issue that spans traditional sectors and siloes. Furthermore, the Climate Action and Adaptation Plan will not be implemented in a vacuum, but rather within an engaged and active community that is already working to improve quality of life through planning efforts, initiatives, and projects. This plan recognizes, connects to, and in some cases builds on these existing activities, including:

- City of Albany General Plan: The Albany General Plan presents a comprehensive long-term plan for the City in order to guide consistent decisions around development, growth, and conservation in Albany. The General Plan details Albany's future goals, along with the policies and actions such as transit-oriented development, green building, low-carbon energy sources, and waste reduction needed to achieve those goals. Also included in the General Plan is a new, more aggressive emissions reduction target than in the 2010 CAP: 60% reduction below 2005 levels by 2035, and net zero emissions by 2050.
- Active Transportation Plan: The Active Transportation Plan recognizes the importance of walking and biking for reducing traffic and air pollution. This plan presents opportunities to make walking and cycling in Albany more safe, comfortable, convenient, and enjoyable through the implementation of new policies, programs, and development standards.
- Local Hazard Mitigation Plan: The Local Hazard Mitigation Plan identifies opportunities to reduce the natural and human-caused risks of greatest concern for Albany's community, such as earthquakes, infrastructure failure, and wildfire, among others. Within the plan, hazards are ranked by probability and magnitude of risk, and strategies for mitigating each hazard are outlined.
- Economic Development Strategic Plan: The Economic Development Strategic Plan outlines targeted policies and programs to enhance the business climate in Albany for the next five years.
- Green Stormwater Infrastructure Plan: The Green Stormwater Infrastructure Plan uses certain trees, plants, and other vegetation to slow stormwater and remove pollutants before the water enters the drain. Slowing stormwater can reduce the likelihood or intensity of flooding, while trees and other vegetation sequester carbon and provide shade.
- Other Plans: The Albany Neck & Bulb Transition Study incorporates anticipated sea level rise in its
 recommendations to enhance habitat, protect shorelines, and transform the Neck and Bulb into an
 active public green space with walking paths, biking trails, and dedicated areas for dogs, bird
 watching, and public art. The Albany Hill Creekside Master Plan uses vegetation management and
 trail maintenance to reduce fire hazard, control for erosion, and support diverse habitat and
 wildlife.

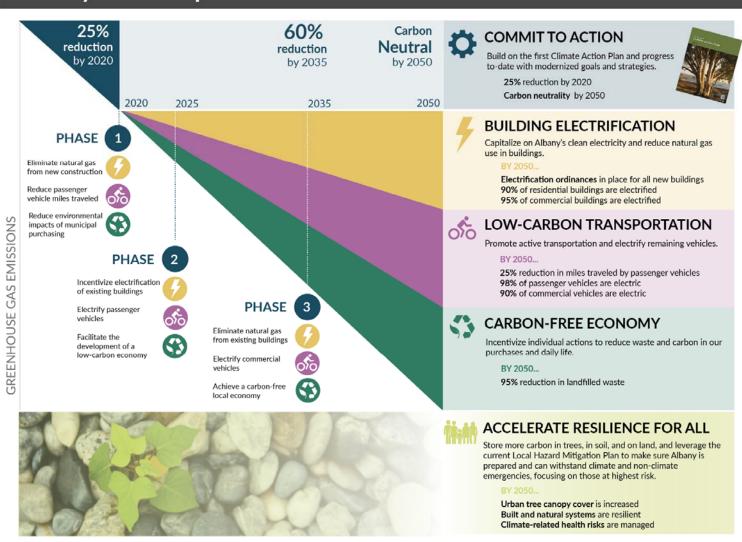
A Critical Pathway

The City cannot feasibly implement all strategies and actions at once. This Plan lays out a prioritized, strategic, and phased approach to meeting the City's climate goals.

This pathway, depicted below, focuses on addressing the most impactful and timely actions first. For example, early electrification of new building construction will ensure that future buildings will not require costly retrofits.

The pathway also prioritizes actions within the City's sphere of control. It focuses on leveraging the City's available resources and influence in the near-term to reach interim emission reduction targets, and then relying on technological advancements and broader state and federal policy will help to fill the gaps later on.

Albany CAAP Implementation: Critical Path



Strategies and Actions

Summary of Strategies and Actions

This City of Albany Climate Action and Adaptation Plan is centered on four overarching strategies:



Strategy 1: Activate, share, and electrify transportation.

This strategy addresses one of the top emissions sources by focusing on active transportation and electrifying vehicles.



Strategy 2: Electrify new and existing buildings.

This first strategy leverages and sets the foundation for long-term savings from clean electricity through electrification of new and existing construction (e.g. installing heat pump hot water heaters and utilizing sustainable building materials) with the goal of eliminating natural gas use in buildings.



Strategy 3: Facilitate a carbon-free economy.

This strategy commits the City to choosing low- or no-carbon options for typically highemissions purchases (e.g., concrete, fuel, fleet), while incentivizing individuals' actions to reduce waste and carbon in their daily lives.



Strategy 4. Accelerate resilience for all.

This strategy stores more carbon in trees, in soil, and on land, and leverages the current Local Hazard Mitigation Plan to make sure Albany is prepared and can bounce back from climate and non-climate emergencies, focusing on those at highest risk.

How to Read the Strategies and Actions

Each strategy section (Transportation, Electrification, Economy, Resilience) begins with an Overview describing the strategy, including its importance and relevance to other sectors. The Climate Connection indicates the contribution the strategy will make to reducing Albany's greenhouse gas emissions. Goals are briefly stated, followed by a detailed Actions table (explained below).

Goal 1: Decrease passenger vehicle miles traveled (VMT) through use of alternative modes

Action		Investment	Benefits	Timeframe
Approa	ch: Encourage active transportation through infrastr	ucture and pa	rking managemen	t.
1.1.1	Develop a new Active Transportation Plan (ATP). Analyze gaps in active transportation network and develop a new ATP that serves as the basis for prioritizing active transportation projects for all abilities in the City. The Plan should emphasize multimodal transportation, access to transit, pedestrian safety, bike racks and lockers, beautification, green infrastructure, and a seamless regional bike network that favors low stress bike lanes where feasible. Consider greenhouse gas implications of improved street lighting.			Near-term

Action: The policies, programs, ordinances, or other general steps that will be taken to meet the goal.

Investment: Investments by the City and/or other public agencies, as well as investments by households and/or local businesses.

Household or Business Investment: Household or business investment icons indicate that the action may require investments to be made by community members and/or local businesses.



High Investment: >\$15,000

Moderate Investment: \$1,000-\$15,000

Low Investment: <\$1,000

Public Investment: Public investment icons indicate that the action may require investments to be made by the City of Albany and/or other state and regional agencies.



High Investment: >\$250,000

Moderate Investment: \$25,000-\$250,000

Low Investment: <\$25,000

Greenhouse Gas (GHG) Emissions Reduction Potential: The greenhouse gas emissions reduction potential icon indicate that the action has the potential to directly reduce greenhouse gas emissions.

P

Public Health: The public health icon indicates that the action could enhance public health.

Resilience: The resilience icon indicates that the action builds community resilience to climate change impacts.

Feasibility: The feasibility icon indicates that the action is highly feasible technically, politically, and socially under current conditions.

Equity: The equity icon indicates that the action could enhance equity within the community, or that equity considerations will be taken into consideration during implementation of the action.

Leadership: The leadership icon indicates that the action has high potential for Albany to be innovative and demonstrate its leadership in climate action

Timeframe

 Near-term
 Next 0-3 years (2020-2023)

 Mid-term
 Next 4-9 years (2024-2030)

 Long-term
 10 or more years (2031-2050)



Strategy 1: Activate, Share, and Electrify Transportation. *Relevant sectors: Transportation*

Overview

Transportation is the highest source of greenhouse gas emissions in Albany. The adoption of a 100% renewable energy pathway, along with increasing interest in alternative fuel vehicles, walking, biking, and transit, demonstrate that Albany is ready to transition to low-carbon transportation. Increasing active transportation is the priority, as this form of mobility emits the fewest greenhouse gas emissions. While the current dependency on single-occupancy vehicles is unlikely to change dramatically in the near-term, and purchasing decisions made now will have lasting impacts, this Plan encourages electric passenger vehicle adoption for those who are unable to fully rely on active transit and public transit. Reducing reliance on fossil fuels for transportation also brings economic, public health, and resilience benefits, as consumers are no longer subject to price fluctuations in natural gas and petroleum markets or air pollution from internal combustion engines.

Low-carbon transportation also includes actions to incentivize the use of carpooling, transit use, and bikeand walk-friendly urban street design. Together, these actions provide lower-carbon options for those who still need to drive, reduce key barriers to taking transit, and create safe, ample opportunities for active transportation. Making it easy to choose a low-carbon option means more community members will try alternative transportation modes and form new, low-carbon transportation habits that improve health and well-being, encourage drop-in business, and reduce local air pollution from fossil fuel-powered vehicles.

Climate Connection

• Fossil fuel use from transportation is responsible for over 50% of current community greenhouse gas emissions in Albany.

Existing Programs

- Supporting Safe Routes to School Programming.
- Promoting existing events such as Bike About Town, Bike-In Movie Night, and Bike to Work Day
- Working with SunShares to provide resources and bulk discounts for the purchase of electric vehicles and chargers.
- Implementing a municipal Clean Fleet and Motorized Equipment Procurement Policy to switch municipal vehicles and motorized equipment to cleaner fuels.

Goals & Targets

Goal	2050 Target
Decrease passenger vehicle miles traveled (VMT) through use of alternative modes.	• 25% reduction in passenger vehicle miles traveled.
Transition passenger vehicles to zero	• 98% of passenger vehicles are electric.
emission alternatives.	 90% of commercial vehicles are electric.

What is Active Transportation? Active transportation is a form of transporting people (and goods) that utilizes human power, such as walking and biking, as well as running, skateboarding, rollerblading, or using a scooter. Active transportation is free or greenhouse gas emissions and promotes public health through increased exercise.

What is Shared Mobility? Shared (or pooled) mobility options are modes of transportation that are shared with multiple passengers beyond a single family. Shared transportation includes carpool/vanpooling, transit such as AC Transit and BART, and rideshare such as UberPool and Lyft Line.

Carshare: Vehicles owned by a third-party operator that can be shared among many different users (e.g., Gig Car Share, Zipcar).

Rideshare: Carpooling or ride hailing services (e.g., Uber, Lyft).

Goal 1: Decrease passenger vehicle miles traveled (VMT) through use of alternative modes

Action	1	Investment	Benefits	Timeframe
Appro	pach: Encourage active transportation through infrastruct	ure and parking	g managemer	nt.
1.1.1	Develop a new Active Transportation Plan (ATP). Analyze gaps in active transportation network and develop a new ATP that serves as the basis for prioritizing active transportation projects for all abilities in the City. The Plan should emphasize multimodal transportation, access to transit, pedestrian safety, bike racks and lockers, beautification, green infrastructure, and a seamless regional bike network that favors low stress bike lanes where feasible. Consider greenhouse gas implications of improved street lighting.	\$ \$ \$		Near-term
1.1.2	Expand and enhance bicycle infrastructure throughout the City. Prioritize low stress facilities to encourage increased ridership.	S S		Mid-term
1.1.3	Research feasibility and emissions reduction impact of implementing a parking management strategy. This research would explore the costs, benefits, and considerations of introducing a parking management strategy such as paid parking or permit systems.	S S	(Mid-term

1.1.4	pach: Encourage shared mobility programs. Research and develop a curb management program	ā	Near-term
1.1	that prioritizes carbon reduction. Elements of the program would include 1) establishing designated rideshare and third-party carpooling parking and loading zones, 2) incentivizing carsharing programs, and 3) integrating scooter and bike share docks, bike parking, electric vehicle charging, and green infrastructure.	\$	incar terrir
1.1.5	Work with third party programs to provide shared e-mobility options. There are a variety of companies that provide shared mobility options such as electric bikes and scooters. The City will work with these companies to encourage the provision of these services to Albany community members and visitors, while considering safety implications. Work with carshare programs to expand electric vehicle options and promote use of third-party carpooling apps and services. Address any safety concerns.	\$	Near-term
1.1.6	Conduct a public transit gap study to increase transit use within the City. Identify opportunities for additional routes to accommodate all users. Explore the demand for an electric shuttle to BART stations, commercial corridors, and areas of the City underserved by public transit. The City should explore both the necessity and the feasibility of this measure—including an assessment of potential operating costs—and consider introduction of an autonomous shuttle as technologies develop. Explore options for reducing public transit fares.	\$ \$	Mid-term
Appro	pach: Encourage density through infill development.		<u> </u>
1.1.8	Amend the zoning ordinance to require higher density development where appropriate. These amendments should include increasing building heights, allowing projects to build out to approved densities, and consider opportunities for mixed land use. Increased density can minimize vehicle miles travelled.	\$	Near-term
1.1.9	Introduce a residential unit-parking swap program for multi-family property owners in exchange for seismic retrofits. This program would incentivize seismic retrofits for soft-story multi-family buildings and encourage density by allowing property owners to add additional units to a building beyond current restrictions in exchange for the sacrifice of a parking spot. The added revenue would help pay for a seismic retrofit. This exchange would increase density and discourage vehicle ownership and use, which in turn would lower transportation emissions.	\$ \$	Mid-term

Goal 2: Transition passenger vehicles to electric alternatives

Action		Investment	Benefits	Timeframe
Appro	ach: Increase access to electric vehicle charging infrastru	ıcture.		
1.2.1	Create an Electric Vehicle (EV) Action Plan. An EV Action Plan would: 1) increase public access to chargers, 2) identify optimal sites for chargers in commercial areas and near the freeway, including DC fast chargers accessible to through traffic, 3) consider integrating chargers into streetlight infrastructures, 4) consider Smart charging technologies that enable a more resilient grid, 5) address barriers to charging for garage-free homes and rental properties, 6) increase use of EVs in carshare programs, and 7) assess the potential to partner with third-party EV charging station providers and EBCE to lower cost and complexity. This action would also include performing outreach promote widespread adoption of EVs and working to integrate electric commercial vehicles such as buses and garbage trucks, where possible.			Near-term
1.2.2	Adopt an electric vehicle readiness ordinance that would increase the charging requirements for new construction and renovations. Consider adopting an ordinance exceeding requirements of the 2020 code for installation of electric vehicle conduit and/or chargers for single-family, multi-family, and commercial projects.	\$		Near-term
1.2.3	Work with gas stations to create the fueling stations of the future. The City could work with existing gas stations to identify opportunities for low-carbon fuels such as renewable diesel and ethanol, as well as electric vehicle charging as space allows. Improving accessibility to low-carbon fueling stations could persuade consumers who are worried about refueling limitations to make the switch to zero emission vehicles.	\$		Long-term



Strategy 2: Electrify New and Existing Buildings. *Relevant sectors: Residential and Commercial Buildings*

Overview

With a 100% renewable electricity pathway identified and underway through East Bay Community Energy (EBCE)'s service and programs, the City plans to prioritize transitioning Albany residents and businesses from using fossil fuels to clean electric energy. This includes actions to incentivize or require a shift from natural gas infrastructure to all-electric infrastructure in both current and new buildings, as well as actions promoting energy conservation and efficiency. Beginning by prioritizing electrification will address the City's second-highest emissions source, institutionalize a more reliable and resilient, low-cost energy source, and hedge against the volatility of natural gas costs in the coming years.

Although electric appliances and infrastructure may be more expensive at present, State efforts to electrify and advancements in technology should bring these costs down over time. As a long-term planning document, this Plan aims to set the stage for electrification so that Albany can meet its long-term emissions reduction goals. These measures will be implemented with cost, feasibility, and timing considerations.

This section focuses on electrification rather than production of renewable energy resources. However, local renewable resources are crucial for resilience, and measures to accelerate their adoption can

Why Electrify?

- Reduce greenhouse gas emissions
- Improve indoor air quality
- Fire safety
- Lower construction costs
- Earthquake safety
- Lower maintenance costs
- Reduced hazard potential

be found both here and in Strategy 4: Accelerate resilience for all. The resilience section also includes actions related to resilience and capacity of the electricity grid—which will be increasingly important as we transition to all-electric infrastructure.

Climate Connection

• Natural gas consumption in buildings contributes approximately 40% of current community greenhouse gas emissions.

Goals & Targets

Goal	2050 Target
Eliminate natural gas from new construction.	9
	 95% electrification of existing commercial buildings
Eliminate natural gas in existing buildings.	 All new commercial buildings are electric
	 All new residential buildings are electric

Existing Programs

- Promoting commercial and residential energy efficiency incentive programs.
- Partnering with EBCE to provide carbon-free electricity to Albany residents, institutions, and businesses.

Actions

Goal 1: Eliminate natural gas from new construction

Action		Investment	Benefits	Timeframe
Appro	ach: Mandate all-electric construction.			
2.1.1	Adopt regulations to require all-electric buildings for new construction. Options such as building code updates or ordinances should be explored as tools for transitioning new construction to all-electric Ultimately as the relative cost of conversion from gas to electric comes down, these regulations would cover both new construction and major renovations of existing buildings, including accessory dwelling units.	\$	★	Near-term

Goal 2: Eliminate natural gas in existing buildings

Action		Investment	Benefits	Timeframe
Approa	ach: Electrify City facilities.			
2.2.1	Work with regional energy partnerships to develop and implement an Electrification Action Plan for City facilities. Include new and existing buildings, incorporate strategies to address energy storage, focus on highlighting any hurdles or solutions that would be applicable to the broader community, and leverage existing rebates.	\$ \$		Near-term
Approa	ach: Educate the community on fuel switching need	ls, benefits, and	methods.	·
2.2.2	Coordinate with regional efforts to conduct outreach and training with local contractors and businesses on electrification. Working with installers and other trade services promotes green job creation. These outreach efforts would provide tools and knowledge for businesses while also reinforcing the non-energy benefits of electrification such as improved resilience, air quality, and public health and safety.	\$		Near-term
2.2.3	Connect landlords with contractors, information, and resources for electrification. Working with landlords and property managers directly to provide information and tools for electrification is an important foundational component of a broader electrification incentive or mandate program.	\$		Near-term

Action		Investment	Benefits	Timeframe
2.2.4	Work with regional energy partnerships to invest in electrification financing programs such as on-bill financing and metered energy efficiency. Working with third-party entities allows the City to leverage incentive systems for electrification, such as options for financing projects and paying back loans through power bills.	\$		Near-term
Approa	ach: Incentivize electrification of existing buildings.	·		
2.2.5	Deploy an outreach and incentive program for electrification. The City should work with EBCE or other regional partnerships to create financial incentives and perform education and outreach to electrify new and existing buildings. Rebates could be structured by income level and prioritized for rental units to be used for panel upgrades, building envelope improvements and passive home design features, electric appliances, heat pumps, and renewables coupled with storage.	\$ \$		Mid-term
2.2.6	Pursue increase in Utility User Tax for natural gas. To incentivize the transition to all-electric buildings, a Utility User Tax increase of 2-4% on natural gas would put a price on carbon and generate revenue for matching funds for incentives for electrification projects. This action would require that PG&E allow for differential billing for electricity within their billing systems.	\$ \$		Near-term
2.2.7	Work with EBCE to continue incentivizing local renewable energy projects. Through collaboration with EBCE, the City could leverage existing incentives to increase renewable energy utilization and generation throughout the entire city. These incentives would include solar installation incentives for residential, commercial, and institutional buildings.	\$ \$		Near-term

Action		Investment	Benefits	Timeframe
2.2.8	Support and advocate for State efforts to decarbonize buildings and vehicles. The State of California has exhibited a commitment to decarbonization, including recent introduction of SB 1477, which calls for all-electric, zero-carbon building programs and updating the State's building and appliance energy efficiency standards. Supporting these efforts and advocating for additional decarbonization efforts would be a relatively low-effort way to realize cascading benefits for Albany.	\$	\$ ≡ ₩	Near-term
2.2.9	Adopt an ordinance requiring individual meters for new multi-family construction. Consider adopting an ordinance exceeding requirements of the 2020 code for installation of meters in multi-family construction projects.	\$ \$		Mid-term
Approa	ch: Mandate electrification of existing buildings.			
2.2.10	Partner with EBCE to research the feasibility of requiring electric panel upgrades during major renovations. Readying electric panels for the transition to all-electric is a crucial foundational step for households, schools, and businesses. For example, when an upgrade is made for solar or electric vehicles, it is sized to consider future electric appliances or infrastructure. Research will need to be conducted to determine the best method for pursuing this goal, including research on legal feasibility and cost.			Near-term
2.2.11	Adopt green building tiers. Adopting CalGreen tiers can promote efficient and sustainable development.	S S		Near-term
2.2.12	Identify a pathway for converting existing buildings to all-electric energy. It is likely that incentives will not be enough to meet the City's goals, and the City will need to transition to mandates to ensure widespread electrification of existing buildings.	\$ \$	<u>Iì</u> ♥	Long-term



Strategy 3: Facilitate a Carbon-Free Economy Relevant sectors: Solid waste

Overview

Albany is committed to decreasing greenhouse gas emissions, creating a more sustainable community and local economy, and curbing global climate change. To meet this goal, it is important to not only look at the emissions being released within Albany, but also the emissions tied to the production, transportation, use, and disposal of goods and services consumed within Albany. The goods and services that are consumed by Albany community members and visitors—such as clothing, furniture, meat and dairy, and air travel—represent a considerable source of greenhouse gas emissions, whether or not the goods and services are originally produced in Albany. For example, an appliance purchased in Albany is produced in a factory that emits greenhouse gases during production, is then transported on a fossil-fuel burning truck to the location at which it will be sold, may use energy or produce greenhouse gas emissions during its use, and will require additional greenhouse gas-emitting technology during end of life recycling or disposal. Although the appliance did not originate in Albany, the demand for the product by consumers in Albany led to the production of, transportation of, use of, and disposal of the product. Ultimately, if demand for carbon-intensive products decreases, so do the greenhouse gas emissions tied to them.

Decreasing demand for greenhouse gas emissions-intensive goods and services is a vital step to addressing global climate change. While behavior change is challenging, many community members and businesses are already taking positive actions to reduce their individual carbon footprints. Purchasing products made of post-consumer recycled material, shopping locally, eating less meat and dairy and more locally grown fruits and vegetables, and participating in local tool-lending libraries and clothing swaps are all relatively low-effort actions that result in a significant emissions reduction impact.

The City plans to lead by example by updating the municipal Sustainable Purchasing Policy to focus on purchasing items with a smaller carbon footprint, such as low-carbon concrete and post-consumer recycled materials. Ultimately, emissions from consumption must be reduced through consumer behavior change strategies that reduce waste and spur systemic changes toward a local, circular, low-carbon, re-use economy. The City can advance these outcomes through public education, economic development, and building codes. These strategies take advantage of existing programs in the City and regionally, such as those provided by StopWaste, and recognize the crucial role of education, outreach, and community sharing in achieving collective behavior change.

Climate Connection

- Waste collection and processing contributes to current greenhouse gas emissions.
- Although not formally in the City's greenhouse gas inventory, the purchases of goods and services by community members also represent a significant source of greenhouse gas emissions.

Existing Programs

- Increasing community engagement with the Carbon-Free Albany platform to educate and motivate the public to reduce their individual carbon footprints.
- Promoting the circular economy through fix-it clinics, swap events, and the Albany Tool Pool.
- Amplifying "Shop Local" campaigns.
- Maintaining partnership with Stopwaste to reduce food waste through education on proper food storage techniques and sell-by dates.

Goals & Targets

Goal	2050 Target
Decrease environmental impacts of	Implementation of updated Sustainable Procurement
municipal purchasing.	Policy
Promote the development of a low-carbon	 95% reduction in landfilled waste.
economy.	

