



SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY

MEMORANDUM

This memo summarizes the in-person community workshop held as part of the initial phase of outreach for the San Bruno Climate Action Plan (CAP) and Safety Element Update. It includes a description of the workshop activities and a summary of the feedback received from attendees, which will support the development of the CAP strategies and Safety Element goals, policies, and actions.

Overall, attendees' feedback highlighted several key themes including concerns about the affordability of climate adaptation requirements for homeowners, strong interest in emergency preparedness resources, support for distributed energy resources and solar installations, emphasis on environmental protection with specific tree replacement policies, and desire for improved sustainable transportation options throughout the community.

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WORKSHOP PURPOSE AND DESIRED OUTCOMES

The purpose of the community workshop was to raise awareness of the CAP and Safety Element update projects and underlying issues of environmental hazards, greenhouse gas emissions, evacuation plans, community constraints, vulnerable populations, and key community assets, and to provide opportunities for the community to provide local knowledge and input.

This workshop occurred following PlaceWorks' preparation of the draft vulnerability assessment and GHG inventory and forecast, and in preparation for the development of the administrative draft of the Climate Action Plan and Safety Element. PlaceWorks will use attendee feedback to help inform policies, strategies, and other information for these documents, which will be made available for public review.

AGENDA AND FORMAT

The City of San Bruno hosted an in-person, open house style community workshop from 6 p.m. to 8 p.m. on April 24, 2025. The workshop began with an introduction by City staff and a 15-minute presentation by the PlaceWorks team, followed by a question-and-answer session with PlaceWorks and City staff, then shifted into an open house format. During the open house, attendees were able



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to talk with City staff, participate in interactive activities, and review information related to climate hazards and greenhouse gas emissions.

The presentation provided an overview of the CAP and Safety Element update process, including the structure and purpose of the CAP and Safety Element, their relationship with other City and regional documents and planning efforts, findings from the GHG inventory and vulnerability assessment, and next steps for the projects. Attendees were able to ask questions and provide feedback after the presentation.

After the conclusion of the presentation and Q&A session, attendees were able to circulate between five stations outlining the purpose and significance of the Climate Action CAP and Safety Element, San Bruno's greenhouse gas emissions and targets, San Bruno's primary climate change-related hazards and priority vulnerable populations and assets, and potential resilience strategies. Images of the posters used at these five stations are included in **Appendix 1**. There was also a sixth station with representatives from partner agencies: the San Bruno Fire and Public Works Departments, OneShoreline, and Climate Resilient Communities (CRC) in their role as coordinators for Resilient San Bruno, who displayed information and answered questions on topics of relevance to the CAP and Safety Element. All stations provided the opportunity for attendees to provide feedback and ask questions, and two of the six stations included an interactive activity on the boards. The board content and associated activities were available in both English and Spanish, and live interpretation was available as needed.

PlaceWorks and City staff jointly staffed the workshop, with two staff delivering the presentation, one facilitator helping with workshop check-in, and all staff circulating during the open house period to help answer questions. Approximately 26 members of the community attended the workshop.

City staff promoted the workshop in advance. Promotion strategies included a direct email campaign to almost 50 community groups and community contacts, distributing flyers in Downtown San Bruno, promotion through the local school district and Skyline College, and posting about the workshop in the City's website and social media channels. Flyers were made available in English and Spanish text.

STATIONS

The open house offered participants the opportunity to engage with the following six stations:



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Station 1: What is the CAP and Safety Element?

This station described what the CAP and Safety Element are and highlighted how they overlap and complement each other.

Station 2: Where do GHG emissions in San Bruno come from?

This station presented the results of the community GHG emissions inventory, projections of future GHG emissions, the GHG reductions from existing local and state efforts, and the proposed GHG emission reduction targets for 2030 and 2045. This station displayed trends over time in GHG emissions and the activities that are the largest contributors to emissions in San Bruno.

Station 3: How will we lower GHG emissions in San Bruno?

This station shared draft GHG emission reduction strategy concepts and gathered feedback from attendees.

- **Activity:** At Station 3, attendees were asked to vote using colored sticky dots whether they support, oppose, or are unsure about the GHG reduction strategy concepts.

Station 4: Who and what is vulnerable to climate hazards in San Bruno?