Actions

Goal 1: Decrease environmental impacts of municipal purchasing

Action		Investment	Benefits	Timeframe			
Approa	Approach: Update and implement Sustainable Procurement Policy.						
3.1.1	Update, simplify, and implement the municipal Sustainable Procurement Policy. An updated Sustainable Procurement Policy would prioritize improvements for the highest emissions reduction impact purchasing decisions within each department, including vehicle and fuel purchases and low-carbon concrete. This action would also include creating environmentally preferable purchasing procedure and educate staff responsible for purchasing.	\$ \$		Near-term			

Goal 2: Promote the development of a low-carbon economy

Action	Action		Benefits	Timeframe
Appro	ach: Mandate and encourage waste reducti	on.		
3.2.1	Partner with StopWaste to develop and then adopt an ordinance requiring reusables for dine-in restaurants and sustainable take-out foodware. This effort would reduce a significant source of single-use plastics and other high-carbon materials used in Albany. Adoption is planned for 2020 following completion of the draft ordinance and associated Environmental Impact Report.	\$		Near-term
3.2.2	Work regionally to support and facilitate food donation programs. Food donation programs reduce the amount of healthy, safe food that goes to waste and redirects it to those in need.	\$		Near-term
3.2.3	Promote low-carbon food choices. Partner with StopWaste to launch an outreach campaign that educates about eating lower down on the food chain and provides information on lower impact, nutritionally equivalent foods, reducing food waste, and composting food scraps. Work with local schools and other institutions to provide low-carbon food choices.	\$	Iìì ▼	Near-term
3.2.4	When negotiating new franchise agreement for solid waste and recycling, include innovative strategies to incentivize waste reduction that could impact upstream consumer habits. Franchise requirements could include in-County sorting facilities, alternative fuel trucks, increased educational programs, pay-as-you-throw or every-other-week collection, and other innovative strategies that reduce overall waste, recycling, and compost volume.	\$ \$		Near-term

Appro	ach: Reduce emissions embodied in goods a	and materials.	
3.2.5	Partner with regional entities to encourage carbon-smart building materials through contractor education. Includes educating architects, designers, and contractors. This work would enable and promote carbon-sequestering building materials in new construction and renovations. Ultimately, this action could lead to requirements for the disclosure and/or limit the embodied carbon emissions of buildings through a whole-building or material-specific policies.	\$	Near-term
3.2.6	Establish a Farmers' Market. Local, seasonal produce and locally crafted goods avoid additional greenhouse gas emissions associated with packaging and transport. They also support local small businesses, keeping revenue in Albany.	\$	Near-term
3.2.7	Promote and facilitate utilization of the sharing and repair/reuse economy through an outreach and advertisement campaign. Increased awareness of available options such as tool-lending libraries, carshare, swap events, and service websites support the growth of a local reuse economy and discourage consumption of high-carbon materials. It is important to ensure the sharing economy is equitable and avoids exploitative business models.	\$	Near-term



Strategy 4: Accelerate Resilience

Overview

The emissions reductions from City efforts to electrify buildings, transition to a fossil fuel-free transportation system, and promote low-carbon purchasing habits might not be enough to create a truly carbon-free Albany. Carbon must be stored in soil, landscapes, buildings, and infrastructure. It is also important to ensure all are prepared for, and able to withstand, the inevitable impacts of climate change.

This section prioritizes approaches for expanding and improving natural systems throughout the city to promote resilience and carbon storage, such as through climate-adaptive landscape management, compost, and mulching. These actions will increase urban tree canopy, sequester carbon, and provide shade. Incentives, mandates, and outreach and education are necessary to ensure green infrastructure improvements for new and existing buildings. These actions will reduce the urban heat island effect, and store water and carbon. To prepare for more extreme weather and other climate impacts, the City plans to implement strategies for coastal resilience, restore streams so they can hold more water, implement vegetation and fuel management in wildfire-prone areas, increase the capacity of community cooling centers, and further strengthen emergency management capabilities. This multi-pronged approach to climate adaptation will ensure Albany is more prepared and resilient, whatever lies ahead.

Climate Connection

- Natural lands and systems, including trees and soil, have the potential to store and sequester carbon.
- In many cases, extreme events will be made worse by climate change. The most vulnerable populations are also most susceptible to extreme events and climate change.

Existing Program

- Continuing to encourage parklet development and setting parklet policies and procedures.
- Expanding capacity to provide accessible cooling centers, especially those most vulnerable to extreme heat.

Goals & Targets

Goal	2050 Target
Increase urban tree canopy cover. Increase resilience of built systems and	Maximize urban tree canopy coverMaximize installations of green infrastructure
infrastructure. Increase resilience of natural lands and	 Install needed coastal flooding improvements
systems Address climate-related health risks	 100% of population with access to emergency
, ida. 555 Sidas i S.dated Hedral Hisks	buildings

Actions

Goal 1: Increase urban tree canopy cover and landscaped area

Action		Investment	Benefits	Timeframe
Approa	ach: Increase urban tree canopy and landscaped are	ea.		
4.1.1	Create a comprehensive Tree Master Plan. A tree plan would focus on increasing urban canopy cover and include elements such as 1) conducting an inventory of street trees and urban canopy cover, 2) determining canopy goals, 3) developing a planting guide that prioritizes carbon sequestration, resilience, and other equitably-distributed co-benefits, and 4) create incentives and/or requirements for street tree planting, and 5) devising a plan for retiring trees and addressing unintended consequences such as sidewalk uplifts. The plan should also include potential ways to support trees on private property.			Near-term
4.1.2	Explore creative possibilities for increasing green infrastructure in Albany. Consider innovative opportunities for plantings such as parklets, green roofs on bus stops, and vertical wall gardens.	\$ \$		Near-term

Goal 2: Increase resilience of built systems and infrastructure.

Action		Investment	Benefits	Timeframe
Appro	pach: Increase the resilience of public projects and facilities		·	
4.2.1	Prioritize adaptation and resilience in discretionary Capital Improvement Program (CIP) projects. This action would include ensuring that the infrastructure being developed will be designed with forecasted changes in climate (precipitation, temperature, wildfire, sea level rise) in mind.	\$ \$ \$	*	Near-term
4.2.2	Work with EBCE to assess and improve energy resilience at critical facilities. On-site PV and energy storage systems at appropriate scales would support the continued operation of critical services such as fire and police during a power outage. The City will work with EBCE to determine a funding strategy to prioritize and finance projects.	\$ \$	*	Mid-term

Action		Investment	Benefits	Timeframe
Approa	ach: Address issues with the electric grid.			
4.2.3	Address time-of use-issues by increasing storage capacity and energy efficiency. The City will support local energy storage projects to improve microgrid resilience and help ensure power is available when it is needed. The City will help property owners address hurdles to implementation of renewable energy generation systems and energy storage infrastructure, including permit streamlining if determined to be a significant constraint. This work would include regional collaboration to develop incentive programs. This measure is strengthened by implementation of energy efficiency measures identified in the Electrification Section of this Plan.			Near-term
4.2.4	Advocate for grid 2.0 initiatives. The current grid is not designed to support a 100% renewable energy supply, so advocacy is needed on the State level to accelerate grid 2.0 initiatives.	\$		Near-term
Approa	ach: Educate the community on green infrastructure impro	ovements.		
4.2.5	Promote the use of climate adaptive plants and high carbon sequestering species in landscaping projects. Options for promoting climate-friendly plant species include 1) educating the public and professional landscapers and 2) working regionally with partners such as ReScape California and StopWaste to develop and promote a planting guide. A planting guide could include information on native and climate-adaptive plants, applying compost, mulching, and reducing synthetic fertilizers to support soil health, store more water in the ground, and store carbon in soil, plants, and trees.	\$		Near-term
4.2.6	Address barriers to green infrastructure and resilience improvements on private property. This includes cool roofs and green roofs, as well as cool pavement and pervious surfaces.	\$		Near-term
4.2.7	Work with FEMA and the City of Berkeley to update flood zone maps. Update watershed management plans with current understanding of climate change related weather patterns to identify properties vulnerable to flooding, and help prepare property owners to implement adaptation actions.	\$		Mid-term

Goal 3: Increase resilience of natural lands and systems

Action		Investment	Benefits	Timeframe
Appro	ach: Manage, restore, and partner to fo	ster resilient natu	ral landscapes.	
4.3.1	Continue to restore and maintain creeks to accommodate increased rain events. Creek restoration can reduce the likelihood and magnitude of flooding and support healthy habitat.	\$ \$		Near-term
4.3.2	Continue to manage wildfire risk by implementing vegetation management and fuel reduction programs. These programs would focus on the highest hazard areas, including Albany Hill and areas adjacent to homes and recreation areas. These programs would defer to the Albany Hill Master Plan and recent Public Works fuel load assessment for fire mitigation efforts on the Hill and consider goals that also help maximize wildlife habitat. Ensure vegetation management incorporates habitat management principles.	\$ \$		Near-term
4.3.3	Partner regionally to address coastal flooding impacts to the Albany waterfront and freeway entrance. The City should partner with an appropriate entity such as the Bay Conservation and Development Commission to address sea level rise through living shoreline principles to address coastal flooding, where appropriate.	\$ \$		Mid-term
4.3.4	Partner regionally to promote water conservation. Work with EBMUD and ReScape California to promote and incentivize water conservation measures such as low-flow technology and graywater systems.	\$		Near-term

Goal 4. Address climate-related health risks

Action		Investment	Benefits	Timeframe
Approa	ach: Provide services during extreme event	ts.		
4.4.1	Inventory, identify, and maintain adequate cooling centers for extreme heat. Cooling centers must be made available during extreme heat events.	\$ \$		Near-term
4.4.2	Promote regional services during extreme weather events. The City will coordinate with local public health agencies to ensure that information about how to prepare for extreme events, such as wildfire smoke or smog, is available to the community prior to and during extreme events.	\$ \$		Near-term
4.4.3	Strengthen emergency management capacity to prepare for and respond to the impacts of climate change. The City should prioritize capacity improvements such as training and equipment to address risks exacerbated by climate change. Emergency management should be equipped to address the possibility of multiple emergencies at the same time, such as the combination of wildfire smoke coupled with extreme heat and local brush fires. Community outreach on preparedness could include information on building envelope improvements for efficiency and air quality.	\$ \$		Near-term

Plan Implementation

This Plan aims to both stave off climate impacts and prepare for inevitable changes. The Plan focuses on three of the most challenging sectors to reduce greenhouse gas emissions in order to achieve carbon neutrality: buildings, transportation, and individual purchases of goods and services. The Plan also combines climate change mitigation with crucial actions to store carbon and prepare to adapt successfully to a changing climate.

The City of Albany will lead implementation of the Climate Action and Adaptation Plan. The Implementation Plan identifies who will lead and partner on each action, a timeframe for implementation, key performance indicators to measure progress along the way, funding strategies, and other key factors necessary for successful implementation. It is also important that individuals and businesses take meaningful steps to eliminate carbon from buildings, vehicles, and lifestyles.

Everyone Has a Role in Implementation

Implementation of the strategies and actions in this section will require the entire Albany community and its partners to engage actively in carbon reduction strategies. Here are some examples of simple steps Albany community members and businesses can take to reduce our collective climate impact:

- Minimize international flights: A round trip flight to Europe causes carbon emissions of over 5,000 pounds per person.
- Turn down your heater: In a typical Albany home, turning down the gas furnace by one degree reduces carbon emissions by over 1,000 pounds over the course of a typical winter.
- **Cut down on driving:** For a typical car, driving just 100 miles less cuts carbon emissions by almost 80 pounds.
- Reduce your meat and dairy consumption: Cutting meat and dairy by 20% can reduce your diet-related carbon emissions by almost 300 pounds a year.

Sources: Shameplane.com; U.S. EPA ENERGY STAR Calculator; U.S. EPA; Scarborough, P., Appleby, P.N., Mizdrak, A. et al. Climatic Change (2014) 125: 179. https://doi.org/10.1007/s10584-014-1169-1

Appendix A. What You Can Do

Addressing climate change is going to take more than just action from the City of Albany itself. Individuals and community groups all have a critical role to play in the City's climate action goals. Through collective, committed, and considerate actions from all, Albany can be a healthier, more resilient, more equitable, and more sustainable city to live in and visit for both present and future generations.

You can make a big difference by reducing your impact in some of the largest contributors to Albany's greenhouse gas emissions—travel, food, and household energy use. By taking action, you can help Albany become a livable, equitable, resilient, and engaged carbon-neutral community.

Electrify	/ Our Buildings
	Install energy-saving appliances and fixtures, such as Energy Star Appliances and LED Lightbulbs.
	Reduce your natural gas use. Install electric heat pumps for space and water heating, electric
	dryers, electric stoves, etc. to transition to cleaner electricity.
	Choose EBCE's Renewable 100 service for your electricity source, to power your home with 100%
	renewable electricity. Opt-up by calling 1-833-699 EBCE or visiting ebce.org/opt-up.
	Install low-flow showerheads and aerated faucets to reduce the amount of hot water you use.
Transiti	on to Low-Carbon Transportation
	Avoid single passenger car trips. Take transit, carpool, walk, and/or bike instead.
	Use a bike for short-distance commutes, rather than a car.
	Delay your next purchase of a new or used vehicle to maximize use. When you decide to make a
	purchase, invest in an all-electric vehicle.
	Consider non-stop flights, and purchase carbon credits when you fly.
Help Ma	ake Our Economy Carbon-Free
	Reduce your meat and dairy consumption – even one less day a week makes a big difference!
	Eat more low-carbon foods like non-processed foods, seasonal fruits and vegetables, and grains.
	Avoid unnecessary food waste: plan meals, right-size your grocery and restaurant purchases, and
	bring reusable containers for your leftovers when eating out.
	Use Albany's tool lending library instead of buying new (<u>www.albanyca.org/services/tool-pool</u>).
	Fix things that are broken instead of buying new.
	Second-hand shop to replace items and join community sharing websites like NextDoor.
	Shop locally and support local business.
	Reduce and eliminate single-use plastics. Carry your own reusable utensils and straws. Request less packaging when ordering take-out and bundling online delivery packages.

Accelerate	e Resilie	ncy for Al
------------	-----------	------------

- ☐ Utilize Carbon Free Albany (https://www.carbonfreealbany.org) to see your household's carbon footprint and get ideas to reduce your environmental impact.
- □ Voice support for policies that promote equitable greenhouse gas emissions reductions.
- ☐ Plant a tree in your yard, and/or request a street tree in front of your house.
- □ Develop a plan with your household to prepare for extreme events, including creating a disaster preparedness kit.
- ☐ Talk about climate change and the changes you're making with your friends and family. People are more often influenced by friends than by experts.

Get Informed & Involved

- ☐ Join local community groups that are involved in mitigation and adaptation efforts.
- ☐ Sign up for Carbon-Free Albany (https://www.carbonfreealbany.org).
- □ Volunteer at local beach and park cleanups.

Appendix B. Partners and Roles

The City of Albany cannot achieve the ambitious goals described within this CAAP without diverse partnerships with individuals and organizations near and far. The table below describes the various partnerships that the City participates in and the roles of partners in the CAAP planning and implementation process.

CITY OF ALBANY PARTNERS & ROLES

COMMUNITY

- Engage with City programs, follow applicable policies, and take actions to reduce emissions.
 - o Community Members
 - o Businesses
 - o Institutions (UC Village: UC Berkeley student housing; Albany Unified School District)
- Solid Waste & Recycling: Current service provided by private hauler Waste Management of Alameda County.
- Electricity: Current transmission service and billing provided by Pacific Gas & Electric (PG&E). Electricity procured by East Bay Community Energy (EBCE).
- Natural Gas: Current service provided by Pacific Gas & Electric (PG&E).
- Water: Service provided by the East Bay Municipal Utility District (EBMUD), a public agency provided water and sewage treatment services for communities in Alameda and Contra Costa Counties.
- Alameda County Office of Sustainability: Provides resources and opportunities for idea sharing regarding sustainability initiatives to local jurisdictions.
- Alameda County Office of Emergency Services: County agency providing resources and support for emergency response and preparedness activities.
- Alameda County Transportation Commission: County agency responsible for coordinating countywide transportation planning efforts and administering local, regional, state and federal funding for transportation projects.
- East Bay Community Energy (EBCE): Local public agency tasked with supplying clean electricity at low rates to customers in Alameda County. EBCE procures electricity and provides local renewable resources, while PG&E continues to administer natural gas service as well as energy transmission, distribution, repair, customer service, and billing for EBCE customers. Their default electricity option in Albany is carbon-free. EBCE also implements a Local Development Business Plan to accelerate the development of clean energy assets in Alameda County, enable electrification of buildings and transportation, and increase resilience through increased energy storage.
- StopWaste (Alameda County Waste Management Authority and Energy Council): County agency administering policies and programs related to waste, water, and energy reduction. Provides support and coordination for the development of Countywide initiatives, including climate action planning and implementation.
- East Bay Regional Park District: Agency managing large system of public parklands in in Alameda and Contra Costa counties, including portions of the Albany waterfront vulnerable to sea level rise.
- San Francisco Bay Conservation and Development Commission (BCDC): Regulates development along the San Francisco Bay, including Albany's waterfront.
- Association of Bay Area Governments (ABAG): Regional planning agency that provides assistance to local governments, including a focus on sustainability, climate adaptation, resilience, and equity issues.
- Metropolitan Transportation Commission (MTC): Transportation planning, financing, and coordinating agency for the nine county Bay Area.
- Bay Area Regional Energy Network (BayREN): Collaboration of the nine Bay Area counties providing regional-scale energy efficiency programs, services, and resources. Managed by ABAG and funded by utility ratepayer funds through the CPUC.
- Bay Area Aire Quality Management District: Regulates aire pollution in the nine county Bay Area and provides policies and programs to reduce emissions.
- Bay Area Climate Adaptation Network (BayCAN): Collaborative network of local government staff promoting sharing and problem solving focused on adaptation challenges in water supply, sea level rise, wastewater and stormwater management, fire risk, ecosystem and parks, and public health.

COUNTY

- California Public Utilities Commission (CPUC): Regulates public utilities providing electric power, natural
 gas, telecommunications, and water.
- California Energy Commission (CEC): State energy policy and planning agency responsible for forecasting future energy needs, promoting energy efficiency through appliance and building standards, supporting renewable energy technologies, and maintaining the California Energy Code.
- CalEPA: State agency focused on public health, environmental quality and economic vitality.
- CalRecycle: CalEPA branch that oversees the state's waste management, recycling, and waste reduction programs.
- Building Standards Commission (CBSC): State agency responsible for managing the development, adoption, approval, publication, and implementation of California's building codes.
- California State Parks: Agency managing the California state parks system, and property owner of portions of the City's
 waterfront which are subject to sea level rise.
- California Coastal Commission: State agency regulating land use and public access to the coastal zone, including the Albany waterfront.
- Cal-OES: State agency responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities, and overseeing the City's Local Hazard Mitigation Plan.
- CAL FIRE: Agency responsible for fire protection, forestry, and fire emergency services.
- Caltrans: State agency responsible for managing the state highway system, including I-80, I-580, and San Pablo Avenue in Albany.
- Environmental Protection Agency (EPA): Administration of Federal environmental policies and programs
- Federal Emergency Management Agency (FEMA): US Homeland Security agency responsible for coordinating the response to major disasters, including support for hazard mitigation and disaster preparedness programs.
- Climate Mayor's Network: Bipartisan peer-to-peer network of U.S. mayors working together to demonstrate leadership on climate change through meaningful action in their communities and to express and build political will for effective federal and global policy action.
- International Council for Local Environmental Initiatives (ICLEI): Global network of cities, towns and regions committed to building a sustainable future, providing support for climate action planning and implementation.
- Intergovernmental Panel on Climate Change (IPCC): Organization synthesizing and communicating the work of climate scientists.

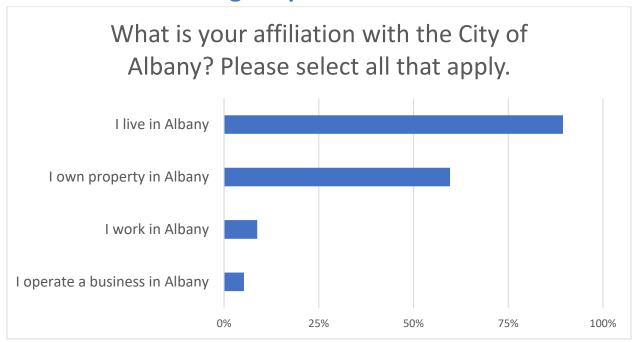
NGOs

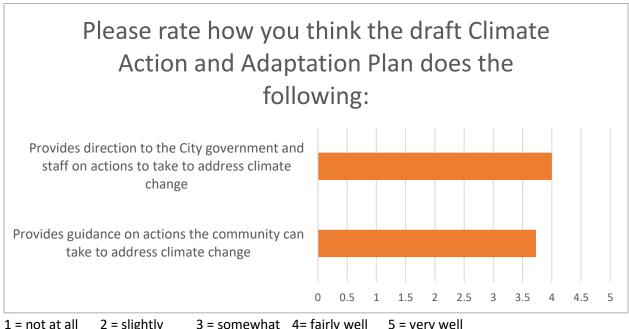
FEDERAL

Albany CAAP Public Comment Survey Results July 2019

Number of Respondents: 58

Affiliation and Rating Graphs





1 = not at all 2 = slightly 3 = somewhat 4= fairly well

Overall Comments

We strongly support your efforts to electrify buildings, but without including additional measures and incentives to drive down peak loads, you are potentially adding stresses to a future all-renewable grid. We also note that the City does not include any action items that address increasing density allowances. By simply electrifying buildings, but not addressing Single family zoning, you miss the opportunity to both increase the energy efficiency of your building stock (shared walls make efficiency much easier and cheaper) AND help reduce transit emissions from vehicles by increasing density in walkable neighborhoods. Albany must become a refuge city that welcomes more residents and to do this effectively, land use must address increased density.

I appreciate what it suggests, as far as transitioning to lower carbon transportation such as bicycles, however if City Staff and Council don't follow these plans, it doesn't do any good

We can all find things to do but strong leadership and urgent enjoining by council and other leaders (dept heads, police, fire, & protective svcs, misc agencies, etc.) emerge as absolutely requisite, so Albany needs need explicit buy-in mechanisms for all city employees and positions.

Instruction to reduce meat and dairy consumption is considerabily weakened by the following "even just one day a week makes a big difference". Instruction should be clear and frank: reduce meat and dairy consumption.

I applaud the city for all of your hard work. Amazing!! I would love to see the city provide more guidance (i.e., really get down to business!) when it comes to how Albany consumers can reduce waste/emissions. For example, Albany says it has banned plastic bags, but almost every story in Albany provides plastic single-use bags when you buy something. Berkeley has done great work to single-use plastic to fining businesses. I'd love to see Albany follow this lead. Thanks.

Again a list of actions, but I bought a paperback called "50 Things you can Do to Save the Earth" in 1993 and this list is not much different

Many of the actions are vague, and there's no indication of how much they will contribute to emissions reductions.

Create a electric transport system like Blue Indy (\$10 per month fee and 20c per mile cost). Fully electric; extremely doable; https://www.blue-indy.com/

Can't see the action plan. Fix the link please.

Three general suggestions - 1) implementation steps (which I believe is coming next) 2) a 1-3 year timeline summarizing the short-term strategies to show how action will roll out, and 3) financing/funding plan.

Critical base of change with schools as centers of dissemination of information is missing in the plan.

Albany can work to preserve and conserve Albany Hill Park

Particularly page 49.

(See previous comments.) Best regards, Passive House California

Again, whatever we come up with, please ensure that City Staff and Council are on the same page and abide by the plan! The plan is only as good as its implementation.

Anything to emphasize the urgency and need for action

I am glad that Albany is working on a climate and adaptation plan. However, I am critical of 1.2.10 and similar strategies covering existing buildings. You only have one identifier for cost to the community but in my experience it can easily be three plus (over \$15,000). In today's East Bay Times (8/19/19) there is a big article on Berkeley banning natural gas in new buildings but they did not include existing ones. They probably recognized the pitfalls, expense and probably lawsuits in doing so. I think it could create havoc in our business community and that is a big no-no. The expenses and difficulties of working on older buildings can result in financial hardships to the tenant as well as to the owner. Secondly, I think you can accomplish your goals without having to "mandate" anything. I think you will certainly alienate quite a few residents if you do. Thank you

Make it a FINAL

Thank you for everything you're doing. I'm grateful. I know that we can do more. I know how much young people understand about climate change, and how anxious they are about their futures. I encourage you to circle parents and students into your work and discussions. Please work with the school district as well. Thanks!

It looks like roughly 50% gasoline and 50% methane gas, and we need to end all combustion of these within 30 years. The methane gas is easier because it's mostly a like-for-like swap out with heat pumps, and some load-shifting issues. To get rid of the gasoline, I'm sorry you just have to go after all the cars and asphalt. And you have to say that out loud and hold out some inspiring examples where it's been done and people are happier and the economy is thriving. Start somewhere, Start anywhere. Just beat back the cars and tear up the asphalt. Just start putting in active transportation in the rights-of-way and tearing up the asphalt. Every street parking space replaced with a pumpkin patch is a huge inspiration and validation for everyone who wants change in Albany. If people don't see cars and parking getting beaten back, then this whole plan feels like a sham and demoralizing.

This is a well-presented and -conceived plan.

This plan feels like a lot of talk with few concrete actions to take and without an understanding of the actual impacts of each action.

Seemingly complete failure to address the need for staff and elected officials to coordinate these proposals with state and neighbor governments to ensure consistent and cost effective measures

As Albany proceeds with this keep in mind that not everyone will be able to afford to make these conversions. There is an increasing wealth disparity in this city now, and will probably only get worse. Let's not turn this town into a Piedmont or Berkeley hills. When making your decisions, remember Albany was once a city where many could afford to live. While it's not possible to turn back the clock, do consider limiting the development of huge houses on small lots, and the impact of increased density

on the quality of life here. There is a saturation point to everything. It is important to continue to make Albany a livable city and not a NYC or SF. As a side note, we have lived and owned property in the city for 40 years.

I can't because the plan is not available via the link provided.

As taxes continue to increase it is making it impossible for seniors to try to survive in Albany and moving is impossible. Mandatory changes are cost prohited to the elderly.

These plans are much easier to implement in newer built communities than in communities like Albany. I'd love us to achieve zero emissions overnight but it would make housing costs in Albany even higher and less affordable.

Please adopt something like this ASAP https://www.blue-indy.com/

Please put me on your email and U.S. mail list for the Final Plan and other events that could use Citizen Support. Thank you: Paul D. Otterness 1096 Peralta Ave. Albany, CA 94706-2442 paulotterness@comcast.net Home: (510) 525-4204 Cell: (510) 206-0587

I thin the Senior Center and YMCA do a lot of positive programs that are very well attended at the library.

Meat eating is thought to be a major source of greenhouse gases. This is one area that a lot of 'green' people seem to want to overlook. I'd love to see plant-based diets officially endorsed by the city!

I feel like Carbon Free Albany is leaned on as a resource to shift personal behavior. I believe this outreach strategy may be insufficient and a more robust, multi-channel strategy is necessary.

more emphasis on training of elected officials, municipal staff, and public so that they are bought it and on board with these new and innovative policy proposals. And so that even if there are transitions in leadership, the trajectory is not derailed.

Glad this is happening

Thank you for this thoughtful document and the leadership that this long-range planning provides.

Mentioned all the points earlier. Make it simple. Solution is reducing the gap between people who are aware/active and unaware/complacent/lackadaisical. There has to be a comprehensive plan on discouraging sale of environmentally hazardous products in our everyday lives. This draft takes a broad, obvious solution into account like electric vehicles, tree plantation, fossil gas, etc but is air pollution the only problem? This plan misses dividing pollutants in air/water/soil categories and what measures are being done to address each, however small they may be. What is being done for water pollution that a daily household contributes to by using harmful shampoos, cleaning products, etc. There should be "environment/carbon tax" levied on such product sales and your farmers' markets should include environment friendly household products. Other actions like Rainwater harvesting? What about penalizing businesses for not using "Green garbage bins". I have mostly seen Recycle and Landfill bins. Including AUSD, where just 1 cafeteria bin may be green and all the classrooms have zero Green bins. Students aren't aware of segregation of waste. Identifying key environment impact zones in neighboring cities that affect Albany immediately. For example: Tilden ecology and fires impact an Albany resident, even though it is officially Berkeley. Tilden park is also a major hub of events/parties, and even though a

conscious party organizer may diligently purchase 100% compostable plates, etc, the businesses and public garbage cans have zero facility of Green compost bins.

Put the actions to a vote.

Albany Hill Park is currently for sale and being advertised for townhouses, it needs to be a priority point for Albany's Climate Action and Adaptation Plan to maintain urban tree canopy's park system and wildlife habitats.

We'd love to see Albany being more ambitious with regards to adopting Reach Codes that go well beyond the energy efficiency targets currently approved by our energy codes. The City of Albany can lead by example by using it's own buildings to drive higher efficiency targets than the energy code. Otherwise providing significant incentives to projects that target Passive House would be a great way to indicate to your residents that you are serious about taking bold, ambitious action. If not Albany, then who?

Streets and Parks commissions as well as other commissions need to avoid siloing and "business as usual" carbon unwise wasteful capital expenditures, and operational status quo approaches need to be scrubbed to bring carbon use sharply down

Not very specific, doesn't seem to chart a "critical path" in terms of sequence, or prioritize the measures, it appears to be a list

I can't see the draft. The link goes somewhere else.

The cost of any plan to convert everything to electric is a joke. There is not enough solar or hydro in the state to do this to begin with. The cost to convert every gas water heater, gas stove, gas wall heaters, gas furnaces, gas fireplaces etc would be egregious at best and who pays for it and most certainly would be passed on to the tenants or consumers as a whole. Why not consider nuclear power in any event which is zero emissions but in any event the overall cost to convert is unattainable

Electrification Section

What do you like most about the Electrification section of the Plan?

Great place to start! Passive House California supports electrification and our members have shown this is not only easy, but also more efficient, safer and HEALTHIER for building occupants.

It's gradual, starting with new buildings. There will be incentives, which is important to reduce expenses.

Moves us out of fossil fuels as well as incentivizes renewables

We have found much support from city officials and staff on this--in fact we're concerned about the lack of arms length provisions for making sure the city isn't overly subject to influence (rates, policies, unexpected changes) by the power providers.

Getting out front of the issue

Order of operations seem appropriate: mandate new construction/renovation be all-electric, then incentivize change and deincentivize use of natural gas.

The goals and actions are very clear. Good work.

Finally getting real, dismantle the gas infrastructure

Provides a strategy for action.

I don't like it at all

Electrify all new govt buildings, schools, new development, and major remodels. Natural gas is dangerous for earthquake risk. Time to get rid of it.

I live in a 100% electricity powered home so it's a good plan for other Albany residents too.

again this is not workable. not enough solar or hydro avail to make this work. Costs to convert everything as mentioned above will somehow have to be passed on to the consumers making the cost of living in Calif even higher then it is

Require change that cost money to retired senior?

Reducing emissions

I don't like this plan. Natural gas provides an affordable source of heat for our homes.

Leadership by the City leaders acting to modify their own buildings to electricity thus reducing use of natural gas thus reducing global warming.

achieveable

Renewable electricity, of course

Instituting a carbon tax to adjust behaviors and the training of local contractors

Electrification mandate for new construction and municipal facilities. Training and outreach for fuel switching.

Cost savings by transitioning to renewable energy

Use of carrot, understanding that it's an unplanned investment you are requesting others to make, as opposed to a stick in mandates and fines for non-compliance.

I like 100% renewable electricity

Agree with switching to electric energy! Incentives would be nice, but I agree regardless.

This is a goal in the Bond Measures B and E school construction projects. The AMS Annex, the AHS Addition, and now the new Ocean View Elementary are being built without gas. Also, an old large gas main is being removed from the Ocean View property, which will reduce a possible safety threat from aging gas pipes.

Move towards Electric vehicles is welcome. However, absence of introducing carpooling platforms/apps are missing.

I don't like it. I like my natural gas heat.

Incentivizing the transition

What would you like to change in the Electrification section of the Plan?

PHCA has identified great opportunities to drive down peak loads by increasing building efficiency. We know that our energy code has room for improvement and would like to see Albany offer significant incentives to projects that target 40% above Title 24 compliance. (Programs that require only 15% above code are not aiming high enough to encourage market transformation.)

Increased incentives: zoning waivers, financial benefits,

We've provided detailed input on this already and can provide more as the process moves forward.

Incentives should be added on a quicker timetable if at all possible.

More specifics, more "Critical path" sequencing (for example, everyone needs a 240V service disconnect for a new heat pump or heat pump water heater. Nothing can proceed without this. This is cricital path); provide more milestones, like "no gas in new construction by 1/1/21," and "20% of existing gas furnaces removed by 2030," and "every gas furnace replacement shall be a heat pump by 2023". Give it teeth. Set up a program to change out everyone on a block-by-block basis, to reduce costs. Set up an "End of life" advising service for existing gas-fired heaters; people create an end of life plan, so it doesn't come as an emergency surprise. Provide a few loaner, 120V electric water heaters on hand-trucks, so people can use them temporarily when their gas-fired water heater goes out, so they can take a week or two to get their new 240V disconnect in place and install their heat pump without panicking.

Concerned about existing residences owned by senior citizens because of hardship to change from natural gas.

I'd like to see specific targets.

Costs of City mandated programs on homeowners

No utility tax!! Many people cannot afford to make the conversion. Albany now has a lot of new very wealthy owners, but there is also a group of long time owners and residents who cannot afford the costs. Allow for people to gradually convert as old systems break down.

Nothing

Look at nuclear power as the long term solution.

Required

Outrageously expensive for most residents. Would need subsidies. Terrible for when there are power outages.

Allow existing homes and businesses with natural gas infrastructure to continue to get natural gas. Have you considered the environmental impact that would result from ripping out those units, the fuel and dangerous materials that will be used in new equipment? It's creating waste!

The plan suggests strongly that in the medium and long-term, the City will impose a series of mandates on Albany residents and businesses. In considering any such mandate, the costs and benefits must be weighed. Consider, for example, the suggestion that we be forced to replace gas appliances with their electric equivalents. This would impose a significant cost, potentially well into five figures, on all Albany residents and businesses. This would also impose a significant cost on the City, which would, at minimum, have to monitor compliance and inspect new installations, not to mention bear the cost of fighting legal challenges to the mandate. The benefits, in the sense of impact on climate change, would be infinitesimal, and would have no discernible impact on the lives of anyone in Albany. Far better, it seems to me, to make any such mandates, at minimum, cost-neutral to Albany residents and businesses. The City could, for example, work with Alameda County and other relevant authorities, to provide real estate tax rebates to those who switch, in the full amount of the cost they bear, by installing new appliances and making related changes to their electrical panels, meters, etc.. Tax rebates should also be given, to cover any additional expense residents and businesses incur, by using electricity over gas, during those periods when the former is more expensive.

Personally, I would like to see specific lists of residential home modification contractors who are reliable and reasonable who can provide close-cell insulation, solar panels, battery storage, and integrated central air-conditioning so that I can do my part with confidence. Also more on loans, subsidies, tax credits, etc. to help lower costs of these climate change action/adaptation responses.

Is there a way for residential homes to have an infrastructure to store solar generated electricity locally. When looking into getting solar we still can't get off the existing and failing grid.

Not force people to electrify

More guidance on reduction of energy use, including indirect usage (manufacture, transportation and use of goods and services)

I wish I had a better snapshot for the potential political hurdles and how they would be overcome.

Some consideration emergency options, should the electric power grid fail, is hacked, etc.

Carpooling apps/platforms? Environment-friendly Shuttle service to minimize use of cars.

Allow natural gas heat and coking stove.

Please provide any additional comments about the Electrification section of the Plan here.

Tie electrification to peak load reduction more clearly. Currently your action items only focus on fuel-switching, which while helpful, don't address the need to simultaneously improve efficiency. We recommend using the same incentive as the City of Vancouver, which offered significant FAR, height increase allowances and upzoning to projects seeking Passive House certification, as a means to help drive this market. (Make the target exceptional but offer very enticing incentives that make the higher target worthwhile.) Link to City of Vancouver incentives: https://vancouver.ca/home-property-development/build-a-passive-house.aspx

Provide incentives to change out residential gas heaters to electric heat pumps

Albany needs a tool lending library. Why do we not have this yet. Host it at the Community Center. Hold classes for people to install their own 240V circuits. They can borrow the tools. Provide portable induction cooktops for loan from the library, so people can try these out.

The City should provide direct financial subsidies in the form of tax credits, rebates, or low or no interest loans to encourage homeowners to implement goals

A good idea, but what are the environmental costs of using only electricity. This is not discussed. Electrification is good as long it is not nuclear power. That would be trading one demon for another-, ie - for all the well know problems with disposal of waste and other risks.

Mandatory changes that residents cannot afford

Cooking on a gas stove is far superior to cooking on an electric stove.

who is going to pay for my new cooker?

How much more does it cost to run a furnace and a clothes dryer and a hot water heater on electricity than on natural gas. Will there be subsidies for replacing furnaces, washers and dryers, and tankless gas water heaters?

can we have solar panels on all the community buildings like schools, YMCA etc.

Long term ROI analysis would be helpful (this plan will cost this much, but save this much over 20 years), etc

Availability of charging stations has to go far beyond Albany's borders.

Although City of Albany and Albany Unified are separate entities, I wonder if the Plan wouldn't benefit from at least a paragraph somewhere stating the goals of the District which are similar to the City's goals. Cooperation between entities can strengthen community resolve.

Electric heat isn't efficient, and cooking with electric is not as good as with natural gas.

Transportation Section

What do you like most about the Transportation section of the Plan?

We love the proposal to allow increased density (2.1.7) This has been very successfully implemented by the City of Vancouver where they required developers to target Passive House standard in exchange for up-zoning.

Realizing that more than 50% of emissions are due to Transportation, it prioritizes the use of bikes, feet, transit, scooters and EVs as low- and no-emissions options.

Recognizes that this is our biggest emitter and therefore most important

Gets us out of our cars

Focus on bike/walking friendly urban design and implementation of EV charging stations for Albany's considerable garage-less/renting community.

Again, the goals are very clear.

Emphasis on active transportation

Comprehensive alternatives.

I want to see better alternative transportation infrastructure in Albany, and more of prioritization of transit over personal vehicles.

Focus on improved public transportation in the form of local electric shuttles

electric shuttle to BART. Encouraging use of EVs with more charging stations, etc.

Bike and walk friendly urban design

Decreased emissions

Transit is too expensive and slow. Albany should lead the way and adopt a public-private ride share program to replace the outdated bus system.

urban design change from car to walk

This sections addresses one of the leading causes of greenhouse gases accelerating global warming.

reasonable for daily living

incentives for alternate means of transportation

Removing parking from public spaces or adjusting parking based on behaviors

good research and planning efforts

Facilitating carpooling, not Lyft and Uber, and transit.

Walk friendly street design

Several goals seem achievable.

Everything is centered around Electric vehicles, that sounds like a single-point agenda in this draft. Lateral thinking is required.

What would you like to change in the Transportation section of the Plan?

We'd like to see more emphasis and specific goals in your plans that focus on bike lanes. We see this does receive some mention, but with no specific metrics attached. How about specifying 'X'miles of protected bike lanes in Albany to be built by 2021. Focus on the roads the lead to schools so that kids can all safely ride their bikes to school. (Yes, PHCA loves bikes too!)

Put teeth into it so City Staff and Council MUST follow its directives.

More overt efforts to curb automobile use and grow cycling and walking

More traffic calming and bike support

As a member of the PTA in AUSD as well as a Safe Routes to School, I'm happy to see the city supporting this plan, but I'm not clear how the city is working with the school district to encourage kids to walk and bike to school? There are no crossing guard on San Pablo, for instance. The PTA has been meeting with school administrators for months to encourage kids to walk and bike to school during Ocean View's construction, but the city has not been present for these meetings?

This section should be about redesigning the public rights-of-way for active transportation. You can't just tell people to bike more, but give them the same car-sewer public rights-of-way to travel through. Focus more on what changes are needed to public rights-of-way to facilitate more active transportation. Instead it seems to be putting the onus on the citizen. As a citizen I can have an urge to walk or bike but if the right-of-way is lined with cars, the sidewalk is an obstacle course, and the clear space down the middle has speeding cars, I'll go with a more comfortable, motorized mode in which I can converse side-by-side with a companion and I have some protection from other cars. Solve THIS.

Unsure about cost and energy benefits of electrical vs internal combustion for autos.

I'd like to see achievable targets.

Reduce monomaniacal focus on bicycle transportation

Add a city ordinance requiring sunlight access to all properties. It's not right for a remodel- added stories etc, to block the sunlight from neighboring properties. Do not increase height limit and do not increase density limits. Albany already has mostly small lots, and much of the new construction is merely adding more square footage for the same number of people living in the space and or for developers to flip smaller, older houses. It's fine to remodel older houses, but not to turn them into "mini mega mansions" on small lots. Albany should continue to mandate the required parking spaces for new multihousing developments. Add EV spaces rather than eliminate parking. People still need cars to get to work, to shop, etc. People will still buy and use cars and park on the streets. Just consider the current parking congestion in the city now. We need to encourage EV use, not elimination of cars. Not everyone can walk or use a bike. Public transport is not always safe after commute hours.

Residents of north Berkeley will still continue to drive through the city to get to the freeway. The city has said nothing about reducing noise pollution and light pollution. That needs to be addressed.

A lot of Albany residents are older or have physical disabilities that prevent them from walking and bicycling. Our streets and sidewalks are in terrible condition. Public transit during non-rush-Hour is scarce. Most Albany driveways are narrow so people wouldn't have a driveway space to charge the car.

get electric car portals for easy renting like https://www.blue-indy.com/

Say more about incentives, tax rebates, subsidies, etc., for getting rid of a functional gasoline-powered car and converting to an EV. Also, how do I charge up an EV if I have a single-family home on Peralta that has no driveway, no garage, and thus no secure place for electrical charging the EV? Can an EV charger be securely placed on the City Strip with a password-coded usage provision and a guaranteed parking spot in front of that charger?

For me transporting my large dog to a suitable place to walk her and my kayaks require daily car use.

Don't force people or make them feel guilty or finger point if they drive a car.

again, options for reducing the need for transit

Many companies predict a switch away from car-ownership to car sharing and shared transportation that looks like car ownership - seeing how some of those trends might impact the plan could be helpful.

more short-term implementation options or a stronger discussion on how the plans will shift towards implementation.

While I biked to commute in Seattle, I quit biking as regular transport in the Bay Area because of the poor road conditions and the senseless cruelty of drivers, e.g., being pushed off the road or touched by a passing auto passenger. I'm now too old, have poor sense of balance to cycle. Tricycles for adults could get us seniors back on the quieter streets for errands about town, although unlikely for uphill hauls on Solano and Marin.

How would electric vehicle adoption be encouraged? Charging stations?

Will car owners willing to shift to Electric vehicles be incentivized by negotiating a better rate with car dealers or discounted electric charging points at homes? Add a section in the draft for installing Electric vehicle charging stations around Albany.

I am handicapped and cannot walk nor bike. I depend on a car.

Please provide any additional comments about the Transportation section of the Plan here.

We love the Albany Electric Shuttle idea along Solano and San Pablo Avenue's as these streets were originally built for street cars. Recreating some of Albany's history will help build a better future and will make Albany a wonderful place to live and visit. We'd support making the Solano Avenue shopping district a pedestrian and shuttle-only street. Imagine outdoor cafes and restaurants all along this lovely street?! We can.

These suggestions are fantastic but even if the Advisory Bodies are on board, City Staff and Council appears to have their own agendas and do not follow procedures that would lower emissions. This is incredibly frustrating.

Would like to see a monthly and eventually weekly car-free day, first on Solano and eventually throughout the city.

The city council needs to get on their bikes and make it a daily habit

The current policy discussion surrounding the Active Transportation Plan makes me skeptical that these goals will ever be made real.

This section has been overly influenced by bicycle advocacy pressure groups such as the Albany Rollers

We need to figure out a way to get the countless cars off street parking in Albany. People have million dollar homes but don't want to keep their cars inside their garages. It's an eye sore and a waste of precious public space!

Painting a sign of a bike on a narrow road does not qualify as a bike lane. I will never let my children ride their bikes on most roads in Albany because the city does not provide a real bike lane distinct from car lanes (Marin ave being the exception)

Please stop parked cars from taking up space from legitimate road. If you have a million dollar home you can afford a garage!

If you want folk to walk, please note that the sidewalks are still hazardous in many places. It's not easy for everyone to use a bus

I am 72 years old and no longer drive because the DMV says I can't drive with a visual acuity reading over 20/40. I am considering the purchase of a class one electric bike to help me get around and up the hills, but the vast majority of bike riders I encounter are blatant scofflaws and don't stop at stop signs, don't signal when passing with bell or horn. and make the bike paths and streets seem very unsafe for all but the young and very foolish. Has anyone considered having bicycle license plates, a required class and test to get the license plate, and a law enforcement team to monitor and enforce penalties against reckless bike riders who don't follow the same rules as required by car drivers?

a staging place to car pool pickups could be done without a lot of infrastructure. Lets do it now.

I do think that most people will continue to want individual rides in automobiles (even if they don't own) - we may need more incentives to aid the switch to EV.

regional planning is an on-going long-term goal. Everything here is short or mid-term strategies which will likely take longer to implement.

Are bike lanes really necessary on San Pablo and other busy streets? As a cyclist who did commute between Cal and El Cerrito/Richmond, I avoided San Pablo and used the quieter parallel streets.

Transportation to and from school contributes to traffic in Albany. The work of Safe Routes to School could be brought forward.

Provide for those people who can walk nor bike due to physical limitations.

Carbon-Free Economy Section

What do you like most about the Carbon-Free Economy section of the Plan?

We like 3.2.4 - the goal to encourage carbon smart building materials and contractor incentives.

Emphasis on acting and shopping locally.

Understands that low carbon in buildings is not just energy use but also materials

Sensible.

Lofty goals

Agree with most all of it.

Not sure

This is common sense policy to help protect our future on a livable Earth.

Sierra club says in current issue that recycling analysis is faulty and newer analysis might change this. I left the issue at YMCA or I'd give the specific citations.

storing carbon

I like the idea of introducing community lending libraries and see this as an opportunity to re-invent libraries to be about more than books.

Starting with the commercial buildings, government offices.

Sounds great

The language used in the draft is targeting a climate-savvy population. The complexity of language and terms are lost on an average reader but a willing participant. Adding examples to explain the context is always helpful in communicating to diverse groups of readers.

What would you like to change in the Carbon-Free Economy section of the Plan?

We're dubious of goal 1's aspiration to purchase 'low-carbon concrete.' (Oxymoron.) We'd like to see city purchases of new vehicles be eliminated and switched to electric bikes. These should be utilized by all city building inspectors to demonstrate the city's commitment to a low-carbon, healthy economy.

Increased private sector education and incentives

The enormous Albany school district generates SO much waste between daily plastic utensils and bags during school lunches. There are compost bins, but very little gets composted at the end of the day. None of the classrooms in AUSD have compost bins for snack... A few of us have met with the city to talk about how to reduce waste, but there has been no follow up? I know resources are limited! There seems to be no communication with Waste Management in AUSD and the city? I've tried to take this on after-hours with some other parents, but no one here has ever returned my calls: http://www.stopwaste.org/at-school/school-districts/albany-unified-school-district

This seems like it's all feel-good, I didn't see anything specific in here that wasn't in my 1993 book on Saving the Earth.

Ineffective means

Need to encourage the removal of excessive concrete on residential properties. Make sidewalks permeable so that rainwater can be absorbed into ground water. Encourage property owners to plant trees on their lots and green cover crops during winter to improve soil conditions. Albany has a high water table and the soil becomes saturated and doesn't drain well in the heavy rains. Since increased heavy rains are predicted with climate change, the clay soil, which is everywhere, becomes almost brick like after heavy rains when there isn't sufficient compost in the soil. Discourage the use of chemical fertilizers, herbicides, and pesticides. Latest from Swiss researchers shows that planting a trillion trees on the planet will delay the worst effects of climate change for 20 years and allow time to make needed changes. They say it is totally possible to do.

It's kind of nebulous. Make it clearer, more tangible.

Add more detail and options for citizens to let go of their once-treasured-now-hoarded possessions in order to share with others. Try something like a City-run Urban Ore Outside Trader Program where either a City agent and staff will come with a truck to remove unwanted items either for a minimal price or as a pure donation to the City's retail sharing space where goods are sold for minimal cost or given away.