This station described the climate hazards affecting San Bruno and presented the results of the city's Vulnerability Assessment, including identifying the priority vulnerabilities (the populations and assets that are most vulnerable to climate change hazards) in San Bruno. It also displayed maps of fire hazard zones, extreme heat severity, sea level rise, and landslide susceptibility in San Bruno.

Station 5: How can we make San Bruno more resilient to climate hazards?

This station shared draft Safety Element policy concepts for San Bruno and gathered feedback from attendees.

- **Activities:** At Station 5, attendees participated in a dot voting activity to indicate which effects of climate hazards they had personally experienced and to express whether they supported, opposed, or felt neutral about the draft safety and resilience policy concepts presented. Additionally, a board with two open-ended questions invited attendees to share further feedback—such as thoughts on personal preparedness or other considerations—using sticky notes.



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Station 6: Table for partner agencies

The San Bruno Fire and Public Works Departments, OneShoreline, and Climate Resilient Communities (CRC) each hosted a station presenting information on climate hazards and programs to help bolster climate resilience and adaptation in San Bruno.

PARTICIPANT FEEDBACK

Attendees were able to ask questions after the presentation. As attendees circulated between each of the stations, the Project Team invited them to provide feedback on the content provided on each of the posters. Participants were able to write comments on sticky notes to display directly on the poster, dictate comments to workshop staff, and/or use stickers to answer questions posed in the activities.

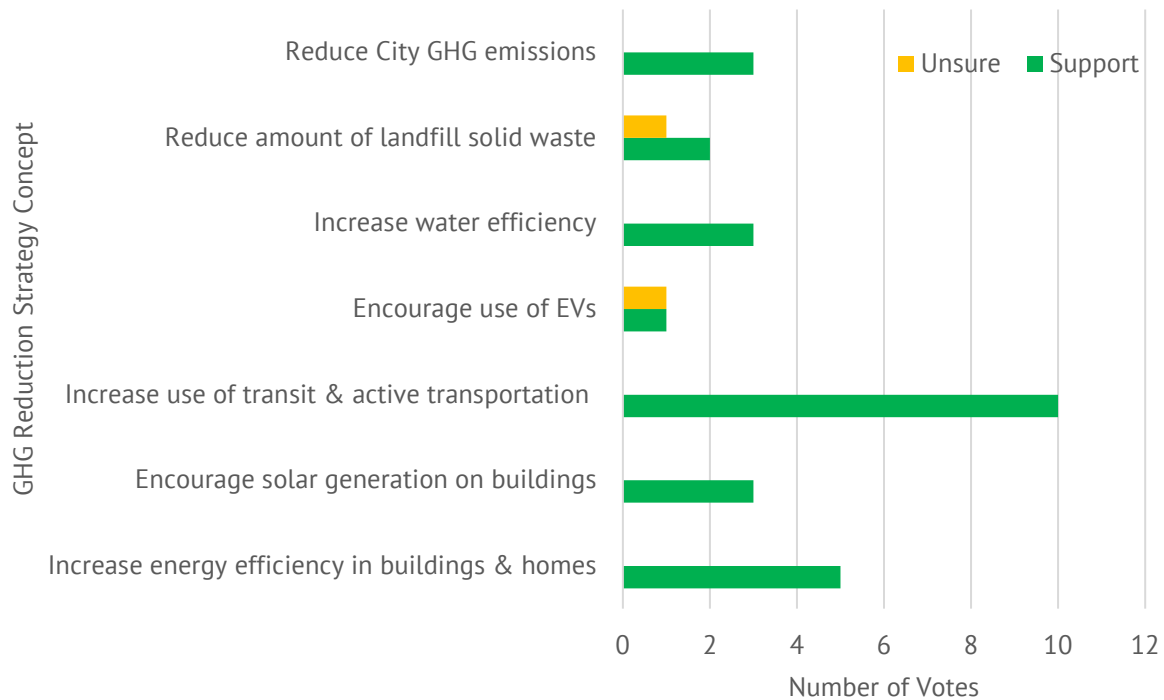
Activity Responses

Attendees were able to use stickers to answer questions at two of the stations. **Figures 1, 2, and 3** present the activity questions and results. Overall, attendees expressed that the effects of climate hazards experienced the most were difficulty sleeping during heat waves (likely due to lack of air conditioning) and power outages during storms or fire hazard events. GHG resilience strategies to address improving accessible active transit modes and increasing building energy efficiency received the most attendee support. The safety and resilience policies that received the most support were related to removal of eucalyptus trees, maintenance of evacuation routes, and promotion of harm reduction activities, while only two policies related to drought and wildfire, and associated costs of requirements, were opposed. In addition to the activity responses, attendees' written and verbal feedback highlighted several key themes, including concerns about the affordability of adaptation requirements for homeowners, interest in emergency preparedness resources, support for renewable energy, and desire for improved sustainable mobility options throughout the community.