I think it needs to be updated with the latest scientific information.

carbon can be stored on properties as well, in trees, plants, mulch. building healthy soils using mulch and composting green waste onsite is an excellent way to retain and store corbon

I felt like this part of the plan was more vague - which consumables are the biggest problems here, which ones do consumers feel ready to share rather than own?

As some communities consider a consumption-based greenhouse gas inventory, I think it would be important for Albany to start seeding that converstaion and include a brief paragraph under this section about how consumption - more than any other factor is the biggest contributor to ghg emissions. RE: Farmer's Markets - if there are near by farmers markets that are already established, it may be better to promote and support those rather than to start a new one. More education in-terms of transitioning to reuse economy. Working with local grocery stores to pilot zero waste product options.

Greater density in Albany will not decrease our carbon footprint, since there are not enough or the right kinds of jobs within walking or cycling distance. It's starting to feel like high-density housing is Albany City government bald grab for tax dollars.

Language, terms used. Definitions of terms where needed.

Please provide any additional comments about the Carbon-Free Economy section of the Plan here.

4.2.2: Increase building resilience should include thermal performance upgrades to improve the passive survivability of all Albany residents in the event of power outages. (Poor thermal envelopes are unable

to remain comfortable during heat-storms and on cold winter evenings and are key to sustainable resilience.)

Suggest the Embodied Carbon Network as a resource

Break the frame of the consumer culture. There is /was the Albany Garden Swap; Dinner with Albany; Tool lending library (we need one); allow neighbors to help each other, cook for each other, do each other's repairs. What are the barriers to people doing this for each other? Break down these barriers. Let somebody run a goat-grazing service around on people's lawns. Let people dump their green waste at the end of every block on Marin, for a weekly pickup that's hauled down to the Gill Tract. If citizens start things like this, get out of their way.

I don't see how these actions get us anywhere near a carbon-free economy.

Our money and effort would be better spent on encouraging statewide solutions rather than by larding burdensome and expensive local requirements on our few residents

Why do ALBANY schools not use electric power generation?

That's very nice

The more specific details you can offer, the better. Make it known and real to people what you are doing. I just found out about this current City of Albany CAAP a few days ago when I wrote to Jeff Bond wondering what the City was doing to help deal with Climate Change and I then got the email about your program, but I don't remember getting it in the past like my wife and I did with the good notification on how to get replacement funding after the Golden Gate Racetrack was about to leave. My wife and I really enjoyed those meeting and that experience made of feel the closes to and most involved with our City of Albany and its leadership and fellow citizens than ever before. Please, more of that more widespread PR to let people know and attend and be active in producing sound solutions. Thanks.

We need to get reductions of excessive packaging in everything we buy. Set up options for bulk purchases of shampoos, laundry detergent, cat litter should not be in plastic containers. Some entertainment venues have stopped selling water bottles. I see thousands of plastic bottles going out of Costco. At public events bulk water containers could be present with sale of stainless steel cups offered instead.

Review your reasoning behind inclusion of high density housing as something that would contribute to lower carbon emissions.

Resilience Section

What do you like most about this section of the Plan?

We support the goal to educate the community outlined at a high level in this section. We encourage this education to be focused on strategies that drive down peak loads, to reduce storage requirements, rather than simply focus on storage strategies alone.

"implement strategies for coastal resilience, restore streams so they can hold more water, implement vegetation and fuel management in wildfire-prone areas"

Realizes some impacts and changes are inevitable and prepares with measures that can simultaneously help sequester or store carbon

Resiliency thru preparation

The tree stuff is just window dressing if you can't get rid of the cars and the asphalt. This section is nice just to be comprehensive, but it's not critical path, and it can distract from the task of getting rid of the cars and the asphalt. Come out and say it.

All sounds good.

The Street Tree plan.

Loft goala

It's all good.

Increasing vegetation -> canopy

A good, forward-looking plan made better when the details appear.

I am already doing my best to this and have planted trees etc.

increase tree canopy

I love the idea of introducing advocacy for statewide initiatives like grid 2.0. I'm also happy to see the emphasis on environment and plants

Inclusion of resilience into CIP.

Recognition that we need to restore our environment to include life-giving trees and greenery.

It acknowledges the importance of our greenscape.

Good idea

Trees, shade, creeks

Increase urban tree canopy

What would you like to change in this section of the Plan?

4.2.3 Address time-of use-issues by increasing storage capacity. We respectfully suggest that this be changed to read: "improve time-of-use issues by incentivizing buildings to drive down peak loads to minimize the need and cost for increased energy storage."

Include undergrounding of utilities; pavement reductions; PV over public R.O.W.s where feasible

Get rid of all the asphalt. Let several blocks volunteer/compete to be pilots in a program to un-pave their streets. Make them Woonerfs. The road maintenance savings alone could make so much sense. What level of vehicular traffic can a gravel lane sustain durably; then restrict vehicles to this level. [see the drive-through loops in public campgrounds]. Stormwater infiltration on both sides. Playground equipment for kids in the middle of the street. Strengthen city facilities to serve as heat shelters and airquality shelters.

Make specific proposals with cost estimates and proposals for funding

I addressed in previous section.

I would like to add that the city should avoid increasing paved sports surfaces by removing vegetation. We already have enough of those for just about 20K people. We have public schools and their fields and sports areas are available to the public during non-school hours. We do not need more of those!

so who pays for all of this and what if just what if climate change does NOT end the world....all that money spent for what...I think follow the money...someone is going to make a lot of money on this scare tactic...whatever happens we as a people will figure it out...

The far greater details I know you will provide later.

We need to make gray water systems easy to install in every home to capture this water and use in gardens and street trees. Too hard to do on individual level.

legislative changes to require trees to be planted when there is construction or sale of property. Also the preservation of potential tree locations when planning construction or utility changes.

I didn't see anything about training contractors on green-scaping buildings or incentives for homeowners investing in these strategies.

Reinstate the City arborist job. Tony fostered some terrific programs to promote and care for our sidewalk trees. Incentivize and advise residents to plant trees to shade their homes instead of putting in a/c.

I don't see any mention of native plants. To me, re-establishing an appropriate natural habit for our threatened native plants, insects, birds, and animals is important. Native plants are adapted to our rain cycles and should be the first options for planting. When I chose our sidewalk tree, there was not a single native plant available as an option (I hope that has changed). Although all natives may not be able to survive climate change, they should certainly be our first priority, for the wide range of benefits reestablishing an appropriate local environment will provide.

Again, simple terms for greater outreach. "Urban Tree Canopy" is essentially "Tree plantation" or am I missing something?

Please provide any additional comments about the Resilience section of the Plan here.

We appreciate the opportunity to support the City of Albany via active engagement from our members to assist your efforts to drive down carbon emissions.

Tree planting should be carefully planned to select trees that don't create hazards; and to unify individual streets with type of tree.

Distributed solar should be a resilience item.

Nice ideas but no clue what you are actually going to do or who will pay for it

The idea of putting in bocce ball courts next to the redwoods near Ocean View is completely ridiculous. You will have to remove grass and plants to put in those courts thereby reducing greenery in Albany. That idea needs to be completely abandoned.

Include a plan that supports residents and business to plant trees in the strip of land between sidewalk and street and have the city pay for that installation, even if it means hacking out concrete

very nice

You will need training classes, perhaps training videos on YouTube to educate homeowners on what they can do to reduce the various risks and what they are liable under new laws and what if any fines can be charged for violations, or charges if the City has to do the work to fix the problem.

I used the Brace and Bolt program when I learned about it. Stuff like that needs to be expanded and include more people. I have gone to CERT training. The City plan is not integrated with the school plan. I tried a number of times to do it. It could be better with more f/u. there isn't enough in that area of young HS level youth. I work with Environmental Traveling Companions and various programs come through that provide that kind of focus.

The City of Oakland and San Fran have done great work starting to integrate resilience into CIPs. Here is also a short report highlighting efforts from around the Country. Embedding these issues into our CIP and general budget is crucial for the implementation stage. https://www.eslc.org/wp-content/uploads/2019/02/III.-Environmental-Finance-Center-Report.pdf

Encourage new construction to put in sod roofs. Incentivize rain-collection front yards.

To increase urban tree canopy, it is important not to turn Albany Hill Park into townhouses, this should be a priority in Albany's Climate Change plan.

Elizabeth Carrade

From: Sent: To: Subject:	Edward FIELDS <efields@berkeley.edu> Sunday, June 16, 2019 10:51 AM Elizabeth Carrade CAAP Edit</efields@berkeley.edu>
Page 49 of the CA	AAP:
	y-Carbon Transportation least one day each week. Take transit, carpool, walk, and/or bike instead.
	: DON'T Drive alone or something like that? But even that isn't a very strong statement. Driving eek, not so good, but better than 5 days. Not sure what was intended here.
Thanks,	
Ed Fields	

From: Dr. Adam Gratz D.O. <drgratz@gmail.com>

Sent: Saturday, June 22, 2019 11:22 AM

To: Elizabeth Carrade

Subject: Re: Public Comment Period for DRAFT Climate Action & Adaptation Plan

Good morning!

Thank you for your amazing work on the Climate action plan. I am a physician, former auto mechanic, Albany home owner, and alternative fuel enthusiast since 1998. I have converted over a dozen vehicles to biodiesel or vegetable oil. Currently our household has 2 electric only vehicles. Finally 100 % free from gasoline, I wanted to share with you how easy, practical, and cost saving it is to go electric.

I would also like to share a public comment as it applies to our energy future:

1) Consider a phase out of gasoline powered police vehicles.

We are a one square mile city, with no need for a fleet of low efficiency SUV style vehicles. Reliable electric cars, motorcycles and bicycles are also now a reality, and we could easily be a leader in the adoption of these technologies. For 10 + years, Berkeley and San Francisco have offered beat and bicycle patrols. Here is a great opportunity to reduce emissions, reduce maintenance costs, dramatically enhance fleet reliability, and create a community connection to law enforcement. A single officer sitting, idling, in an SUV does not serve the community in the way an officer on foot, or on a bike does. This should also reduce health care costs, as city employees who walk or bike daily have statistically lower health care risks.

2) Consider immediate legislation to stop the use of gas powered lawn mowers, leaf blowers and other landscaping tools.

Gas mowers spew 88 lbs. of CO2, and 34 lbs. of other pollutants into the air every year. Berkeley already has laws restricting the use of these small, inefficient gas engines, The EPA website states that a new gas powered lawn mower produces **more** volatile organic compounds and nitrogen oxides emissions in one hour than **11 new cars** being driven for one hour, or the equivalent of driving one car 350 miles. Estimates of spilled gasoline from filling lawn equipment approaches 17 million gallons annually. Million gallons! https://www.peoplepoweredmachines.com/faq-environment.htm

Plus, Albany residents won't have to wake up to gasoline leaf blowers every Sunday at 7 am. Win, win!

Please consider me as a resource for community education on both EV ownership and transitioning away from gasoline engines. I am happy to volunteer as a speaker, presenter or group leader, to share my positive experiences in this arena.

Thank you and feel free to call or text me anytime,

On Fri, Jun 21, 2019 at 11:50 AM Elizabeth Carrade < <u>eCarrade@albanyca.org</u>> wrote:

The <u>DRAFT 2019 Climate Action and Adaptation Plan</u> is now available for public review. The City is soliciting public comment via email, <u>at public meetings</u>, and through <u>this survey</u>. <u>The public comment period is open until July 19.</u>

Your input will inform development of the final Climate Action and Adaptation Plan. Please note that this draft version of the City of Albany Climate Action and Adaptation Plan is not fully designed and formatted. Thus, please focus your review on the content, and not the formatting of the document.

If you need assistance or have questions regarding this survey or the City's climate action planning process, please contact Elizabeth Carrade at ecarrade@albanyca.org or (510) 528-5762.

If you are interested in learning more about the CAAP planning efforts to date, visit our <u>CAAP webpage</u>.

If you are interested in learning how to reduce your own carbon footprint, sign up for <u>Carbon-Free Albany</u>.

Thank you for participating in the CAAP planning process. We look forward to your feedback!

You are receiving this email because you indicated that you would like to receive email updates about the CAP 2.0 planning process. If you would no longer like to receive these updates, please email ecarrade@albanyca.org requesting to be removed from the list.

Elizabeth Carrade
CivicSpark Climate Fellow
City of Albany, CA
ecarrade@albanyca.org
510-528-5762

--

Dr. Adam Gratz, DO Cell: 510-556-4333 Fax: 866-263-1889

From: Justin Fried

Sent: Thursday, June 27, 2019 4:23 PM **To:** Claire Griffing; Elizabeth Carrade

Subject: FW: My Notes for June 27 (I'm out of town)

Comments from Commissioner who will not be present tonight.

5-2 Draft Climate Action and Adaptation Plan Strategies

As we move forward in eliminating release of carbon in Albany we come to bigger and bigger hurdles. Transportation-related emissions are the largest remaining sector and perhaps the hardest to change. A new Active Transportation Plan will need to reach far to boost walking and "micro-mobility" like cycling and scootering. We will not see a dramatic increase in human- or battery-powered micro-mobility until we implement facilities that support all ages and all abilities. Until folks feel that their families are safe on the road they will not come out in the numbers we need. Separated facilities, connected all over town, will be required. Our system of bike lanes and bike boulevards is only a start.

Managing parking in our commercial streets is a complex issue. We are fortunate that Albany parking enforcement is strong compared to Albany traffic enforcement. Before considering meters on streets like Solano, we need to fine-tune time limits and enforcement hours. By all means allow car-pools to stay longer in certain areas. Encourage faster turn-over in our most impacted zones. We also need to consider extending time limits and parking enforcement through dinner hours.

Electric shuttles could help connect Solano to bus lines and BART. Just remember that short headways are key. It may take more than two shuttles to make the program reliable and successful.

Public electric vehicle charging is off to a slow start. We need to address how renters and those who regularly park on-street get access to chargers. This is an issue for those who come to work in Albany by day and for residents by night.

Thanks for considering my comments,

Ken

Ken McCroskey
Traffic & Safety Commissioner

Comment Received from NextDoor

Shahar S., Albany Terrace-27 Jun

Hi, first of all i want to say that I greatly appreciate your initiative to adapt to the Climate Change, here in Albany. It will take many years to implement changes although some actions can be taken even in the short term, for relatively small amount of money. I've listed few of those below. Re "Strategy 2: Transition to low-carbon transportation" (and other parts of the plan), I want to suggest few options for consideration: 1) Allow Micro Mobility Solutions, such as Lime, Spin, Skip and others, to operate in Albany 2) Ask Albany community to vote for turning Solano Ave. to a car-free route (from ~Ventura to San Pablo). 3) Install public benches across the city 4) Install more bike-only routes on Santa Fe Ave, Portland Ave & parts of Washington Ave. 5) Install a Running course that spans throughout the city (~5mi length), where runners have right of way over motorized vehicles 6) Install potable water fountains (for drinking) across the city 7) Install Community Splash Pad in one of the city's parks 8) Install Beach Volleyball courts.. after all this sport was originated in CA. (we already have abundance of basketball, soccer, baseball & tennis courts) .. with these courts, Albany can benefit from hosting AVP's tournaments, and allow more extra curriculum options for middle & high school students. Best, Shahar Shamay.

From: s s < shahar.baba.shamay@gmail.com>
Sent: Thursday, June 27, 2019 3:17 PM

To: Elizabeth Carrade; mayor@albanyny.gov

Cc: michal rokach

Subject: Re "Climate Action & Adaptation Plan"

Hi,

first of all i want to say that I greatly appreciate your initiative to adapt to the Climate Change, here in Albany. It will take many years to implement changes although some actions can be taken even in the short term, for relatively small amount of money.

I've listed few of those below.

Re "Strategy 2: Transition to low-carbon transportation" (and other parts of the plan)

I want to suggest few options for consideration:

- 1. Allow Micro Mobility Solutions, such as Lime, Spin, Skip and others, to operate in Albany
- 2. Ask Albany community to vote for turning Solano Ave. to a car-free route (from ~Ventura to San Pablo).
- 3. Install public benches across the city
- 4. Install more bike-only routes on Santa Fe Ave, Portland Ave & parts of Washington Ave.
- 5. **Install a Running course** that spans throughout the city (~5mi length), where runners have right of way over motorized vehicles
- 6. Install potable water fountains (for drinking) across the city
- 7. Install Community Splash Pad in one of the city's parks
- 8. **Install Beach Volleyball courts**.. after all this sport was originated in CA. (we already have abundance of basketball, soccer, baseball & tennis courts) .. if following official standards, Albany can benefit from hosting AVP's tournaments, and allow more extra curriculum options for middle & high school students.

Best, Shahar Shamay.

(please forgive any grammar mistakes.. English is my second language)

From: Alesia Alonso <alesiaalonso@yahoo.com>

Sent: Tuesday, July 2, 2019 11:40 AM

To: Elizabeth Carrade **Subject:** Climate plan

Good morning,

I'm pleased to see that Albany is drafting a plan to address climate change.

I am disappointed however that the issue of water conservation is not addressed in the plan.

By simply installing rain water capture systems like easy to install rain barrels, individuals can reduce the amount of run off, alleviate potential flooding on city streets, and water their trees.

I purchased rain barrels from Ace Hardware and installed each one in under an hour.

Greywater systems also present a straightforward way to conserve water and trees are good at filtering and using that recycled water.

I don't want to go on too much here but am hopeful that Albany can find ways to conserve water and capture rainfall and to encourage citizens to do the same.

I would be happy to be involved.

Regards, Alesia

Alesia Alonso

From: Lizz Bronson <zzbronson@gmail.com>

Sent: Tuesday, July 2, 2019 6:37 PM

To: Elizabeth Carrade

Subject: Climate action plan comments

Hi Elizabeth

I just skimmed through the plan and will be looking over it for the next few weeks--one general comment I have regarding the plan and fossil fuel transportation goals: currently AC transit is unaffordable and their services can be especially inaccessible if one is low income, doesn't have much money, or any scenario involving disadvantage and finances.

They keep raising their fares and there are no transfers. Fares are approximately \$2.50 one way and if you want to ride more than one bus, you are forced to buy a \$5 pass that is good 24 hours until 3 a.m.

This, in conjunction with how routes have been redesigned, means that riders spend more to get to certain destinations than they did before.

As an Albany resident I've found the change in fare structure punitive and not accommodating people's different monetary situations.

This is an issue I feel needs advocacy, because overall, fare structure can contribute to a drop in ridership, and it means it is harder for some residents to feel like they can go places because the bus costs so much.

Maybe Albany can have its own bus, or share one with berkeley.

The other comment is that in some places around Albany it isn't so safe to walk because it isn't well lit, like in the past when I've gone on the path by eastshore under the freeway, going to Target.

There is a place to cross eastshore near where the cars curve after turning on the freeway, and that is a bad place to walk because cars might not see pedestrians in time, and many times I've seen cars turn under the overpass when they said there's no through way.

It has been awhile since I've walked that way, but in the past several years I have gone down that path to Target, it has always felt like I've taken a huge risk. For a long time this area has not been served by AC transit lines or public transit of any type. (Did something change that I'm not aware of?)

It is mostly for people who have cars.

This plan has good goals and ideas. I feel the city of Albany needs to have more support of safety and accessibility to reach these goals, and part of this might be giving feedback to AC transit/mtc about transit agencies needing to improve how constituents are served.

Elizabeth Bronson

From: Ben Lukas <ben@benlucky.net>
Sent: Tuesday, July 9, 2019 7:37 AM

To: Elizabeth Carrade **Subject:** Climate Action Plan

Regarding electrification of homes from natural gas for heating and cooking:

Until the entire electrical grid is CO2 free, it will increase energy consumption and CO2 emissions if we remove our natural gas appliances. It is decades premature to enact such a regressive and simple-minded proposal.

The regional/state power grid must be considered as a whole, not as a small community. This proposal does not consider what happens to our CO2 use as a greater community. Regular PGE customers must be considered alongside your community energy program consumers. The PGE consumers already get a percentage of the power from renewable sources (hydro, wind, solar) off the same grid. Because these sources are not usable at all times (night and low wind times), additional sources are also used to make up the differences (gas.) When you, a "all renewable customer" turn off your light, a regular PGE customer gets the flow of electrons from your source, and gas systems can generate less for that moment.

Even if you personally have "carbon free" energy plan, what happens when you turn on an electric stove? Your demand for electricity increases, and the PGE delivery system gets more electrons from the "on demand" sources to keep its grid power level meeting demand. No, it does not turn on a solar cell somewhere, or a wind turbine. (These are already producing what they can depending on nature's current condition.) A natural gas turbine spins up faster, burning natural gas. And it takes lots more gas to create the electricity to heat your food than it does to burn gas to cook your food directly. Ask an engineer what the inefficiencies are of converting heat from gas to electricity, and then the second step off converting electricity back to heat in your stove.

Per US Dept of energy:

https://www.energy.gov/energysaver/home-heating-systems/electric-resistance-heating

"However, most electricity is produced from coal, gas, or oil generators that convert only about 30% of the fuel's energy into electricity. Because of electricity generation and transmission losses, electric heat is often more expensive than heat produced in homes or businesses that use combustion appliances, such as natural gas, propane, and oil furnaces."

While you think you are decreasing your CO2 footprint by buying an electric range, you are actually significantly increasing it. This will be true until the entire electric grid is not using carbon sources as the buffer for times of low generation, which is at least decades away.

Ben Lukas 510.681.9007

CivicSpark Climate Fellow

From: Sent: To:	Village Association <ucbvra@gmail.com> Tuesday, July 9, 2019 10:12 AM Elizabeth Carrade</ucbvra@gmail.com>
Subject:	Re: City of Albany Climate Action Plan
Hi Lizzie,	
sustainable options task force group wit construction. I would school means that construction offer this problem and the but most families ar	to your email separately since I had a few comments. I'm really glad to see things such as for restaurant foodware, farmers market, and supporting Safe Routes to School. I am currently on a h Safe Routes to School trying to find sustainable options for transportation during the Ocean View d be happy to discuss this further by phone. For many village residents, the increased distance to ar transportation is necessary. Many families are considering buying a car or a second car because transportation except for special ed students. At the city 2x2x2 meeting yesterday, I spoke about a mayor seemed concerned. Village staff are working on setting up a walking school bus program, the looking at car transportation as their only option. In view of carbon emissions, the school are very concerning.
Best, Esther	
On Mon, Jul 8, 2019	at 10:09 AM Elizabeth Carrade < <u>eCarrade@albanyca.org</u> > wrote:
Village, or send it o	ope all is well. I am reaching out because I would like to see if we are able to post a flyer at UC out via email. The attached flyer includes information about the City of Albany's draft Climate Action and encourages community members to provide feedback on the Plan. More information is also by website.
aims to help the Cit word about the Pla	is soliciting feedback on the draft Climate Action & Adaptation Plan through July 19, 2019. The Plan ty reach its 2035 and 2050 greenhouse gas emissions reduction goals. We are hoping to spread the n so that we get as much community feedback as possible, as we want it to be a Plan that reflects es and values. We would love to receive feedback from residents of UC Village.
	ached flyer to alert the community about the Plan and to give clear information about how to ment. Are you able to post this at UC Village? Or send to an email group? If not, no problem at all. eck!
If you have any que	estions or would like to chat about this on the phone, please feel free to call me at (510) 528-5762.
Have a great day.	
Best,	
Lizzie	
Flizabeth Carrade	

City of Albany, CA ecarrade@albanyca.org 510-528-5762

From: Judy Kerr <ridleykerr@gmail.com>
Sent: Wednesday, July 10, 2019 3:37 PM

To: Elizabeth Carrade **Subject:** Public comments

Thank you for your presentation to the Social and Economic Justice Commission on July 2, 2019. My general comments were made at the meeting. Here are more specific statements.

General comments related to content:

- 1. Please make every effort to how input from diverse and under-represented groups within Albany was sought and to what extent you felt as if you had received input.
- 2. Questions in particular are how will the proposed action be accessible to people with low incomes, to people with disabilities, and to people who are unhoused and living within the city.

Specific comments per page number:

Page 4: please say more about how you "took equity in to consideration of each action and prioritized a more equitable city".