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Figure 1.¹ Do you support, oppose, or are unsure about implementing the following GHG reduction strategy concepts?

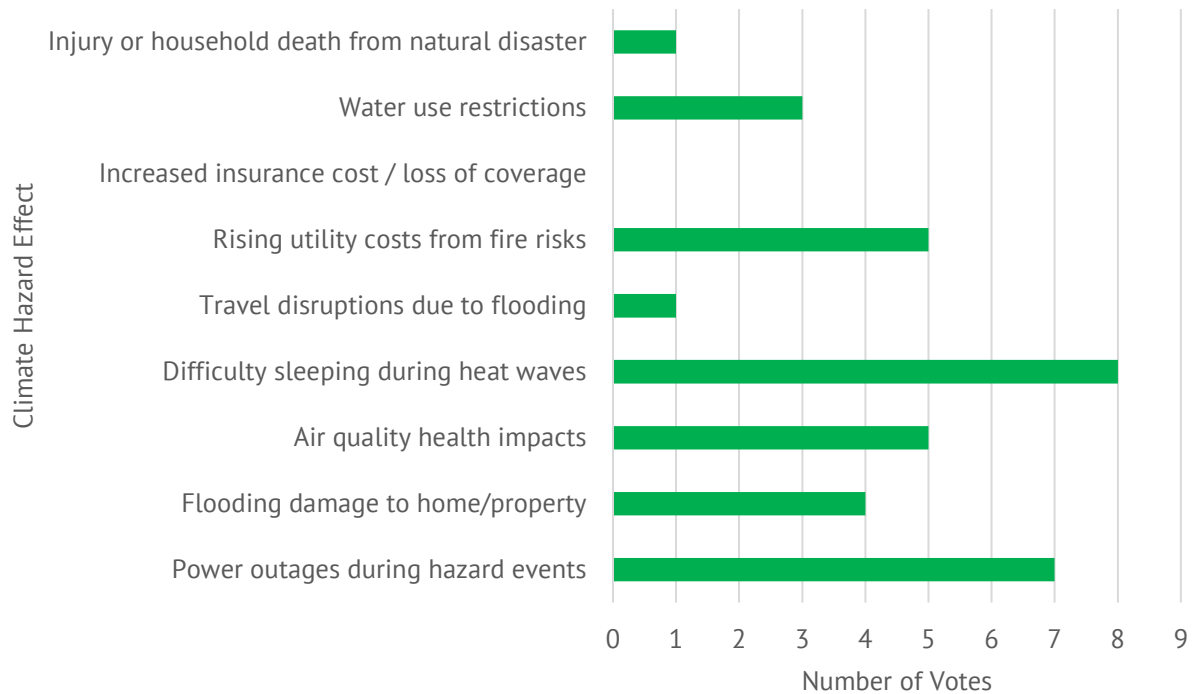


¹ There were no votes indicating opposition to any of the seven strategy concepts displayed.