Page 8 "every resident has access to a walk-able, bike-able, and affordable neighborhood with ample green space" - please say more about e bikes and scooters and how those modes of transportation on public walkways and bike paths impacts the safety of people unsteady on their feet including older residents, children, and people of any age with mobility impairments.

"Equity drives our sustainability. Initiatives are developed in collaboration with vulnerable groups" who is at the table when the problems are identified?

Page 9 the word equitable appears at least 4 times-what do you mean when you use that term-perhaps a glossary that references how you achieved equitability.

Page 14 please look at how verb tense impacts this statement and try to use present tense.

Page 17 "under its belt" does not sound quite right-Albany does not wear a belt-the phrase is vaguely sexist and exclusionary. "fully vetted" is jargon and does not inform the reader as to what happened

Pages 23-24 Can we have content on how equity and inclusion were considered in the key elements. Do we know anythong about the 300 responses to the questionaire- were they unduplicated? are there demographics indicators?

Page 27 the discussion of active transportation makes no mention of people with mobility issues and yet this is listed as a section with an equity badge?

Items 1.2.2 and 1.2.5 How does job training impact vulnerable groups-is the underlying assumption that people are poor because they don't have jobs?

Item 1.2.5 How will the incentive program work for low income households

- 2.1.1 Equity does not seem to include people with mobility issues and older individuals
- 2.1.5 What does active transportation look like from the point of view of a person who uses a wheelchair or other adaptive mobility device.
- 2.1.6 How does this enhance equity-show me, don't simply tell me that it does
- 2.1.8 As above
- 3.2.6 How does this work for people who are disenfranchised who have low income or for those with mobility impairment.

Thanks very much for you review of these comments and for the excellent work on this plan.

Judy Kerr 653 Spokane Ave Albany, CA



Virus-free. www.avast.com

From: Susan Clifford <susanclifford64@gmail.com>

Sent: Wednesday, July 10, 2019 7:24 PM

To: Elizabeth Carrade **Subject:** CAAP Review

Hello!

This plan is excellent and really represents a great deal of thought and work. I'm sure there will be responses from reviewers that can critique the content more skillfully than me, but as an over-viewer from the audience, I'm impressed.

I do have three questions:

- . My neighbor wanted to know if plastic is being recycled; she thought we should let people know. And how is that being accomplished?
 - . And do we have to ask restaurants if we can bring our own containers for leftovers?
 - . Lastly, how do we manage Albany home rentals related to following the CAAP?

In closing, I think that one of the strengths of the CAAP is that the goals and objectives are measurable, which makes short term and long term strategic planning possible.

Thank you for your work and for this opportunity to provide input.

See you soon I'm sure. Take good care, Susan

Sent from my iPhone

Ed Fields Comments – received via email 7-12-2019

With the goal of reducing VMT, we are using the CAAP to get increased building heights in Albany. We have already seen that it is possible to build out to approved densities under the existing regulations, especially since parking requirements have been reduced.

Bigger picture:

It has been shown that VMT is reduced more by locating jobs rather than housing near transit.

If we add another 1000 residents to Albany, communities like Antioch and Brentwood will still add more housing for another 50,000 residents.

At the beginning of the 20th century, we built large apartments in the inner cities to house workers. In the middle of the 20th century, we ripped up the tracks for mass transit, and urban planners brought us the auto-dependent suburbs. Now that the planet is threatened by climate destruction brought on by industrialization and fossil-fuel based transportation and agriculture, they're telling us that was all wrong, and we need to house workers in the inner cities again.

"Mass urbanization has been made possible by the prodigious exploitation of fossil fuels."

"As of 2018, the world has over 1,000 urban areas (which may include multiple city jurisdictions) with over 500,000 people at an average density of 11,000 per square mile (or 17 people per acre)." I might note, exactly population density of Albany.

"Thirty-seven urban areas have over 10 million inhabitants."

"The circulatory system of a modern city is very active, and it requires high energy inputs to keep the city-dwellers fed and prevent the build-up of wastes."

"Contrary to the forecasts of most demographers, urbanization will reverse course as globalization unwinds during the 21st century. The eventual decline in fossil hydrocarbon flows, and the inability of renewables to fully substitute, will create a deficiency of energy to power bloated urban agglomerations and require a shift of human populations back to the countryside. In short, the future is rural."

Which is the title of the report by Jason Bradford and the Post Carbon Institute from which these quotes are taken.

From:	Mark Meldgin <mark.meldgin@gmail.com></mark.meldgin@gmail.com>
Sent: To:	Friday, July 12, 2019 5:51 PM Elizabeth Carrade
Subject:	comments on draft Climate Action and Adaptation Plan
,	
Ms. Elizabeth Car	rade
Dear Ms. Carrade	e,
•	e reminder to submit comments on Albany's draft Climate Action and Adaptation Plan. It is an that represents a great deal of work and writing skill. My comments are given below.
Thank you,	
Mark Meldgin	
Albany CA	
Comment 1	
•	's goal of <u>net</u> zero emissions by 2050. The "zero" is fine—I share the urgency to reduce carbon "net" is troublesome because it is defined vaguely: "CO2e removal may come from a

Are there geographic limits on Albany's plans for natural systems and land management practices? Obviously, all carbon emissions have equal impact, regardless of where on Earth they originate. If cost-effectiveness is important, this goal means that Albany should pay for the cheapest land management practices anywhere on Earth. However, there is a risk of double-counting: Can Albany ensure that only Albany gets credit for land management practices it pays for outside Albany, or even outside the U.S.? There is also the risk of voter backlash if Albany is spending money on distant projects while leaving potholes unfilled at home.

combination of carbon-sequestering natural systems and land management practices, as well as from carbon

capture technology as it becomes available." (Draft Plan, p. 29)

I suggest that Albany define carbon neutrality more precisely, indicating what is and what is not contemplated, or else drop the neutrality and set a simple numerical target for carbon emissions. If carbon sequestration becomes practical, an emission target less than zero could be morally justified based on (1) the fact that GHG emissions linger and cause warming for decades, and (2) we have known the consequences of GHG emissions for years, and (3) during those years we emitted far more per person than most humans.

Comment 2

The draft Plan repeatedly refers to "locally sourced" renewable electricity. The Plan's justification for local solar power is apparently green jobs. How many green jobs? A crew of 5 installed solar panels on my house in a half-day of work, or 20 person-hours. If there are, say, 5000 homes in Albany without rooftop solar, doing them all would involve 100,000 person-hours. That's the equivalent of 50 full-time green jobs for 1 year, or 10 jobs for 5 years.

Every job helps, but I suggest that the Plan or a supporting document include some quantification of the green jobs that would result, and the cost of creating each of those jobs, because local solar is 55% more costly than large-scale solar in the Central Valley. – The 55% number comes from a report by the consultant MRW & Associates. MRW's work greatly facilitated approval of East Bay Community Energy by the Alameda County Board of Supervisors. MRW's draft Appendix (never finalized, to my knowledge) was presented at the October 4, 2016 Board meeting. It assumes that electricity from small-scale (<3 MW) solar plants in Alameda County will cost 55% more than electricity from large-scale solar in sunnier places in California (p. B-3 at http://www.acgov.org/board/bos_calendar/CDA_241280.pdf).

If we're not going to cover Albany's roofs with solar panels, what should we do with them? This question was addressed by Dr. Catherine Wolfram in a post at the blog of the University of California Energy Institute. She suggests consideration of building codes that require white or light-colored roofs, or "cool roofs" to reflect light and heat:

"Cool roofs are potentially a pretty big deal, too. Several articles have shown that making most urban roofs a bit more reflective would be the equivalent of removing 300 million vehicles, more than are currently registered in the United States."

(https://energyathaas.wordpress.com/2018/10/22/how-should-we-use-our-roofs/.

Dr. Wolfram's article has links to the "several articles" mentioned in the above quote.

I hope that the Plan can include an economic and jobs comparison of covering Albany's roofs with solar panels versus making them lighter in color.

I assume that a "cool roofs" program would be compatible with Action 4.1.1 on adding urban trees, but consulting with an expert couldn't hurt.

Comment 3

The draft Plan (p. 9) includes "Advocate for state and federal legislation", which I like, but I wish it went further, to include advocacy for more funding of <u>research</u>. Several left-of-center analysts have posited that the median voter will not approve any emission reduction program with significant costs. For example, Kevin Drum of Mother Jones says that:

"...the danger of future climate change is now about as clear as it's going to get. ... And yet there's still no *real* willingness to reduce fossil fuel use anywhere. Not if it costs more than a trivial few cents anyway, and even at that it's hard to get the public to approve it unless that cost is buried somewhere."

(https://www.motherjones.com/kevin-drum/2018/12/we-need-a-climate-miracle-would-you-spend-500-billion-per-year-to-get-one/)

Mr. Drum recommends that spending 1% of U.S. GDP, or \$200 billion/year, on research, in addition to doing the sorts of actions specified in Albany's draft Plan.

Dr. Severin Borenstein of U.C. Energy Institute says:

"I'm as big an advocate of pricing GHGs [carbon taxes] as other economists ... But when it comes to global climate change, pricing carbon isn't a complete answer. The idea that we can ratchet up the tax until we hit the desired emissions [reductions] doesn't recognize that most of the global emissions are now coming from relatively poor countries. Politically, they are even less likely than the developed world to accept a large carbon tax. ..[T]he most viable path to decarbonizing the developing world must include pushing the cost of reducing GHGs ever lower. Pricing up carbon (and other greenhouse gases) in wealthier countries helps, but if much of the world is unlikely to take that road, then we also need to be focused on innovating down the cost of alternatives.

(https://energyathaas.wordpress.com/2019/04/15/pricing-carbon-isnt-enough/)

Dr. Borenstein does not specify an amount of research funding. He does describe "market failures" that justify government involvement in funding research.

Mr. David Roberts of Vox.com makes a case of increasing public funding of clean energy R&D:

(https://www.vox.com/energy-and-environment/2019/7/11/20688611/climate-change-research-development-innovation)

If Albany is really serious about combating climate change, the City Council could demonstrate that by adopting a resolution calling for more public funding for research on <u>any</u> technology that could help reduce global warming, including unpopular ones like passively safe nuclear plants. THAT would send a message that might be more widely noticed than Albany's Plan.

Comment 4

The draft Plan states that Albany is already "... promoting commercial and residential energy efficiency incentive programs." Should more weight be placed on this? On cold mornings in my neighborhood, most roofs are covered with white frost, but some are not, indicating that ceiling insulation is thin or absent. Personally, I would pay higher taxes to have Albany install insulation for free (and create green jobs in the process). This seems like the proverbial "low-hanging fruit".

Comment 5

Could the strategies in "Electrify our buildings" include stronger efficiency requirements for whole-house air-conditioning? As temperatures increase, I expect that more and more Albany homes will be retrofitted with A/C. Is there room for action by Albany, or does the California Energy Commission have exclusive authority over A/C efficiency standards? I presume Albany could add conditions to building permits for approval of whole-house A/C, e.g., a minimum of R-19 ceiling insulation and/or light-colored roofs and/or window films, so that A/C is not the sole source of cooling.

Comment 6

Action 1.2.8 (p. 35) and Action 4.2.2 (p. 44) advocate working with EBCE on matters related to the electricity distribution system. It probably makes sense to work with EBCE to some extent. However, the wires are owned and maintained by PG&E. Perhaps PG&E should be the focus of partnering on these actions?

Comment 7

Albany's draft Climate Action Plan states that "Albany's default electricity supply is now carbon-free...", which is almost true. The supply is <u>net</u> carbon-free, but our use of electricity at night causes carbon emissions: East Bay Community Energy produces solar electricity in excess of its customers' needs, and uses that excess in <u>netting</u> to disclaim responsibility for carbon emissions caused by our use of electricity at night.

Netting is a sensitive issue because "100% carbon-free" is important in marketing. So, when asked, proponents tend to say that (#1) they control some wind turbines that are "complementary", i.e., they produce more electricity at night than during the day, and (#2) they control some hydroelectric resources that can produce more electricity at night, and (#3) they have paid for the "greenness" of hydroelectricity that would have been generated anyway, e.g., by BPA in the Pacific Northwest. Of these, #3 has questionable benefits aside from marketing, but #1 and #2 are true. But are they significant? To the best of my knowledge, the relevant data are not publicly available.

I do not wish to single out EBCE: All California electricity providers use the same netting protocol. Using that protocol has encouraged California electricity providers to develop so much excess solar electricity that, at times, California's grid operator disconnects some solar plants from the grid and even pays entities to take the electricity. I have heard that Arizona is curtailing its own solar plants in order to be paid to accept solar electricity from California. If true, that is absurd, but it is a logical consequence of "netting" and the marketing importance of "100% carbon-free".

Someone in California is using a lot of fossil-fueled electricity. For example, here is yesterday's chart from the California grid operator:

http://content.caiso.com/green/renewrpt/20190711_DailyRenewablesWatch.pdf . The figure on the bottom of page 1 shows a thick, light-blue band of electricity from fossil-fueled power plants (labeled "thermal" in the graph because the fossil fuel is burned). Who is responsible for that? I suspect that we in Albany are responsible for part of it, even though we allegedly have an electricity supply that is "100% carbon-free".

From: Renaldo Marin <rmarin4428@gmail.com>

Sent: Friday, July 12, 2019 4:29 PM

To: Elizabeth Carrade

--

I think the overall cost of converting everything from gas to electric would be so huge the the economic impact on property owners and tenants would be egregious at best. Further, there is not enough solar and or hydro to provide power at this time so how would the power needed be provided if no by out of state coal or natural gas fired power plants. Seems to defeat the purpose. Calif use to have nuclear power plants which have zero emissions but those were mostly closed down years ago. They are the safest and cleanest of all power sourced...work towards that

The information in this Email is confidential and may and could be legally privileged. It is intended solely for the addressee. Any review, re transmission, dissemination, or other use of, or taking of any action in reliance upon this information by persons or entities other then the intended recipient is prohibited. Access to this Email by anyone else is is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. California Bingo Service disclaims all responsibility and liability for the accuracy and content of this Email or attachments and or Email for any damages or losses arising from any inaccuracies, errors, viruses, e.g., worms, trojan horses, etc., or other items of destructive nature, which may be contained in the Email and or attachment and shall not be liable for direct, indirect, consequential or special damages in connection with said Email or attachments.

From: Olshansky, Robert B <robo@illinois.edu>

Sent: Friday, July 12, 2019 1:10 PM

To: Elizabeth Carrade

Subject: Re: Public Comment for Draft Climate Action & Adaptation Plan

Just a quick comment: It looks quite good overall. The challenge will be in implementation: prioritizing, assigning responsibility, monitoring. The plan says you will do these things, but just a tiny bit of detail on the next steps would be helpful.

Rob Olshansky

1247 Dartmouth Street

From: Elizabeth Carrade <eCarrade@albanyca.org>

Date: Friday, July 12, 2019 at 11:37 AM

Subject: Public Comment for Draft Climate Action & Adaptation Plan

Good afternoon,

This is a reminder that the DRAFT 2019 Climate Action and Adaptation Plan is now open for public comment.

The public comment period closes on July 19, 2019.

The Climate Action Committee will be discussing the Draft CAAP at the Climate Action Committee meeting on July 17. The meeting begins at 7:30PM in the City of Albany Council Chambers at 1000 San Pablo Avenue, Albany CA 94706. Meeting agenda and agenda packet can be accessed here.

Agenda item 5-1 is a presentation on the City of Albany's updated greenhouse gas emissions inventory. Agenda item 6-1 is a discussion of the Draft Climate Action & Adaptation Plan.

There will be opportunity to provide public comment on the Draft CAAP at the Climate Action Committee meeting. If you are unable to attend the Climate Action Committee meeting, you may submit public comment the following ways:

- Provide public comments directly to Elizabeth Carrade at <u>ecarrade@albanyca.org</u> or (510) 528-5762.
- Complete the public comment survey.
- Deliver handwritten comments or mail comments to:

Attn: Elizabeth Carrade Community Development Department 1000 San Pablo Avenue, Albany CA 94706

All comments must be received by July 19, 2019.

Your input will inform development of the final Climate Action and Adaptation Plan.

If you need assistance or have questions regarding the City's climate action planning process, please contact Elizabeth Carrade at ecarrade@albanyca.org or (510) 528-5762.

If you are interested in learning more about the CAAP planning efforts to date, visit our <u>CAAP webpage</u>. If you are interested in learning how to reduce your own carbon footprint, sign up for <u>Carbon-Free Albany</u>.

Thank you for participating in the CAAP planning process. We look forward to your feedback!

You are receiving this email because you indicated that you would like to receive email updates about the CAP 2.0 planning process. If you would no longer like to receive these updates, please email ecarrade@albanyca.org requesting to be removed from the list.

Elizabeth Carrade CivicSpark Climate Fellow City of Albany, CA ecarrade@albanyca.org

510-528-5762

Claire Griffing

From: Nick Peterson <nickpetersonarchitect@gmail.com>

Sent: Sunday, July 14, 2019 2:03 PM

To: Claire Griffing

Cc: Elizabeth Carrade; Nick Pilch

Subject: Re: CAC Agenda

Claire

Here are my comments on the consultant's status report:

The Implementation Strategy must include more than just an analysis of "funding available". This plan won't succeed if a more comprehensive view is not taken.

There needs to be a well conceived financial strategy that uses carrot and stick funding tactics that are phased to promote acceptance and allow for adaptation with minimal resistance and political blowback. This needs to include considered methods and financial analysis including case studies for strategies targeted at representative Albany citizen types (renter, landlord, small business, large business, home owner, etc) to determine the optimal funding approach and timing for proposed strategies. These need to be scheduled along a coordinated timeline that moves all sectors towards net zero emissions compliance in an equitable, timely and feasible manner.

This is very complex and interconnected with many critical actions required by city council and put forward to city voters for approval. This should be planned with fall-back options anticipating specific known difficult hurdles so the success of the plan isn't defeated by not achieving one or two more difficult options. It must also specifically address effective, coordinated, and inclusive outreach to the entire community that has verifiable results and specific follow up action items. Clear tasks and roles must be identified so the bulk of the effort is not dumped on city staff and so an organized body of volunteers can be recruited to get the work done effectively.

This is the crux of the plan and must be clear and concise without any reliance on or assumption that Albany citizens will voluntarily make necessary changes in their current fossil-fuel based life styles just because it's the right thing to do.

Thank you for passing this on to the consultants.

Nick Peterson

510.734.3712

On Jul 13, 2019, at 2:16 AM, Claire Griffing < cgriffing@albanyca.org > wrote:

Hi All,

Please see attached minutes from your last meeting and <u>find your agenda here</u>. Please come to the meeting prepared to discuss any additional edits you have to the CAAP, but also feel free to send us comments via email. Comments on the draft are due by next Friday.

THANKS.

CLAIRE GRIFFING

SUSTAINABILITY & RESILIENCE MANAGER | PIO CITY OF ALBANY

1000 San Pablo Avenue Albany, CA 94706 (510) 528-5754 http://www.albanyca.org/greenalbany

<CAC 2019-6-19 DRAFT Minutes.pdf>

HOWARD F. McNenny, AIA

ARCHITECTURE / PLANNING / DEVELOPER SERVICES

 1039 Santa Fe Avenue
 Tel: (510) 705-1671
 h.mcnenny@comcast.net

 Albany, CA 94706
 Cell: (510) 207-7019
 CA license #C-8868

July 17, 2019

Elizabeth Caradde (via email) City of Albany, CA

RE: Comments on draft Climate Action & Adaptation Plan

I have read the draft report, and although I agree with many of the points being made (more trees), my overall impression is that it is a somewhat superficial analysis and many of the conslusions are debatable. It is interesting that absolutely no peer-reviewed scientific papers are referenced (other than those related to defining the problem), and indeed no list of contribtors to the report with any scientific credentials. This is particularly disappointing in view of the fact that we have a world-class resource in our back yard to draw upon—the Lawrence Berkeley Laboratory—with specific expertise in this area.

My main comments relate to that portion of the report that deals with energy usage of buildings. As a local architect, and a LEED-certified professional, my expertise is mostly in that area. The primary thrust of the report with respect to buildings seems to be that we need to move immediately toward all electric buildings, and that in doing so, we can eliminate a good portion of our carbon footprint. There are several problems with this assumption:

- 1. Heating will need to be by use of heat pumps. (The state energy code prohibits resistance heating). Heat pumps do indeed operate with fairly high efficiency, however they are more expensive than natural gas-fired furnaces—as much as double.
- 2. Our electical grid (operated by PG&E) is supplied with electrical energy from a variety of sources, including nuclear, wind, solar, hydro-electric, geothermal, and natural gas. In addition, PG&E imports electrical energy from other states, much of which is from coal-fired plants. To say that we are 100% renewable energy in Albany ignores that electricity is fungable once it enters the grid, and in fact a portion is and will remain non-renewable for the forseeable future. The "Brilliant 100" plan is an illusion—the clean energy we claim to be drawing from the grid leaves less clean energy for other PG&E customers.
- 3. Once a residence is equipped with a heat pump, cooling is a built-in feature. As we expect more and more extreme heat days in Albany, the air conditioning function will be used more and more, and exactly at the times that the electrical grid is under the most stress, and when electricity is most expensive. Typically, non-renewable (out-of-state coal?) sources will be brought on line to supply this increased demand, exacerbating our carbon footprint.

- 4. The use of electricity for domestic water heating is also problematic. Heat pump water heaters are expensive (and noisy)—many times the cost of natural gas water heaters. (As with space heating, the less expensive electric resistance water heaters is not allowed by state energy codes.) You may want to add some section in the report dealing with an on-demand heat pump boiler that can be used for both hydronic heating and water heating. As far as I know, the city has no policy in place for this, and may in fact not be allowable per current code. Regardless, electrical heating will always be more expensive to install, unless it is resistance heating
- 5. If we assume that any incremental increase in demand for electricity will be provided by our still remaining natural gas fired generating plants, then the carbon footprint advantage of electrical heat pumps will be largely negated. (There are some good scientific articles on this.)
- 6. If residences are not provided with natural gas, you may expect that bootlegged resistance heating will be installed—simply plugged in. The cost of operation will be high, but the initial cost is much less. I am aware of landlords that have done exactly that.
- 7. There seems to be an assumption that the cost of electricity will decline over time. On the contrary, I see the cost of electricity in Albany increasing while the cost of natural gas will decline. The increase in electrical cost is largely due to the particular situation with PG&E. They are currently in bankruptcy, will need to be covering their losses due to recent fires, and will need to be upgrading their transmission network to mitigate future fires.

Given all the above, I would urge the city to proceed with caution before taking any drastic action to prohibit natural gas service to residential customers (as Berkeley has just done). There is a tendency on the part of this city to unilaterally adopt standards that cost homeowners a lot of money without adequate weighing of costs and benefits. My suggestion: Take a look at cutting off gas service to city facilities before requiring homeowners to do so. I think you will find it is not so easy.

Respectfully,

Howard McNenny, AIA, LEED AP

John Duggar Comments received by phone on July 17, 2019.

There are good elements in the Plan. Thinks it is important to take these steps to address climate change, but does not believe we only have 12 years to address climate change. He has had great success getting people to take voluntary measures – for example, with tenants in his building starting to compost. Believes strongly in voluntary measures, rather than draconian measures. Suggests allowing people to come up with their own ideas and solutions – voluntary, creative measures most effective.