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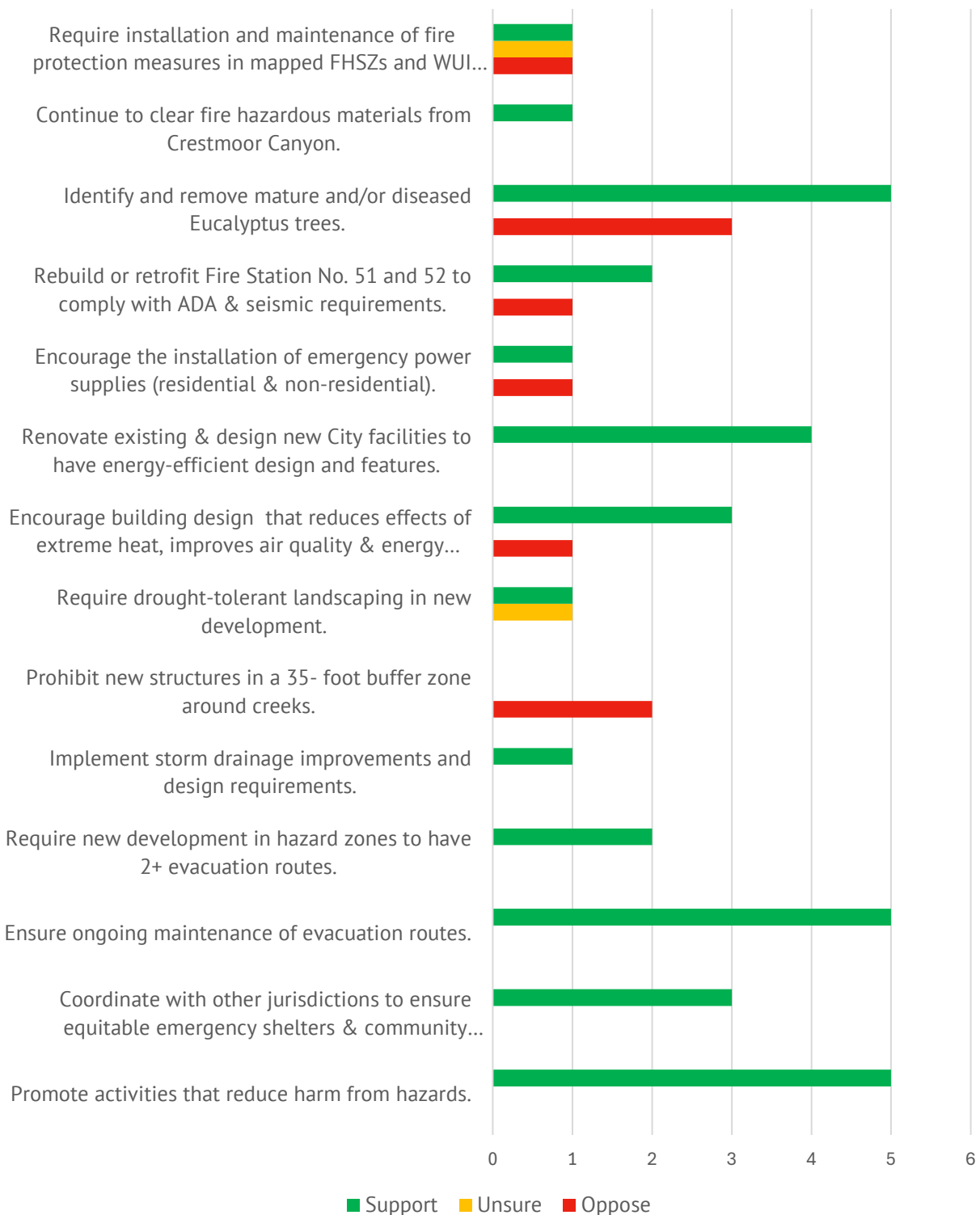
Figure 2. What effects of climate hazards have you experienced?





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Figure 3. Do you support, oppose, or are neutral about the following safety and resilience policies?





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Other Feedback

In addition to the structured activities at the stations, attendees were able to ask questions of project staff and provide feedback and recommendations in the form of verbal commentary, sticky notes left at each of the stations, and post-workshop comment cards. Photos of the interactive activities and comments on the boards are included in the workshop photos in **Appendix 2**. No comment cards were received. The following topics emerged from community feedback²:

Cost Concerns and Affordability

- Concern about how costs for climate adaptation requirements might burden homeowners, particularly for Fire Hazard Severity Zone protection measures.
- Interest in improving grant programs to ensure that costs for energy efficiency upgrades are not passed on to renters.
- Questions about affordability of drought-tolerant landscaping requirements and whether state funding is available to offset costs.

Emergency Preparedness and Response

- Several attendees noted they have emergency and Community Emergency Response Team (CERT) kits ready with specific plans for emergencies.
- Others expressed interest in initiating emergency preparation actions but hadn't yet done so.
- Desire for more exit drills and emergency planning resources.

Energy Resilience and Alternatives

- Support for distributed energy resources to improve resilience during outages.
- Interest in expanding solar panel installations throughout the community.
- Recognition that active transportation options (like e-bikes) complement clean energy programs offered by Peninsula Clean Energy.

² Community comments have been edited for clarity.



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Environmental Protection and Sustainability

- Concerns about tree removal policies, with suggestions that replacement trees should be planted at a ratio of at least 10:1 for any trees removed. Contrarily, there is a high support for eucalyptus tree removal.
- Desire for better practices related to wildfire mitigation debris removal.
- Interest in reducing toxic materials and "forever chemicals" in consumer products and holding businesses accountable for their use.

Transportation and Infrastructure

- Support for improved public transit, including electric buses.
- Interest in more green landscapes integrated with transportation infrastructure.
- Desire for the City to actively promote local, county, and State climate resilience programs, including those for electric vehicles and home energy efficiency.

NEXT STEPS

This memo provides the summary of the first community workshop for the San Bruno Climate Action Plan and Safety Element Update projects. The project teams will use the feedback gathered from community members to inform the development of the CAP strategies and Safety Element goals, policies, and actions.



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APPENDIX 1: POSTER IMAGES

This appendix presents the images of the poster boards used at five of the six stations. These images are of the posters themselves without any input, comments, or feedback from workshop participants. For images of the boards with feedback, please see **Appendix 2**.

STATION 1: WHAT ARE THE CLIMATE ACTION PLAN AND SAFETY ELEMENT?

What are the Climate Action Plan and Safety Element?

Overview of Climate Action Plan and Safety Element

The City of San Bruno is working on several important planning documents that will help shape the community's future resilience to hazards, both man-made and natural, including a Climate Action Plan (CAP) and Safety Element update.

These two planning documents complement each other by addressing different aspects of the same challenge: creating a safer, more sustainable and resilient San Bruno that can thrive despite changing climate conditions.

Along with the CAP and Safety Element, the City will also shortly begin work on an Open Space Element and Environmental Justice Element.

Climate Action Plan

The Climate Action Plan is a strategic plan that outlines how San Bruno will reduce greenhouse gas (GHG) emissions and adapt to the changing climate. The plan will analyze current emissions, assess existing sustainability policies and practices, set reduction targets, and identify specific strategies to achieve those targets. Now, with new state requirements around GHG emissions, improved technology, and increased urgency around climate issues, this is an ideal time for San Bruno to prepare a CAP.

Safety Element

The Safety Element is a required component of San Bruno's General Plan that identifies potential natural and human-caused hazards and establishes policies to protect the community from these risks. The existing Safety Element was adopted in 1989 and needs to be updated to reflect current conditions and to meet new State requirements.

The Safety Element addresses a wide range of hazards affecting San Bruno, including:

- Geologic and Seismic Hazards
- Airport Safety
- Emergency Preparedness and Response
- Flooding
- Wildfire Risks
- Hazardous Materials

The updated Safety Element will incorporate current information about these hazards, add information to meet new State requirements, address emerging challenges like climate change, and create policies to keep our community safe.

CAP and Safety Element Timeline

Phase 1: Fall 2024/ Winter 2025

- Complete data collection
- Launch project website
- Have GHG inventory & prepare forecast

Phase 2: Spring/ Summer 2025

- Establish GHG reduction targets
- Draft GHG reduction strategies
- Develop reduction and adaptation plan

Phase 3: Summer/ Fall 2025

- Draft CAP
- Draft Safety Element Update
- Identify adaptation measures

Phase 4: Fall 2025/ Winter 2026

- Public review & draft documents
- Final adoption
- Sign implementation

*community engagement throughout

How Do They Work Together?

The CAP addresses how we can reduce our contribution to climate change through energy efficiency, renewable energy, sustainable transportation, waste reduction, and many other activities. These efforts help slow the pace of climate change by reducing emissions and lessen the severity of associated future hazards.

The Safety Element focuses on how we can protect our community from hazards, including those made worse by climate change. Its hazard mitigation and climate adaptation strategies help San Bruno become more resilient to flooding, extreme heat, wildfires, and other climate-intensified hazards.

Both plans prioritize efforts that protect San Bruno's most vulnerable residents and critical infrastructure based on a climate change vulnerability assessment, which identifies people and community assets most at risk to climate hazards.