- 'Our vision: Albany works together to ensure a vibrant and sustainable urban village that is livable, equitable, resilient, and engaged' This is not very clear Albany works together with whom? Other cities? Other regions? 'Engaged' in what? I would like to see as a highlighted called out box that Albany seeks to be a leader in climate action. E.g.
- Our vision: Albany is a leader in climate action and works together as a community to ensure and ensure a vibrant, healthy, sustainable city that is livable, equitable, resilient, for all.
- "Albany defines carbon neutrality as achieving net zero greenhouse gas emissions caused by fossil fuel use within the City". This is problematic. Suggest revising ==> defines 'net carbon zero as net emissions from currently tracked emissions (gas, electricity, transportation, solid waste) as zero)' i.e. if EBCE had changes and Albany were to get electricity from natural gas plants outside of city, we would need to count that, and those positive emissions would have to be offset by negative emissions somewhere else.
- Climate targets: need to revise Albany targets to something like 100% in 2040 and 60% in 2030
- Outreach, education, increasing awareness are all important and necessary. I did not find any mention of other carbon action groups in the city such as ACAC or Strollers and Rollers. I think this need be an explicit part of the vision and story building partnerships across the community and among various community groups.
- 'We Have a Climate Emergency' is embedded rather inconspicuously in the intro text. I believe this needs to be much stronger either make it large font and bolded or bring to the front as it's own separate page with no more than 10-12 key bullet points.
- I did not find any mention of "passive" housing that should be added in context of most resilient housing to extreme heat and cold or wind or even possibly fires. Can 'support for passive home design' be added?
- Solar PV and resilience is mentioned in 4.2.2 request adding more general statement about investigating the role for rooftop solar PV in residential and commercial buildings for resilience, to contribute to more locally distributed generation and economic developmet, and for facilitating net zero carbon existing buildings as well as new buildings.
- As it stands the plan does not speak to intermediate goals and addressing how the city can meet the targets x% electric vehicles; y% electrified homes- will there be plans to add this?
- Role for energy efficiency retrofits and insulation/building shell measures?
- Are carbon savings icons based on calculations or modeling or qualitative? Will those be quantified?
- 1.2.10 Identify a pathway for requiring all-electric energy in existing and new buildings.
 - ==> split up new and existing bldgs into sep. measures.
 - ==> Identify pathway to "determine a plan to convert all existing bldgs to all electric by 2035"
- EV action plan should be priority has biggest impact. Does not mention anything about outreach/education about increasing adoption! 2.2.1 sort of gets to that.
- 2.1.5 Work with third party programs to provide shared mobility options: I would like to see language about weighing and managing possible downsides such as potentially greater VMT or greater congestion (e.g. <u>Uber and Lyft are the 'biggest contributors' to San Francisco's traffic congestion, study says</u> of course SF and Albany are very different, but important to be mindful of possible downsides)
- Since transportation is top emissions source, I think it should be Item #1.
- Gas stations to provide charging stations why such a big impact?
- How do you measure impact of low C economy?
- Add a measure for campaign to eat lower down food chain
- What is goal of last phase (Resiliency)- aesthetics, heat resiliency?
 - o if latter, what has the biggest impact? These should be prioritized or mentioned first
- With the revised goal for C-neutrality in 2040 and 90% GHG reduction in 2035, the city and CAAP needs to make efforts and strategy to not allow Carbon "lock-in", i.e. it cannot approve new buildings that will produce carbon emissions after 2040 assuming the building lifetime is 30-50 years or vehicles that are gasoline-burning after about 2025 assuming average lifetime of about 15 years.

Elizabeth Carrade

From: Sent:	Mark Meldgin <mark.meldgin@gmail.com> Thursday, July 18, 2019 9:54 PM</mark.meldgin@gmail.com>
То:	Elizabeth Carrade
Subject:	second set of comments on Albany's draft CAAP
Attachments:	2019.07.18 2nd comments on draft Albany CAAP.odt
Dear Ms. Carrade,	
My second set of co	omments is attached, and also pasted below in case there is any difficulty with the attachment.
Thank you,	
Mark Meldgin Albany CA	
	
Ms. Elizabeth Carr	rade
Dear Ms. Carrade,	
	as my second set of comments regarding Albany's draft Climate Action and Adaptation Plan. I sed, even though it may be after the deadline.
Thank you,	
Mark Meldgin	
Albany CA	
Comment A	

The discussion at the Sustainability Committee's meeting on July 17 brought out an idea that I think is great. It may have originated with Commissioner Eric Larson.
The idea is to address the question: "What can I do to help reduce carbon emissions?", and to suggest actions that an individual can take.
I suggest a box on the first or second page of the draft CAAP containing that question as a heading, along with a few bullet points.
The first bullet point would read: "Albany's carbon emissions in 2017 were about x pounds per person.
The remaining four-six bullets would be actions that would reduce carbon emissions.
For example:
1. Minimize international flights: A round trip to Europe causes carbon emissions of x pounds per person.
2. Turn down your heater: In a typical Albany home, turning down the gas furnace by one degree reduces carbon emissions by y pounds over the course of a typical winter.
3. Cut down on driving: For a typical car, reducing your driving by just 100 miles cuts carbon emissions by z pounds.
Staff probably has good resources to obtain the numbers, but if they are overloaded, I will have time in mid-August to work out estimates for the numbers, and provide them along with documentation. Perhaps someone (on the Sustainability Committee?) already has a good sense of a few measures, to be listed in the box, that can be taken by an individual and have a significant impact.
Comment B
My earlier comments were critical of "netting" in the reporting of emissions from electricity generation.

Electricity generation is not universally understood, so below is an analogy that may be helpful: "The Grid

Works Like a Tandem Bicycle".

The Grid Works Like a Tandem Bicycle

Imagine a tandem bicycle that is pulling a wagon up a hill. Suppose that:

- People are free to jump into or out of the wagon whenever they please, and
- The bicycle must be kept moving at a constant speed (for example, because the tires are balanced for that speed, and will shake too much at other speeds).

If people jump into the wagon, the pedalers must push harder on the pedals (harder, not faster) to keep the bicycle at a constant speed up the hill. If people jump off, the pedalers must back off to some extent.

Why is this tandem bicycle like the electricity grid?

- The people jumping into or out of the wagon are like customers' demand for electric power.
- The pedalers of the tandem bicycle are like power plants. They provide the power to pull the wagon up the hill.
- The chain of the tandem bicycle is like the wires of the electricity grid. The chain combines the power from both pedalers and transmits it to the rear to pull the wagon.

To keep the bicycle moving at a constant speed, at least one of the pedalers must react to the number of people in the wagon, as well as the actions of the other pedaler.

In this analogy, a generator powered by solar panels is like a pedaler who pushes hard on the pedals when his/her part of the tandem bicycle is in bright sunshine, but backs off when he/she is in shadow, and does not pedal at all during the night. The other pedaler must make all the adjustments to maintain a constant speed.

In this analogy, a typical nuclear power plant is like a pedaler who pushes equally hard at all times. As in the case of solar power, the other pedaler must make all the adjustments to maintain a constant speed.

In a real electricity grid, there are hundreds or thousands of power plants, all working together to "move the chain", or power the grid. The power from all of them is combined instantaneously on the grid.

(Credit: The tandem-bicycle analogy is drawn from a 2005 paper by Stefan Fassbinder and Bruno De Wachter, who in turn acknowledge a 2002 paper by Lennart Soeder. Their paper is at: http://www.gonder.org.tr/wp-content/uploads/2015/04/ElectricityTandem.pdf)

(Distinction between energy and power: In the metric system, the unit of energy is the <u>joule</u> (rhymes with cool and pool). It is defined as the amount of energy needed to raise the temperature of one liter of water by one degree C. The flow of electric energy is power. Power is measured in joules per second, which are also, confusingly, called watts (<u>not</u> watts per second) One joule per second equals one watt. — Many measures of flow include a unit of time, such as "gallons per minute". A watt does not sound like a measure of flow, but it is: It is a flow of one joule of energy per second.) One watt of power flowing for one second is one watt-second of energy. It is an inconveniently small unit, almost always replaced by kilowatt-hours or Megawatt-hours.

Elizabeth Carrade

From: Aaron Priven <aaron@priven.com>
Sent: Friday, July 19, 2019 2:47 PM

To: Elizabeth Carrade

Subject: Climate Action Plan comments

In general, I think the Albany climate action plan is a good document that is worth supporting. I do have a number of comments that I would like to see considered.

- The introductory section asks "Why act?" but the answers are all about how climate change will affect Albany residents. In fact, Albany's effects on climate change affect everyone on the planet. The equity concerns in the document do not mention that the past 100 years of activity in Albany and other cities like it have led directly to the climate crisis we face. We are responsible, and we must take strong and immediate steps to help ameliorate the problems that we ourselves have played a part in causing.
- The electrification of buildings section emphasizes the transition from natural gas to electricity, and notes that (with rare exceptions) Albany's residents are using energy from carbon-free sources, and this is all to the good. However, the document takes the creation of this carbon-free energy for granted. There is no discussion of how the carbon-free energy is sourced.

Until all energy on the grid is carbon-free, however, Albany must recognize that every erg of power it uses could potentially have been used somewhere else, replacing an erg of non-carbon-free power generated by a fossil-fuel plant. Thus, conservation of power, increasing energy efficiency, and the active creation of new sources of carbon-free power, should continue to be an important part of Albany's climate strategy. There is some discussion of new power generation but no discussion of efficiency that I noticed.

• I am grateful that active transportation and public transportation are given primacy in the document over automobile usage. And it is unquestionably preferable to have zero-emissions electric vehicles instead of fossil fuel powered vehicles. Nonetheless, pushing 1000 kilograms of automobile in order to move a 100 kilogram person is inherently inefficient, and thus uses more energy that should be necessary to move that person.

Moreover, and this is one reason why it was a bad idea to remove the more general notion of sustainability from the name of the Climate Action committee, climate is not the only environmental issue, and while the particulate pollution caused by tires and brake dust may not have much impact on the climate as a whole, it does have an environmental impact on the community's health.

In short, it is all too easy to treat zero-emissions automobiles as a good-enough way of dealing with the climate crisis. It is not, and it should be considered at best a necessary intermediate stop on the way to a more sustainable transportation future.

Despite these issues, I am generally pleased with the Climate Action Plan and look forward to actions toward its implementation. Thank you for working on it.

__

Aaron Priven, aaron@priven.com By the tapping of my thumbs: Mobile e-mail this way comes...

Elizabeth Carrade

Sent: Friday, July 19, 2019 12:35 PM

To: Elizabeth Carrade **Subject:** draft CAAP comments

Attachments: draft CAAP input pdj.docx; Berkeley heat events and Tmax.xlsx

Hi-

Congratulations on your CivicSpark graduation. At least I think that is where I hear you were last Wednesday.

Attached are my comments on the draft CAAP along with a workbook referred to in two of those comments that might be useful.

Happy to answer and questions or discuss any of my input as helpful.

Take care.

Preston

--

Preston Jordan 510 418-9660

[&]quot;If you don't like the news ... go out and make some of your own." - Scoop Nisker

The CAAP should refer to greenhouse pollution rather than emissions as per the Supreme Court decision finding the EPA can and must regulate greenhouse gases. As such the use of pollution rather than emissions is both more technically accurate and rhetorically conveys the negative consequences of elevating concentration of these gases in our atmosphere in a single word. "Pollution" is immediately recognized as something to eliminate and avoid. "Emissions" does not obviously require action.

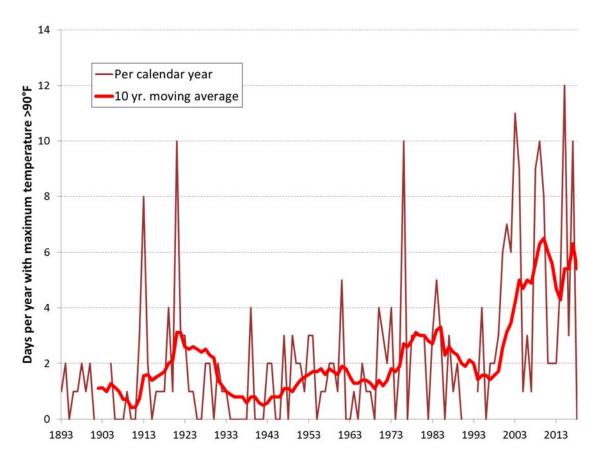
The four strategies should each be conveyed by short clear statements of the actions to be taken as is the case for the first statement, which is "Electrify our buildings." I suggest the following for the other three:

"Activate, share, and electrify our transportation" rather than "Transition to low-carbon transportation." The former covers improving conditions for sidewalk users, people biking and using other micromobility devices, public transportation, and electrifying private vehicles.

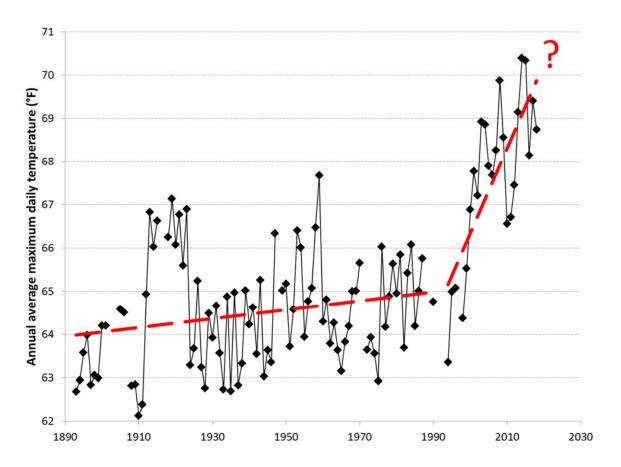
"Reduce, reuse, recycle." rather than "Make our economy carbon-free." In the explanation reduce can be defined as both the traditional reducing consumption and consuming less carbon-intensive products. The current prime example of the latter is reducing beef consumption and then other meat consumption.

"Increase tree cover, cool surfaces and other adaptations to extreme weather" rather than "Accelerate resilience for all."

Figure 1: The two decimal places should be deleted from the ordinate axis labels. The figure implies Albany only experiences one day per year above 90°F currently. The nearest meteorological station, which is in downtown Berkeley, indicates the historic average has risen from one to two during all of the last century to five already this century as shown below. This is germane to the urgency of resilience via measure to counter the urban heat island, such as increasing tree cover and cool surface installation.



Suggest further conveying urgency by including the following figure using data from the same meteorological station:



The workbook with these charts and the processed and raw data is attached for your use.

Figure 4: The comparison of greenhouse pollution released in 2010 to 2005 on this figure suggests the pollution from Western Forge and Flange was not removed from 2005 as required by prior motion of the Climate Change Committee (then Sustainability Committee). Western Forge and Flange moved to Texas so the Committee voted that Albany's inventory should not take credit for this reduction, which was estimated as 3,000 tonnes of CO2 pollution per year. This is approximately 5% of Albany's baseline pollution and so unconscionable to include in the baseline. Further, including it in the baseline risks the City not realizing the actual difficulty of honestly meeting the interim targets setting up for substantially more difficulty meeting the final target.

Figure 5: Out of date because it shows pollution from electricity. Waste in Figure 3 does not accord with goods in this figure. Water in this figure does not accord with no water in Figure 3. Information gathered at the time of development of the last CAP indicated water supply to Albany was essentially free of greenhouse pollution because it was almost entirely gravity flow from the Sierra to here.

Page 17: Question the 27% reduction based on Figure 5 suggesting this treats the departure of Western Forge and Flange as an actual reduction in greenhouse pollution.

Page 23: County should logically be above Regional given progression of other categories from local to national and international.

Actions 1.2.4, 1.2.5, 1.2.7 and 1.2.10: Move them to the top as they are more important than actions above them.

Action 1.2.5: Working with Stopwaste should be mentioned as it is joining with agencies in the other counties in the Bay Area to stand up a regional program providing incentives to mid market actors (installation contractors).

Action 1.2.7: This action should be expanded to include the option of movement along both policy axes of this idea. One axis is increasing the utility user taxes to fund mid-market incentives for electrification under 1.2.5 (which connection should be explicitly mentioned). The other axes is restructuring utility user taxes so they focus on natural gas as the polluting use rather than electricity. Each needs to happen independent of the other and they can be combined. Albany's existing utility user taxes on energy need to restructured. The utility user tax increase needs to occur to provide funds to subsidize electrification. Ideally this increase would be only on natural gas but it remains a policy decision to be examined if the value of increasing the tax on both natural gas and electricity because it is not possible to do so only on natural gas provides more benefit as a revenue source for mid-market subsidies than it does harm for not being structured only on pollution. Another aspect that should be mentioned is that the increase could be implemented all at once to allow the subsidy carrot to come into existence while the restructuring phases in over a decade to slowly increase the size of the stick. Movement along either axis could be combined with exempting low-income households from utility user taxes on energy, which would serve to also advance economic justice in Albany as these households currently pay a higher rather than lower percent of income to in taxes to the City.

Action 2.1.1: This or some other action should mention the connection between the percent of trips people choose to complete by sidewalk and the presence of street trees and therefore the connection to Action 4.1.1. This could be characterized as included gaps in tree cover into the gap analysis.

Action 2.1.2a: Change this to "Develop a motorist-separated cycling network throughout the City." Worldwide experience shows only such a network will result in meaningful absolute increases in the number of people choosing to bike. Locally this is evident by a far higher number trips on the Ohlone Greenway multi-use path than any other biking route in Albany. It should be noted this network would also serve users of other micromobility devices, such as electric scooters. This in turn will maintain conditions for sidewalk users as use of micromobility devices becomes more common.

Action 2.1.6: Either as part of this action or adding another action support the development of bus rapid transit on San Pablo Avenue and any other changes that will enhance the utility of buses over private vehicles.

Action 2.1.7: Specifically call out San Pablo Avenue, Solano Avenue, and area north of Brighton between San Pablo and Masonic Avenues. The latter has not been mentioned in prior conversations, the focus being upon San Pablo and Solano. However the area north of Brighton is the closest to a BART station and could support a substantial increase in allowed buildings heights because they would not appreciably shade adjacent single residence properties due to being north of them. Further, it appears the average lot size in this area is greater than along Solano suggesting the development of more

residences there may be more feasible there. This action should also note that upzoning will result in a greater supply of affordable residences due to Albany's 15% inclusionary housing requirement.

Action 2.2.3: Ahead of this action should be an action to levy a tax on gasoline to fund development of infrastructure for pollution-free modes. State law currently provides counties this authority. Ahead of the last election cycle MTC was contemplating putting a regional gasoline tax on the ballot using this authority because for the first time it polled well. Albany could support this, support Alameda County doing so alone, and could support the state legislature extending this authority to cities.

Action 3.2.4: Ahead of this action should be an action to require seismic retrofitting of multi residence soft story buildings and support retrofitting of single residence buildings. A year ago ABAG issued a study projecting one out of four residences would be made uninhabitable by a magnitude 7 earthquake on the Hayward Fault. A bit more than half due to the primary shaking and the rest due to the fires that would result. Loss and replacement of these buildings would result in the largest release of greenhouse pollution in Albany's history and so is worth avoiding for this along with so many other reasons. Further, this is one of the consumptive activities over which Albany actually has substantial control.

Approach 4.1: "Cool the City" rather than current language.

Action 4.1.1: The plan should also consider greater utilization by the city of its property along streets for expanding tree canopy. This property extends outside of the sidewalk throughout most of Albany, and quite far along many streets. Trees could be planted outside sidewalks on this property or sidewalks could be moved outward to allow more room for street trees. The latter is preferable as it would position trees to shade both the sidewalk and the road where they can do more to reduce the urban heat island. This is a longer term approach though as sidewalks can most efficiently be moved when they otherwise need repair. The plan should also consider converting partial on street parking spaces to tree bulbs. For instance there are locations where the distance between driveways is one and a half parking spaces long. The wasted space could be converted to a tree well, potentially with attendant stormwater runoff improvement features such as a bioswale.

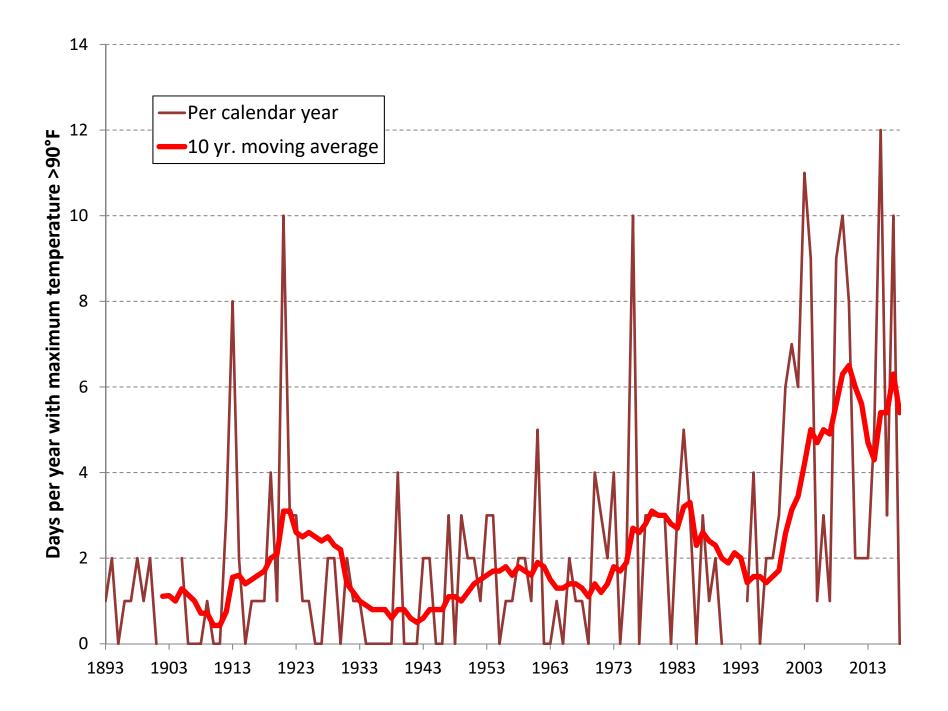
Action 4.1.1a: Facilitate installation of cool roofs. See LBNL sources for research

Action 4.1.1b: Install cool pavement where tree shading does not exist or cannot be created over the life of the pavement. See LBNL sources for research.

Action 4.2.1: This action should include consideration of converting underutilized parking areas to green space or green infrastructure, such as that on the east side of Masonic south of Dartmouth. Surveys have found parking demand in that block can be met on the west side of the street freeing up the east side to be added to the adjacent park allowing its expansion. Either this action or an added action should target gas phase out in the outermost branches of the gas distribution network in order to allow staged abandonment. This would provide the cobenefit of reduced fire risk after an earthquake, which in turn reduces the risk of massive greenhouse pollution resulting from those fires. This would also avoid generation of co pollutants such as those that ruined the health of so many 9-11 first responders and have made the water distribution system in Paradise non-usable.

Page 57: Additionally, the City will explore re-structuring the existing Utility Use Tax, which <u>currently</u> applies equally to natural gas usage and electricity usage, to <u>charge a tax only on natural gas</u> create an incentive for households and businesses to reduce natural gas use.

Page 57: Placing a tax measure on the ballot does not incur substantial cost. For instance, see the answer to "How much does it cost to place a measure on the ballot?" at https://www.albanyca.org/recreation/faq.



CAC Draft CAAP Comments

Wednesday, June 19, 2019

Overall Comments

- Consider revising targets
- Add specificity on targets like Portland's plan
- More about implementation
- Add a statement about that timeframe for implementation into the plan. Too many near/midterm actions
- Add more info to intro section, but also be more concise
- Address AUSD in the plan
- Add more information on our "vulnerable" communities
- What you can do section:
 - Add a section called "get informed and involved" suggesting people join local community groups and sign up for Carbon-Free Albany
 - o Transition to carbon free: Ride a bike, not just an electric bike
- Reorganize action sections based on priority

Electrification

- 1.2.3 Be more directive city engaging rental property owners to electrify buildings
- 1.2.6 is strange
- 1.2.7 take out "but"
- 1.2.8 don't do research –
- Split out 1.2.10 new vs existing buildings, these are different things and should be two different items
- 1.2.11 to support State efforts is too vague
- Add incentives for electric appliances

Transportation

- Remove "where feasible" for protected bike lanes in ATP
- Specific action for building bike infrastructure calling it out separately from ATP
- 2.1.2 should be focused on getting rid of fossil fuel vehicles
- 2.1.3 there is a lot of emphasis on designated rideshare is rideshare that significantly better for our environment?
- 2.2.1 EV charging infrastructure: want something specific for landlords/MFDs for charging stations
- Electric school bus to get kids from west side of town to the schools on the east side of town
- Help for purchasing EVs or how to purchase EVs

Carbon-Free Economy

- 3.2.4: training should also include designers and not just contractors
- 3.2.4: This needs to be included in the building code

- Explain why this section is important
- Explain how to quantify this section
- Add something about electrifying operations for the City
- Add information on consumption of plastics
- Farmer's Market isn't relevant to the plan
- Address air travel
- Add something about eating lower down the food chain

Resilience

- 4.2.1 is there a conflict between adaptation and GHG mitigation?
- 4.4.1. needs to address extreme heat, especially the western part of the City
- Work with volunteers to plant trees
- Address cool roofs and pavement
- Add water efficiency measure
- Reorganize to address highest to lowest risk

EDC Draft CAAP Comments

Wednesday, June 20, 2019

Allen Cain = AC Shaun Charles = SC Robert Cheasty = RC John Montagh = JM Stephanie Sala = SS Andrea Goldman = AG Aaron Tiedemann = AT

General Comments

AC - clarification on eliminating fossil fuel use. Doesn't like the term "elimination"

RC - Poorly written - needs an edit

- Repetitive
- Vague
- Edit it down

Having the goal of eliminating fossil fuel use is a laudable goal – we don't have a choice – we have to make this change – and we can do this, there's just a lack of will – but we can do this, it's possible.