Some strategies that may be included in the CAP to reduce emissions may also serve to mitigate hazards. For example, expanding the urban tree canopy helps absorb carbon to reduce emissions while also providing cooling shade during heat waves to protect public health. Green infrastructure can manage stormwater to prevent flooding while also improving air quality and reducing urban heat.

Stay Involved!

- Sign up for project updates
- Participate in future workshops and events
- Complete online surveys
- Attend public hearings
- Visit the project websites for updates

CAP WEBSITE:
www.sanbruno.ca.gov/966/Safety-Element-Update

SAFETY ELEMENT WEBSITE:
sanbruno.ca.gov/1177/Climate-Action-Plan



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¿Qué son el Plan de Acción por el Clima y el Elemento de Seguridad?

Resumen del Plan de Acción para el Clima y del Elemento de Seguridad

La ciudad de San Bruno está trabajando en varios documentos de planeación importantes que ayudarán a dar forma a la futura resiliencia de la comunidad a los peligros, tanto artificiales como naturales, incluyendo un Plan de Acción Climática (PAC) y la actualización del Elemento de Seguridad.

Estos dos documentos de planeación se complementan entre sí al abordar diferentes aspectos del mismo desafío: crear un San Bruno más seguro, sostenible y resiliente que pueda prosperar a pesar de las condiciones climáticas cambiantes.

Junto con el PAC y el Elemento de Seguridad, la ciudad también comenzará a trabajar en breve en un Elemento de Espacios Abiertos y un Elemento de Justicia Ambiental.



¿Cómo funcionan juntos?

El PAC aborda cómo podemos reducir nuestra contribución al cambio climático mediante la eficiencia energética, las energías renovables, el transporte sostenible, la reducción de residuos y muchas otras actividades. Estos esfuerzos ayudan a ralentizar el ritmo del cambio climático al reducir las emisiones y disminuir la gravedad de los peligros futuros asociados.

El Elemento de Seguridad se centra en cómo podemos proteger a nuestra comunidad de los peligros, incluidos los que empujan por el cambio climático. Sus estrategias de mitigación de peligros y adaptación al clima ayudan a San Bruno a ser más resistente a las inundaciones, el calor extremo, los incendios forestales y otros peligros intensificados por el clima.

Ambos planes priorizan los esfuerzos para proteger a los residentes más vulnerables y las infraestructuras críticas de San Bruno basándose en una evaluación de la vulnerabilidad al cambio climático, que identifica a las personas y los bienes de la comunidad más expuestos a los riesgos climáticos.

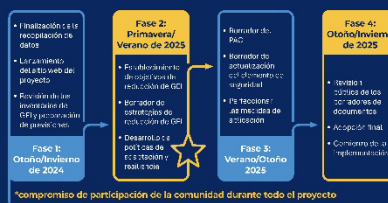
Algunas estrategias que pueden incluirse en el PAC para reducir las emisiones también pueden servir para mitigar los peligros. Por ejemplo, expandir la cubierta arbórea urbana ayuda a absorber carbono para reducir las emisiones, al tiempo que proporciona sombra refrescante durante las olas de calor para proteger la salud pública. La infraestructura verde puede gestionar las aguas pluviales para evitar inundaciones, al tiempo que mejora la calidad del aire y reduce el calor urbano.

Plan de Acción para el Clima

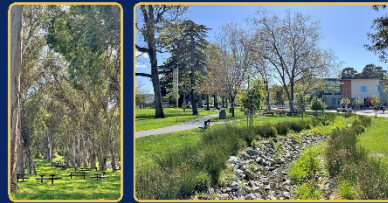
El Plan de Acción Climática es un plan estratégico que describe cómo San Bruno reducirá las emisiones de gases de efecto invernadero (GEI) y se adaptará al cambio climático. El plan analizará las emisiones actuales, evaluará las políticas y prácticas de sostenibilidad existentes, establecerá objetivos de reducción e identificará estrategias específicas para alcanzar dichos objetivos. Ahora, con los nuevos requisitos estatales en torno a las emisiones de GEI, la mejora de la tecnología, y el aumento de la urgencia en torno a cuestiones climáticas, este es un momento ideal para San Bruno para preparar un PAC.



Calendario del proyecto



Tus aportaciones de hoy contribuirán a la actualización del Plan de Acción Climática y del Elemento de Seguridad de San Bruno. ¡Aquí te contamos lo que viene a continuación!