SS - Support these efforts. From a business point of view:

In carbon-free economy section emphasize the role of shopping local in that it supports business resilience, reduces need to travel, etc.

- AT Good goal to eliminate fossil fuels. A lot of the goals here contradict Complete Streets Plan.
- SC Conflicted How would eliminating fossil fuels help businesses?
- AC "Shop dine and use Solano". Make it easy and affordable to walk bike. Implies that it is difficult and expensive to drive a vehicle. City gov shouldn't be in a position to discourage one thing over another.
- JM CAP is required.
- RC Plan may have some anti-car things it doesn't go against cars, just cars that burn fossil fuels and the EV trend is big and will continue. No reason why we can't ease out way from fossil fuel vehicles to more renewable options. "We don't have a planet B". We'll lose our shoreline, all of our airports, etc. Massive droughts and storms are becoming the new normal. If you think immigration problems are bad now imagine them with more extreme weather
- AC Hybrids not affordable.
- AT This plan doesn't exist in a vacuum. We don't have the power to change the grid or make EVs more affordable. This is what we do have the power to. This is our goal and this is what we have the power to effect, and that's part of a worldwide effort to affect this problem.
- RC Maybe he needs to speak for the CAC about the importance of this plan...

AG - Included a goal that offered assistance to people to help everybody to afford the changes that need to be made. We kind of already have this.

TSC Draft CAAP Comments

Thursday, June 27, 2019

Preston Jordan = PJ Farid Javandel = FJ Amy Paulsen = AP Roberst del Rosario = RR

General Comments

AP - Add reference to the Clean Fleet Policy in the CAAP

PJ – "Transition to Low-Carbon Transportation" isn't specific enough. Suggests "biking, walking, and electric vehicles"/more specific wording.

Transportation

2.1.1 -

PJ - developing and implementing an ATP not enough, measure should be about implementing a motorist separated bike network citywide. Include a % metric. Old CAP was more progressive about bike networks.

2.1.2 -

AP – Should say near-term for everything given that transportation emissions the biggest sector

PJ – There is a marginal benefit to listing mid-term due to changing zoning requirements. The parking situation could change drastically 10 years from now. Until more housing is built, not much additional demand for parking.

Comments from the Public

Matt Fields: Clarification question about current parking requirements in Albany – current policy does not make much sense to him. Suggests that we only have parking on one side of the street and the other side dedicated to bike lanes – he suggested this at the CAAP Community Workshop in January as well.

2.1.3 -

RR – seems counterproductive because it may actually increase VMT as it is in San Francisco. We should encourage carpooling.

2.1.4 -

No comments.

<u>2.1.5</u> –

PJ – Concern that there are a lot of measures. Would prefer maybe eliminating this one in order to trim measures.

PJ – Adding more context could help clarify why we keep this measure in the Plan.

AP – Doesn't agree that there are too many measures.

<u>2.1.6</u> –

RR – ACT already has this – could fill in the gaps with another service or encourage ACT to fill in those gaps. Target also has a gap in service. We could push ACT to have electric vehicles. Seems that right now the biggest barrier to transit is fare – maybe figure out how to remove this fare barrier or create a strategy for encouraging free transit.

PJ – ACT might not be able to address all gaps. Advocates for autonomous vehicles because it may actually be more cost-effective/feasible.

RR – Wouldn't be surprised if all transit autonomous in next 30 years.

FJ – we would need to contract out.

RR – look at demand response models – explore demand response services/microtransit to serve neighborhoods – own measure.

PJ – The CAP is also missing a measure for implementing a tax on gasoline in Albany. There is surprising elasticity for where people stop for gas – not feasible for cities to do this on their own yet, only counties can at the moment. It would take state action to extend that power, but keep a measure in the CAAP in case the opportunity comes along. Could use the revenue from the tax on gasoline to support the shuttle.

Approach: Density Through Infill Development

2.1.7

PJ – increasing building height limit so developers don't have to jump through hoops. Thinks this measure isn't clear, our zoning policies not consistent.

JB – We will be looking at this one and there is a grant we are pursuing.

Comments from the Public

Matt Fields: Jobs affect VMT more that home spaces. Suggests that the future is rural, not urban to accommodate renewable energy.

Matt Fields: Advocates for keeping the affordable housing element.

Resilience

4.1.1 -

PJ – more street trees make sidewalks and walking more appealing. We should recognize this in the measure, that there are transportation benefits as well. Suggests sidewalk changes/structural encroachments. Move sidewalks as they are repaired for more space for tree wells. The type of tree matters tremendously – even in areas with the same amount of vegetation space of other areas of the City have better plants and thus it looks like they have more space because more canopy cover due to the type of tree.

AP – on page 13 there are footnotes but no text to go with them.

SEJC Draft CAAP Comments

Tuesday, July 2, 2019

Judy Kerr = JK Bart Grossman = BG Margie Marks = MM Brian Parsley = BP

Electrification

BG —People are already stretched thin; some people simply aren't going to be able to do it. In some cases, we may need to pay for it in full. Concerned about that for all the sections, but the electrification section specifically he worries that people won't be able to afford & keep up. Rent increases could be an unintended consequence. We need to be more realistic about barriers to this Plan in general. We need to anticipate unintended consequences.

JK – City currently has incentives for low-income tax exemptions – this is a stepping stone for identifying individuals who need help for electrification, but there are some issues with this program. The Plan needs to do a better job of showing how we address equity. We seem to have made presumptions about equity.

MM –Only 60 people have applied to the low-income program, but 600 people eligible who aren't applying. Albany CAREs could help. Look at PG&Es low-income base to determine who needs the incentives most.

BG – Low-income gets more complicated when you're talking about this stuff.

BP – PG&E CAREs program for low-income data incentive program is great idea. Incentives always better than mandates. Consider labor costs, not just cost of equipment when encouraging electric appliances. Another problem is that natural gas is cheaper than electricity. The real struggle will be with businesses – they can't always go electric. All for new electric construction.

Comments from the Public on Electrification

Allen Marris: Clarification questions for icons. The engagement process is important community building. Tax returns and incentives not always aligned, keep that in mind. Look at a way to give incentives to those who need it the most.

David Danby: Question about a graphic in the presentation.

Allen Marris: Clarify the tax language on UUT measure - say where revenue would go.

Julie Winkelstein: 300 people not a big percentage of the population (survey responses). Didn't really talk to many people. A survey is an easy way of reaching out to the community. To get to the CAAP info is too many clicks on the website. Resilience implies that bad things are going to happen and we're telling people to buck up and deal with it. We don't want them to have to be resilient to it. Also need to think about natural gas as being better when PG&E power shutoffs start happening.

Leah Burrell: Homeless population wants to get involved in fighting climate change but they aren't engaged in the process. We are members of the community and a part of climate change. We need to engage homeless on this.

Transportation

JK – There are disability concerns that need to be taken into account in the new ATP. Introduce non-carbon-based transportation for elders & those with disabilities. Need to focus on protecting vulnerable populations – separate walkways for example.

BG – high percentage of disabled & seniors in Albany. A lot of these approaches aren't feasible. Uber/Lyft only feasible for those who can afford it. Afternoon busses are often empty, slow down traffic & increase pollution from people idling in traffic behind the bus. Need systems of public transit not experienced as a punishment. Don't make it harder for people to get around by car. Take a look at the future of public transit.

BP – Agree with BG. Difficult to get a kid to school & then get to work, and bus and bike are slower options. Efficiency of ACT and BART lacking. Cost of BART is problematic. Not every bicyclist is the same. Something in the ATP must benefit all cyclists, slow and fast. Wants to see less electric scooters, likes them less than electric bikes – they're problematic. Tripping hazard → need docks. Need to look at the options that have docking systems. Likes the electric shuttle idea, thinks it accommodates those with disabilities better. Wishes we could have a BART station in Albany.

Comments from the Public on Transportation

Allen Marris: Need to include/emphasize telecommuting → reduces amount of gas burned community, promotes better work life balance, solar power can power our computers.

David Danby: Public transit is going all-electric, but charging is still a question. Likes the idea of an electric shuttle, could help convince people to take BART. The shuttle would deal with the last mile concerns.

Leah Burrell: Hates public transit personally. Logistics are staggering. There has to be something else to help those with disabilities get around. Need to take into account that public transit doesn't address disability logistics. This world is not user friendly for disabled persons.

Julie Winkelstein: Important to address disabilities. Expand goal in vision – not everyone can walk or bike. Looking at the vision statement: Don't use the term "vulnerable groups".

Transportation/Housing

2.1.7 & 2.1.8

BG – Contradiction between increasing density and reducing parking. Cannot assume that reducing parking will increase public transit use. When you reduce parking you create a situation where people can't park. Parking study ended at 7pm – concerns with the data. We have a responsibility to look at reality – can't do "wouldn't it be good if". Need an alternative that actually works. If we're moving in the direction of EVs we can't get rid of parking. Can't rely on ineffective transit.

BP – likes the idea of higher density in the right zone (San Pablo). Reality is that without reliable public transit, can't give a developer more dwellings for less parking.

JK – Heart doesn't bleed terribly for developers. Parking swap program should somehow benefit those who live here without cars, who are low-income. A free/subsidized transit measure would justify an equity icon in that measure. Need to incentivize transit, incentivize people to not have cars.

Carbon-Free Economy & Resilience

BP - Having a system where someone comes & picks up food is great. This needs to happen sooner rather than later in implementation of the Plan.

Comments from the Public

Peter Campbell: We need to reshape society to effectively address climate change.

PZC Draft CAAP Comments

Wednesday, July 10, 2019

Doug Donaldson – DD Megan Jennings – MJ Christopher Kent – CK Elizabeth Watty – EW

Overall Comments

DD – "If not Albany, who?" → Who? Who is "we" in the document? Climate Action Committee? Council? Not a very governmental document.

Concerned about the limited pool of renewable energy available. We are a rich city procuring clean energy, who does that mean we are taking it away from? Are we relying too heavily on EBCE to provide carbon-free electricity?

MJ – Donaldson has an interesting observation. This is something going on at the state level, infrastructure improvements are allowing for more energy generation.

DD – This should be more of an Albany Plan. The Plan is missing:

- Encouraging more solar panels. Thinks we should be encouraging more local solar because that also incentivizes other things such as electric vehicles and solar hot water heating.
- DD is a landlord, wants to see us encouraging landlords to install solar. There is nothing in here about solar hot water heaters. How can we individually meter? Help our multifamily properties become more energy efficient and install solar.
- There is a lot in the Plan about encouraging bike/active transit. Does not think that will really move the needle maybe less than 1%. Albany and the US will still be auto-oriented. Maybe a goal should be to increase active transit 5% that could encourage all kinds of improvements in bicycling. Worried that Uber and Lyft will increase greenhouse gas emissions, rather than decrease them downtown San Francisco is an example of this.

CK – Likes the intro. Thinks some of the language in the Plan is not very Albany-specific, generic to any community.

Specifically on the Vision page:

- Take out "are the norm" in the jobs bullet. Seems like we are always assuming that we are going to have, but we don't want that.
- Equity Make the wording more Albany-specific.
- Locally sourced renewable power solar panels?

MJ – Good draft. The sector that is responsible for the most emissions is transportation, but the transportation section is not of the same magnitude as the other sections – there are more action items for the electrification section. How do we get people to stop driving their cars so much? How are we going to reach that goal? How can we increase access to/usership of BART? The first/last mile issue is a huge problem in Albany. Always liked the idea of a shuttle – that should be a high priority. Help people

get to ferry service in Richmond, potentially to a ferry in Berkeley. That also leads to traffic decongestion.

Need to do more to involve the school district. Can't talk about the overall City reducing emissions drastically without involving the school district. Need to talk more about AUSD in the Plan. Look at school food service, waste management \rightarrow provide resources and incentives to get them on board.

CK – Currently no protection of trees on private property in Albany, but other cities do this – incorporate that into the Tree Master Plan measure.

DD - 3.2.5 – The Farmers' Market hasn't worked here before, and we have other Farmers' Markets close by, so not sure we need to have this in the CAAP. Suggests striking this measure.

4.2.6 - Add in El Cerrito and Contra Costa County.

Educate the community on green infrastructure improvements – add in policy to design and encourage retention basins and rain gardens. Implement a 501c3 requirements for all non-exempt development – maybe that should be acknowledged in here.

CK – We could require it on street projects, where most of the pollution comes from.

CK – So many ways we can tie trees and green infrastructure together.

Electrification

EW - The restaurant industry is a big part of our culture and economic engine – don't be naïve and assume someday everyone will make the switch to electric stoves. People in Albany are foodies, and may not want to give up gas cooking. Be cognizant of this, explore this a little more.

DD – Natural gas infrastructure in Albany is totally built up. Why would we want to get rid of it? That's a radical thing to do.

EW – Other measures in here are a lot less painful with greater bang for our buck. Other things we can do in the near term that are less painful changes.

MJ – Could not bring self to buy electric stove – it's an emotional issue for a lot of people. People feel very attached to gas stoves. Will require phasing, meet people where they're at.

EW – In this section, give a pamphlet that talks about benefits of electric v. gas appliances. Give people educated options and show where the benefits are.

1.1.1

DD – Not sure he is in favor of this measure. We have existing gas infrastructure in place, would affect restaurants, etc.

MJ – Favors this for new construction, but not sure for retrofits. If it has a long phase in period, or different compliance milestones, and if there are exceptions that can be granted, that would help. It will be really difficult in the near term to have an all or nothing approach. In favor of the intent of this measure, but it needs to be moderated to protect total freak out. Not sure that it makes sense to pivot away from existing infrastructure.

DD – Add another house sign to this measure because it will be expensive for homeowners.

1.2.8 & 1.2.10

EW – "Retrofit" implies seismic retrofit. Use "Remodel" in place.

CK – If the state is going this way and we start pushing electric, we could be getting ahead of the curve, which is good.

EW – Don't make people change out infrastructure/appliances that aren't broken. There is inherent green-ness in the things we already have. Existing infrastructure inherently green.

DD – Doesn't like "Approach: Mandate fuel switching". Suggests changing to "Identify pathway.." which is much more reasonable.

EW - "Incentivize fuel-switching"

DD – On 1.2.11 – How about Title 24 building changes? Where does that come in here? Does Albany want to encourage changes in Title 24? Harder to meet Title 24 with heat pumps.

Add something in about solar hot water heating in multifamily buildings.

Transportation/Land Use

2.1.7 & 2.1.8

DD –Doing a lot with respect to parking – Maybe this policy should reflect what we already have. Should be put in planning & zoning language to fit what they are already doing.

EW – Our ADU policy already does this because you can add an ADU without parking. Unless there is a different intent here, that already exists.

2.1.7: Allowing projects to build out to their densities. Not sure what this measure is calling out.

MJ - 2.1.7 - Explore increasing densities – may be CEQA constraints. Consider expanding densities where appropriate.

2.2.2

EW – Not sure this is appropriate for a planning code. Not sure if the planning code is the right place for this, but supports the goal.

EW - Clarify language – public chargers v. private chargers.

CK – Make it easier for people to do, rather than hard.

EW – Be careful that there aren't encroachments/screening in front of sidewalks.

EW – Getting us out of our cars critical, addressing the first/last mile very critical → many co-benefits related to addressing this. Really likes the shuttle idea.

Carbon-Free Economy

<u>3.2.4</u>

No comments.

PROS Draft CAAP Comments

Thursday, July 11, 2019

Todd Abbot = TA

Ben Noble = BN

Hillary Sardinas = HS

Harriet Patterson = HP

General Comments:

HP – Make clear in the Implementation Plan who are the drivers and who is implementing.

HS – Most of the incentive programs based on the electrification section, but EBMUD has had for a long time an incentive program, particularly during the drought, for rain barrels and drought tolerant landscaping. This improves resiliency → alternate water source in earthquake etc. Partner with EBMUD to be permanent incentive programs, increase promotion. Wants to see Albany reclaim the water. Gray Water Action another great resource for us to tap into.

HS works for Alameda County Resource Conservation District, could potentially support a lot of these measures.

BN – Include the term affordable housing in the vision statement.

The term sharing economy appears in vision, which suggests that it's an important concept. Unclear what the City's role is in this.

Engaged bullet points – Having a statement about proactive City leadership is important. Be proactive, not reactive. The Plan somewhere should mention importance of youth engagement and leadership.

2.1.1 – Unclear if new ATP is really necessary, versus making sure the ATP is adequately implemented – that may be a better use of limited City resources.

Would like to see stronger language in the Plan related to infill development. Call for proactive efforts on the City's part to produce affordable housing. Move away from a reactive model. Invest City resources and make it a pattern.

2.1.7 – Potentially expand the area where multifamily housing is allowed.

Include some language about the importance of maintaining a regional perspective, and our decisions' impact on the greater community.

HS – Make it easier for people to plant on their roofs. Neat thing going around – pollinator gardens on bus stop roofs. Think about creative places to make gardens/green more areas.

Public Comment

James Fawn – Concern about rising groundwater levels – has noticed that groundwater is rising, could be more severe due to climate change. What can City do about it?

Concerned about spreading diseases – Are any of these going to be threats in Albany? If so, what can we do about it?

Would be good to know about what trees are considered more versus less flammable. Any Plan to over time replace the Eucalyptus with a less flammable option?

Gerhard Brostrom – Founder of Transition Albany. Thrilled to see the results of the CAAP. Look forward to providing help in refining of the Plan and carrying it out. Climate change is a focus for Transition Albany- believes that if all governments and people get involved right now, we can do it. We are here to help you, hope to work with the City.

Carbon-Free Economy

3.2.5

HP – Location concerns for Farmers' Market. Loves the idea of a farmers' market, thinks El Cerrito has a great one. When deciding where to place another, think about its proximity to already existing markets, try to spread them out. Great to have a farmers' market available every day.

3.2.6

No comments

Resilience

4.1.1

Question about overlap between this measure and the PROS workplan.

BN – Sounds similar to a workplan item that the Commission is supportive of. The City should do more to develop policy for street trees. This item should be prioritized in the CAAP and the PROS workplan.

TA – This action also mentions private street trees. How do you feel about that?

BN – That should continue to be discussed.

TA – Suggests adding a business owner icon in addition to homeowner icon and city cost icon. Or be clear that it's business/homeowner and not the City.

HS – Question about implementation. Include ideas about how it will be accomplished/by who.

BN – Possible that the last sentence in 4.1.1 could be its own measure, because it is about private trees.

TA – Did we decide we didn't like the term "street"? "Street tree" versus "City tree". This measure might need to cover trees in parks. Check terminology to be consistent across documents.

HP – May be more than one nested topic.

TA – Should be both a City and Street Tree Plan

4.2.5

HS – Shouldn't be just high sequestration, but also drought adaptive. Also include native plants. Update irrigation to ensure it is more water efficient. Ensure that these plants survive.

TA – Surprised drought concerns did not appear more in this document, particularly in the resilience section.

Extend purple pipe reclaimed water from greenway to private property.

Strong supporter of something that protects grass in parks. We'll ask residents to get rid of grass, so keep grass in parks so they can still enjoy grass but as a community resource.

HS – There is native grass we can use that is more drought tolerant. Transition grass to climate resilient grass/drought tolerant.

4.3.1

HS – City is still working on the stream maintenance program, streamline permitting program?

Chelle – Not sure.

HS − If you can have an S&P that will allow you to go in and routinely manage creeks in a comprehensive way → this could be a key piece of the Implementation Plan. Mechanism for getting it through a lot more quickly than applying for each permit at a time.

4.3.2

HS – The Diablo Valley Fire Safe Council could be a partner – grants & programs available. Shelter in place and evacuation planning as well. They are a great resource.

HS – Vegetations management should include re-planting, not just fuel reduction. Replanting Plan necessary. Recreate dense canopy that can support the bird and butterfly species that live there.

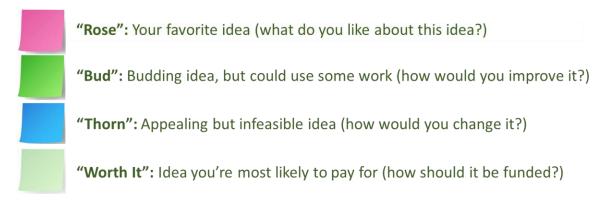
Comments from Climate Action & Adaptation Community Workshop

Comments came from the posters, comment cards (1 response), and the notecard activity.

Comments typed as they were written by event attendees, with little to no grammatical/spelling correction (if a word was spelled wrong in such a way that it did not make sense, it was corrected).

For the posters, the topic/emissions source/climate effect is <u>underlined</u>. The comments/suggestions are bulleted (•), and the comments written on colored sticky notes (key below) are bulleted underneath (o). Not all sticky notes had comments on them.

The sticky notes follow the following key:



Wildfire and Smoke:

- Have plans to coordinate information with surrounding communities
- Vegetation management on Albany Hill and in overgrown creek corridors
 - o Rose: Keep doing it
- Emergency plan in case of major fire on Berkeley Hills
 - o Worth It: Berkeley Hills Contingency Plan
- Emergency alarms throughout city
- Masks & inhaler distribution
 - o Rose
- To restrict fire risk, plant restoration programs need to reduce broom, invasive ivy, pampas grass, & some gum trees
- Is there a FireWise NFPA program in the East Bay?
- Equip public buildings (schools!) with air purifiers & masks
 - Rose: Easy way to ensure every student has access to healthy air
- Increase public info on response during events (beforehand)

Sea Level Rise & Flooding

 Partner with EBMUD to create incentives for rain barrels for individuals & residents (also will be useful for disasters)

- Green: not sure if EBMUD does this
- Compost application in soils to increase water holding capacity
- Increase green infrastructure (eg. Curb cuts & rain gardens)
 - Rose: Lots of examples of how to do it well
- "Dig once" embed in all capital projects
- Coastal restoration and planning to help more businesses/infrastructure for flood-prone areas along the coast
- Adopt a storm drain volunteer program (like in Oakland)
 - Worth It: Drainage is a large factor during floods and having a program to mitigate poor drainage that could be avoided would be a low cost solution.
- Re-establish oyster reefs
 - o Rose: Great idea New York City is doing this
- Incorporate SLR into CIP process

Water Scarcity

- Pumping gray water into an aquifer
- Reclaim & reuse graywater
- Leak detection
 - o Worth It
- Instead of raising Shasta Dam, use billions \$ to equip homeowners with rainwater collection →
 instant water reserves in case of fire.
- Encourage installation of tech for real-time monitoring of water usage. Gives feedback on use throughout the home and alerts when there are leaks
 - o Rose
 - Worth It
- Partner with EBMUD and/or grey water action to support residential rain barrels!
 - o Rose
- Water efficient sprinklers
- Trainings/free classes on drought tolerant landscapes
- Contest to encourage water reduction goals per household & per capita, 35 → 55 gal/person a day!
- Educate kids in Albany schools about how precious water is field trips to learn outdoors!
- *Drip irrigation workshops
- Change law to mandate unit owners in multi-unit housing to be billed for their water usage (currently paid by HOA as a whole does not incentivize conservation by unit owners)
 - Rose: Good idea but not practical because you would need individual water meters.
 Probably is a simple tech solution for this.
- Mandate dry gardens for ornamentals and lawns
 - o Rose x 3
- How-to workshops for rainwater collection and irrigation
 - o Bud
- Keep runoff in yards, not to storm sewer

- Encourage replacing or eliminating size of lawn. Up to 60% water use is used on landscaping →
 plant natives
 - o Rose
- Give away free aerators & showerheads
- Incentives for low-flow toilets as low as .8 gal/flush

Environmental Preservation & Repair

- Assure that means of carbon reduction don't destroy or ignore natural wildlife such as plants, insects, mammals, birds, etc. native to the area
- Native plant list for Albany residents
 - o Rose: Native plant education
- Signage about native gardening/landscaping in parks with gardens
- Bioswales
- Encourage eco-friendly AC as it becomes more necessary

Extreme Heat

- Event-specific geoengineering
- LA piloted white roads. Was this successful/worth replicating?
- Albedo modification
- Encourage light-colored or reflective rooftops
- Plant more trees to offset urban heat-island effect
 - o Rose: Very doable
 - Rose x 5 (6 Rose sticky notes total)
- More trees & tree canopy
 - Worth it: More trees
- Vertical gardens (like in France)
 - o Thorn: Need to be more clear as to how they would help
- Community energy generation (microgrid) in event of outages
 - o Bud
- Replace asphalt with "plant & soil scapes"
- Provide community shelters and healthcare
- More trees! More school gardens.
 - Rose: TREES!! (shade, etc.)
- Fire respirators to low-income residents during fire events
- Paint roads white
- Solar panels over parking lots

Carbon-Sequestration

- Plant & preserve the urban forest (trees)
- Work with StopWaste to add compost/composted mulch strategically to increase soil organic matter, couple with planting of trees & shrubs
- More woody shrubs in parks (e.g. Ohlone Greenway, Terrace Park)
- City planting program expanded beyond street trees (e.g. native perennial grasses)

- Plant example list for residents
- Buy & protect rainforest funded through a bond measure
 - Worth It
 - Worth It: I'd be willing to vote and pay for this
- Review "Project Drawdown" ideas to expand City's capacity
- Green roofs/vertical gardens
- Rain gardens
- Educate and encourage use of carbon sequestering building materials and low emitted carbon options → plant-based (wood, straw, bamboo, hemp, cork); low-carbon concretes (clay, adobe, etc.); build less/smaller/efficiently
 - o Bud.
- Encourage trees on the Ohlone Greenway
- More street trees' "sponsor a tree" program
 - o Rose.
- Expand program w/ cub scouts to plant natives throughout city (e.g. parks, medians)
 - o Rose.
- Re-think grass at Pierce St. Park maybe make it into a carbon-sequestering landscape
- Education!
- Trim more street trees instead of removing them if diseased
- Expand urban forester capacity
- Re-establish oyster reefs off coast
- Prioritize or mandate "green cement" in infrastructure projects
 - o Rose
- Encourage urban agriculture! Front & back yards, more community gardens.
 - o Rose.
- Plant more fruit trees
- Work w/ other cities/county to support their carbon drawdown projects

Consumption

- Put fee (or prohibit) on plastic take-out containers
 - Rose: Businesses' supporting waste reduction
- Encourage businesses who offer reusable options instead of disposable to-go containers, utensils, cups, etc.
- Consider where businesses/industry source materials to reduce GHG/waste pre-consumption
- Public education on how to purchase grocery items w/out plastics. i.e. glass jars and cloth bags for produce. Signs on buses, workshops by City, Park & Rec. Reuse & Recycle Days
 - o Rose: Yes education at Albany schools start young
 - o Bud: Advertise @ the DMV (this one was next to the "signs on buses" statement)
- Schools: add a curriculum on waste reduction: zero organics in landfills, more reusables, less disposables → zero waste schools
 - Rose: Public schools are a strong tool already in place we should use them to get the message out early & often about the need to reduce waste
 - o Rose: Educate our kids (K-12), they will teach their parents how to reduce waste

- Bud: Curricula @ elementary/middle/high school; Teach about complete waste cycle first, making reduction an obvious & critical next step
- Smaller portions served at restaurants
- Educate on IPM to reduce HHW consumption
- Encourage planting/purchase of fruit trees, edible garden plants
- Encourage use of reusable water bottles through water filling stations, give-aways
- Fees on plastic containers like the CRVs for glass containers
- Participate in regional approach to reducing single-use plastics. i.e. Bay Area-wide drop off of reusable to-go containers
 - Rose: Yes encourage re-use swaps & repair stations.
- Reduce/eliminate single-use products from all municipal events
- Schools: More local/sustainable foods in cafeteria
 - o Rose x 2
- How about a real-life plastic bag ban? (Styrofoam ban too). Still plastic bags and single use plastic containers used at restaurants, stores (Target, etc.). Also, plastic utensils and straws!
- Public educ. On what can & cannot be recycled. Better recycling program in schools.
- Less beef consumption.
 - o Rose
- More reusable businesses
- Creating network for redistribution/reuse of goods
 - o Rose: Zero Waste center with bulk products, repair businesses, 2nd hand items...
 - o Rose: Regional network of redistribution/reusable
 - Rose: Network of redistribution/reuse
 - Worth It: I would invest in this one.
- Reduce airline travel
- Educate people on flying non-stop
- Charge garbage collection (waste) by weight, not volume → incentive to take out wet waste (organics) from landfill.
- · Better detailed info on recycling
- Recycled paper in municipal buildings.
- Better monitoring/enforcement of construction & demolition waste/building material reuse
- Organize neighborhoods for resource sharing
 - o Rose: CERT network can help with organizing neighborhood-resource sharing!
- Citywide bulletin board
- Encourage produce boxes imperfect produce
 - o Bud
- Encourage bulk purchases
- Promote free recycle sites like Buy Nothing Albany (Facebook).
- Encourage local businesses to use eco-friendly takeout containers

Energy Use in Buildings

Electricity:

Solar panels on roof of New Ocean View School

- o Rose: Love!
- Encourage home solar
 - Rose: Yes!! I love the solar panel incentives being offered by the EBC
- Encourage insulation & green roofs for better climate control
- Streamline the process of going solar: education & case studies, resources/simple calculator, expedite permitting/decrease soft costs/reduced permitting fees.
 - o Bud: Partner with a local solar company to help achieve this?
 - Worth It: Should have good value for investment.
 - o Rose: Streamline solar process.
 - Rose
- Pilot/example (+ heat pump) energy retrofits (+/- 5?)
 - o Rose: A home tour and bring EBCE to see it! (anytime? By appt.)
- Rebate or incentive programs
 - o Bud: Explore and promote commercial & residential PACE programs.
 - Rose: Incentives tend to be effective.
 - o Rose: More incentives help people insulate their homes.
- Behavior awareness: phantom loads, living w/o a 2nd fridge (#1 energy user)
 - o Thorn
 - Bud: LOW HANGING FRUIT
- Encourage opt-up in EBCE to 100% renewable
- I have tar + gravel roof & was told not compatible with solar panels so encourage compatible roofing materials. Peer-Peer Roofing Projects → Generalize.
 - o Rose: Yes!
- PV on AHS/schools
- Block-level retrofits for lower cost
- City install solar on City buildings (& over parking lots) and share real-time electricity production graphs/data & economics of it so residents can see positive impact & viability in foggy Albany
 - Rose: & at schools!
 - Rose: Pay back period tracked as well as carbon footprint reduction with time (life-cycle)
 - o Rose: Solar panels over parking = cooler temperature in urban environment
- UCB Village residents don't know how much energy their unit is using. If facilities can't make that
 info available, at best building usage. Can start electricity <u>challenge</u> there.
- Educate Albany residents about SunShares program.

Natural Gas:

- Electrification Expo (Feb. 7th Ed Roberts Campus), education, information on costs and benefits, options (heat pumps, induction cooling, etc.)
 - Worth It
- Contractor education on heat pumps.
- Prohibiting natural gas in new buildings! "Stretch" codes for greater efficiency.
 - Bud X 3
 - Bud: Work w/ other regional partners to support development & implementation of electrification stretch codes!
 - o Thorn: Discourage through higher fee for installing gas-fitted units

- Thorn: Too extreme to prohib. Maybe incentives
- Utility use tax to incentivize change in existing buildings
 - o Worth it
 - Worth It: Natural gas use tax funds are used for incentives to educate & incentivize fuel switching to heat pumps for heating & HW
 - o Bud
 - o Bud: 0 tax on elec. & most tax on gas
 - o Rose X 2
 - Rose: Good idea may face some challenges
- Mitigation fee (escalating) for incentivizing change
- Encourage (tankless) on-demand hot water heaters or electric
 - o Rose: Seems very feasible.
- Bulk purchase programs
- Subsidize insulation retrofits.
 - o Worth It.
 - Worth It: Subsidize insulation.
 - Worth It: Old houses need insulation
 - Worth it: Credit on property tax if homeowner installs

Gas-Powered Vehicles:

- Share charging stations
- Car share programs, dedicated spaces
- Carpools facilitate them
- Casual carpool site
 - o Bud.
 - o Rose.
 - o Rose: So needed!
- All taxi, Uber, Lyft = e-car or carbon tax
- Albany as "walkable" "bikeable" health benefits
- Eliminate tax on electricity promote e-cars
 - Rose
- Availability of charging stations on street parking. Free charging.
 - o Bud.
- Free bikes
- Pedi-cabs
- Free bus for youth, seniors
- Less accessible to cars
- Ride share for longer trips
 - o Bud: Ride sharing
- Non-gas transport frequent use stamps
- Priority right-of-way for bikes & peds
- Bike & walk tours in City
 - o Rose: gets people out & in community to experience City

- (Existing) campus shuttle free to students
- Build light rail transit along San Pablo to Downtown Oakland or streetcar
- Support transition to e-vehicles
 - Thorn: New cars are very expensive & new vehicles are not frequently purchased by lower income houses/families
- Focus on older cars
- Package rates increase \$ commercial & residential
- Incentive for e-vehicle parking rates, space permits
 - o Bud
- Encourage increase housing density, discourage cars, parking, reduce need
 - Rose: Housing density
- More people could live closer to jobs, less commuting
 - o Rose: EV Car sharing
 - Rose: Infill development of housing: This is necessary, but <u>must</u> be linked to effective transportation (see suggestion on shuttles).
 - Thorn: Humans are not robots, you can't expect them to live immediately adjacent to work spaces
- Walking school bus expand, reduce driving to school, more regular times, days.
 - Worth It: WSB low to no cost
- Add BART station in Albany
 - o Rose: great idea, will increase pedestrian access to Albany
 - o Rose.
 - o Thorn.
 - o Thorn: BART station need to increase density around new station site
 - \circ BART station \checkmark
- Require vehicle charging station with remodel, purchase
 - o Thorn: Requirements are challenging incentivize it instead
- Bus lanes
- Expand plug-share
- Richmond ferry service, Berkeley
- Capitol Corridor stop in Albany
- Require all new City fleet vehicles to be zero-emission vehicles
 - Worth It.
 - o Rose.
- Bike lanes more, San Pablo Ave., make safer, cycle tracks protected.
 - o Rose. X 2
 - Worth It.
- Fewer cars limit parking in residential bike lanes on all streets (to only one side of street (written by someone else))
 - Worth It: Regional connected bike network
- Public Trans more freq. buses, shuttle to BART
 - o Rose, X 2
 - Bud: More frequent buses need to work with regional agencies & nearby cities

- Free shuttles to Solano, San Pablo, BART
- Car free sections, streets, days, "Sunday Car Free"
 - o Rose
 - Rose: LET'S DO THIS! (Awareness)
 - o Worth It: !
- EV Charging @ U Village, rental prop.
 - o Bud.
 - Bud: Incentives & permitting for curb-side EV charging
- Education to residents on ped + bike safety, + motorists
 - o Rose.
- More ped cross walks w/ lights
 - Worth It: Tax me to pay for more lighting.
- Solar paved bike lanes
- Incentive for home charge stations
- Cars & buses powered by Bio-gas
- Hydrogen fuel station
- Improve safety of ped & bike street crossings on San Pablo & Buchannan to encourage walking/bike
- Bridge across Cerrito Creek on Adams to encourage regional bike/ped
 - o Rose
 - o Worth It: Yes! Connect to bike lanes on Carlson, EC, Raven 99, etc.
 - Worth It

Comment Cards:

(Please use this comment card to write down any additional comments you have about the City's Climate Action and Adaptation Plan and place it in the comment card box prior to leaving the workshop.)

 Prioritize resilience & mitigation in capital improvement plan process. All capital investments should require climate (sea-level, heat, etc.) considerations in order to be included. Ruberic should include co-benefits of climate change prep and give extra consideration to projects that address climate issues.

Notecard Activity Responses:

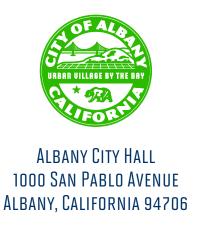
(By 2050, how do you hope Albany will have changed?)

- A more inclusive engagement from all cultural groups on civic matters of interest.
- We have places for people to live here, so they no longer have to drive in from the Central Valley to work in the Bay Area.
- Require buildings to convert to electric heating.
- Reduced waste production by >50%; zero emissions; charging stations.
- World class bike infrastructure
- All municipal buildings and all new construction will be electrified and on renewables
- Regular communication about Albany climate status and how we can help.

- More biking.
- More trees to offset urban heat island effect and sequester carbon
- A lot more charging stations (or access to garbage for Mr. Fusion car power)
- All households use electric vehicles and charge with renewable energy!
- More trees! (tree canopy)
- Have trolleys running again!
- More solar panels!
- Solar & battery storage on all school, commercial and public space.
- >1/2 of residents will feel comfortable biking to all destinations in town.
- Dense housing/commercial along main through fores,. Solano street a pedestrian/bike mall. Solar power generation on schools & city buildings. MORE TREES.
- Complete streets that support many modes of transportation throughout town.
- By 2050, we will be ahead of targets on reductions through largely positive lifestyle changes
- Solar powered homes.
- Zero Waste City!

EMAILS RECEIVED REGARDING AGENDA ITEMS

CITY OF ALBANY, CALIFORNIA



Study Session: Climate Action & Adaptation Plan

> CITY COUNCIL MEETING SEPTEMBER 16, 2019

From: Theresa Halula
To: citycouncil
Cc: theresa halula

Subject: Comment for Draft Climate Action and Adaptation Plan

Date: Monday, September 16, 2019 11:49:17 AM

Albany City Council Member and Citizens of the City of Albany City Council Meeting September 16, 2019 Open Comment Period.

These comments are intended to be shared with the team developing the Climate Action and Adaptation Plan for the city. As a member of the Gill Tract Community Farm Project I have a desire to report on our progress as it relates to the city's long term goals for a livable village, sustainable city and resilience for our population. We appreciate the opportunity to support the City of Albany via active engagement from our members to assist your efforts to drive down carbon emissions.

We would like to share our message with the City Council. We strive to provide food security by growing food sustaniably, teaching in the community about food production and offer a center to build community relationships. All are welcome to participate at the farm during our open hours. The Gill Tract Community Farm has been growing food and medicinal herbs organically since 2012. In additional to our large community of volunteers, we also have won the support of the Alameda and Contra Costa Master Gardeners Program the Californa Agricultural Extention Representatives and many other nonprofit community-based organizations working for food security in the East Bay. We strive to and continue to grow in our ability to reach those with the greatest need for fresh and nutritious produce locally. We have become a stable and community-based resource teaching local sustainability and resilience, teaching each other how to grow food in our home gardens, how to build stronger ties with each other and to act as a center for community change.

With growing support in Albany, Berkeley, El Cerrito, and the University of California, Berkeley the Gill Tract Community Farm is launching plans to expand our programs for community development by bringing on staff to better organize our efforts to reach out into the community. We support the Climate Action and Adaption Plan the city is developing. We want to be part of the city's effort to reach these critical goals. We would be happy to meet with you to discuss our program further as the Climate Action Plan moves forward.

Theresa Halula
Gill Tract Community Farm Working Group Member

From: Dan Johnson
To: citycouncil
Subject: Comments on CAAP

Date: Monday, September 16, 2019 12:16:57 PM

Attachments: image.png

Council members and staff.

Thank you for the opportunity to provide input on the CAAP. Specific comments:

- 1) Goal date for Zero Carbon/ Zero Emissions city is 2045, not 2050. <u>State goal is 2045</u>; Albany would be a laggard, not a leader, to use 2050
- 2) Interim goal needs to be -40% carbon by 2030---I think this might be consistent with -60% by 2035---or the 2045 date is not achievable, and the integrated emissions over the timeline exceed our allowance
- 3) Should be included specifically in the plan:
 - Contact vendors of fossil fuels in Albany (gasoline dispensaries, PG&E, etc.) and tell them they must cut sales 40% in the next 10 years; for PG&E, no new connections are allowed, effectively immediately (2020), and all vendors need a plan in place to exit this market and move customers to other energy sources. If they don't help with this, they are in violation of Albany's Climate Plan.
 - We want this to be a win-win for the vendors, for example, help PG&E decommission it's dangerous and money-losing gas infrastructure, which is also a PG&E goal. They would prefer no gas customers. What is the plan for the gasoline dispensaries? They need a new business model to thrive.
 - Extend this thinking to other businesses affected directly by the CAAP plan; it's actually a business plan for them
- 4) Yes, **no new gas connections starting 1/1/2020**. This is consistent with other Bay Area cities, it would be a laggard position to not adopt this policy.
- 5) Please target a much greater reduction in VMT. Page 33 indicates only 25% reduction in passenger vehicle VMT by 2050. This needs to be more aggressive. Target a VMT cut of 50% by 2050.
 - Chart on page 12 shows nearly 25% reduction in transportation carbon from 2005->2017 was already achieved, with nearly 40% reduction by 2025, but nearly a flat line for transportation carbon from 2025 to 2050---why?

90,000 80,000 70,000 ■ Nonresidential Electricity 60,000 ■ Waste MT CO,e 50,000 ■ Nonresidential gas ■ Residential gas 40,000 ■ Residential Electricity 30,000 ■ Transportation 20.000 10,000

Figure 4. Albany community greenhouse gas emissions forecast from 2025 to 2050.

2015

2017

2025

• Achieve -50% VMT by 2050 with land use changes: **start with safe routes to school: protected bike lanes that are buffered by landscape**: big trees, stormwater retention.

2035

2040

2030

- Goal that *no child in Albany should NEED to be driven to school for their safety*
- 60% of my 2nd Grader's classmates get to Marin Elementary by car. In a city less than 1 squ. mile, this is disgusting. The parents feel so unsafe about walking and biking that they must drive the children for their own protection. Other factors too. Identify these and correct them.
- This is a situation that the Council has created through land-use planning directives (public rights of way, street design), and it's within the Council's power to provide safe and appealing routes to school for all Albany children that do not involve strapping into multi-ton steel shells.

Thank you.

Dan Johnson 510-325-5672 cell From: <u>Douglas Donaldson</u>

To: <u>citycouncil</u>

Subject: Climate Action Plan Comments

 Date:
 Monday, September 16, 2019 8:37:11 PM

 Attachments:
 Climate Action Plan Comments - Donaldson.docx

Hello Council,

Here are my notes for the comments I made at the City Council Study Session tonight. I ran out of time before I could make the last 3 points. Please add this to the record.

Thanks,

Doug

Doug Donaldson 627 Spokane Ave. Albany, CA 94706 (510) 524-4835

EMAIL ATTACHMENT SUBMITTED BY DOUG DONALDSON, 9/16 8:37 EMAIL

- P. 4 If not Albany, Who? Statement this should come from the City Council, not an anonymous "We." This page should be entirely re-written.
- P. 6: Strategies over stated: "We'll convert our natural gas infrastructure" We'll eliminate fossil fuel use" What? Won't happen. We all know that, and language to this effect has no business in a City adopted Plan.
- P32: Electrify our buildings? With EBCE only? Where is solar? Not mentioned anywhere in the Plan. Are we really going to abandon our natural gas infrastructure? At a time when natural gas is very plentiful?
- p. 34: Where are programs for solar in apartment buildings hot water and PV?? Also incentives for SFDs?
- pp. 33-35: Mandate fuel switching? Really? This could be a major task, even if limited to major residential additions.
- P. 36: Where do Uber/Lyft fit into our transportation strategy?
- p.42: Farmer's Market, delete. We tried that and it didn't work. I have 2 farmers markets within walking distance of my home they are just not in Albany.
- p. 45: include El Cerrito and CCC in FEMA mapping; add policies for infiltration basins/ rain gardens and policies to acknowledge 501 c 3 requirements to be met in new construction

DRAFT CITY COUNCIL MINUTES EXCERPT 2019-09-16 CITY OF ALBANY CITY COUNCIL MEETING STUDY SESSION: CLIMATE ACTION AND ADAPTATION PLAN DRAFT

Sustainability and Resilience Manager Claire Griffing presented the staff report. In 2010, the Council adopted Albany's first Climate Action Plan (CAP), which outlined a course of action to reduce emissions by 25 percent by 2020. The City has successfully decreased community-wide emissions by 33 percent. Over the past year, staff has worked with consultants to develop a Climate Action and Adaptation Plan (CAAP) for the City's 2035 and 2050 greenhouse gas reduction goals. The draft CAAP was developed with input from the Climate Action Committee and the community.

Andrea Martin of Cascadia Consulting Group outlined community engagement for the CAAP development, including a survey, community workshop, and stakeholder meetings focused on specific subject matter. The community, staff, and Council advisory bodies have reviewed the draft CAAP, and staff has incorporated the feedback into the draft CAAP. Increasingly, communities are thinking about the broader impact of consuming goods and services, which is called a consumption-based inventory. Therefore, the CAAP includes a strategy to address consumption-based emissions. The CAAP also includes a plan to increase the community's resilience to anticipated climate change impacts or adaptation. Greenhouse gas reduction targets are typically based on actions taken in peer communities, State and Federal policies, the local context, and science. By Executive Order, the Governor has set a goal of carbon neutrality by 2045. To achieve carbon neutrality, the City will need to provide renewable electricity for all; transition to allelectric buildings; shift to electric vehicles and active transportation; and transition to zero waste. The draft CAAP contains strategies to activate, share, and electrify transportation; electrify new and existing buildings; facilitate a carbon-free economy; and accelerate resilience for all. Staff has identified three phases to implement the strategies. Phase 1 involves eliminating natural gas from new construction; reducing passenger vehicle miles traveled; and reducing environmental impacts of municipal purchasing. Phase 2 includes incentivizing electrification of existing buildings; electrifying passenger vehicles; and facilitating the development of a low-carbon economy. Phase 3 is composed of eliminating natural gas from existing buildings; electrifying commercial vehicles; and achieving a carbon-free local economy. Next steps include developing an implementation plan and preparing a final draft CAAP.

The following persons spoke: David McCoard, Nick Peterson, Preston Jordan, Doug Donaldson, Ian MacLeod, Milan Ferus-Comelo, Jean Woo, Cynthia Deng.

A summary of comments is as follows: Sierra Club suggestions to include additional details; suggestions to set a carbon neutrality goal of 2040 or 2045 and to dedicate one staff person to communicate with the public; suggested revisions regarding the low-carbon economy strategy, the resilience strategy, Western Forge & Flange pollution, the introduction, unrealistic statements, and solar energy; support for building electrification; questions regarding the carbon-neutrality goal, the feasibility of generating electricity for an all-electric community, and incentives for converting to electric vehicles and appliances; suggestions for installing charging stations on San Pablo and instituting an easement program to charge EVs at residences.

Ms. Martin explained that the State set the goal of carbon neutrality by 2045 after the City set its goal of carbon neutrality by 2050. Converting to an all-electric community is feasible from the standpoint of technology. The CAAP focuses first on incentives and partnerships to make an all-electric community feasible. The Plan emphasizes active transportation as well as electric vehicles.

Council Members concurred with Mayor Nason's suggestion to continue the study session to the next Council meeting and to provide Council Member comments at that time. Vice Mayor McQuaid suggested Council Members email their overarching comments to staff prior to the next meeting.

In response to comments from the public, Council Member Pilch supported including dates in goals; electrification of new construction; exploring a carbon neutrality goal by a date sooner than 2050; replacing the term low-carbon economy with reduce, reuse, recycle; advancing the seismic retrofit ordinance; updating green building standards; and incorporating a local development business plan.