Elemento de seguridad

El Elemento de Seguridad es un componente obligatorio del Plan General de San Bruno que identifica los posibles peligros naturales y causados por el hombre y establece políticas para proteger a la comunidad de estos riesgos. El elemento de seguridad existente fue adoptado en 1999 y necesita ser actualizado para reflejar las condiciones actuales y cumplir con los nuevos requisitos estatales.

El Elemento de Seguridad aborda una amplia gama de peligros que afectan a San Bruno, incluyendo:



El Elemento de Seguridad actualizado incorporará información actual sobre estos peligros, añadirá información para cumplir los nuevos requisitos estatales, abordará desafíos emergentes como el cambio climático y creará políticas para mantener a nuestra comunidad segura.



Participe

- Insíbete para recibir actualizaciones del proyecto.
- Participa en futuros talleres y eventos.
- Completa encuestas en línea.
- Asiste a audiencias públicas.
- Visita los sitios web del proyecto para obtener actualizaciones.



SITIO WEB DEL PAC:
[www.sanbruno.ca.gov/SSS/
Safety-Element-Update](http://www.sanbruno.ca.gov/SSS/Safety-Element-Update)



SITIO WEB DEL ELEMENTO DE SEGURIDAD:
[sanbruno.ca.gov/1177/
Climate-Action-Plan](http://sanbruno.ca.gov/1177/Climate-Action-Plan)





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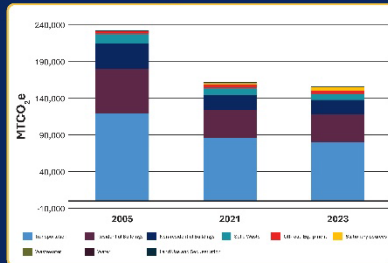
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STATION 2: WHERE DO GHG EMISSIONS IN SAN BRUNO COME FROM?



Where do GHG emissions in San Bruno come from?

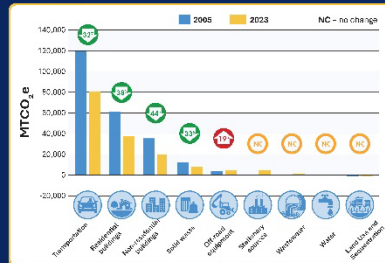
Results of the Community-wide GHG Inventories (2005, 2021, and 2023)



Community-wide GHG Emission Sources

- Transportation:** Fuel used in cars, trucks, buses, and other vehicles.
- Residential buildings:** Electricity and natural gas used in homes.
- Non-residential buildings:** Electricity and natural gas used in businesses, civic buildings, and some industrial buildings.
- Solid waste:** Emissions from decomposing trash thrown away in a landfill.
- Off-road equipment:** Fuel used in equipment such as landscaping and construction equipment.
- Stationary sources:** Electricity and natural gas used to power large sites, such as industrial or institutional buildings, or emissions from certain industrial processes.
- Wastewater:** Emissions released as the by-product from the wastewater treatment process.
- Water:** Energy used to transport and treat water used in the community.
- Land Use and Sequestration:** Changes in the amount of trees and open space from development, tree planting, and open space protection.

GHG Emissions by Sector, 2005 and 2023 (MTCO₂e)



Note: There is no data for stationary sources, water, and wastewater for 2005 and therefore no change between 2005 and 2023.

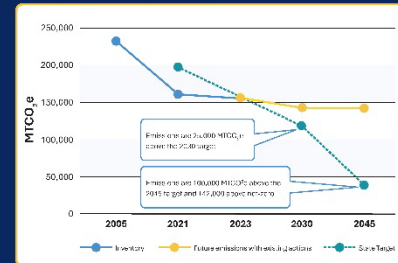
Trends

- Cars and trucks** are the largest source of emissions in San Bruno. This category includes residents and workers driving into, out of, and around San Bruno. Emissions from transportation decreased 32 percent from 2005 to 2023 from less travel, more fuel-efficient vehicles, and an increase in electric vehicles.
- Buildings** are the second largest source of emissions in San Bruno, which includes electricity and natural gas used in residential and nonresidential buildings. Emissions from buildings decreased 40 percent from 2005 to 2023, due to a 12 percent decrease in natural gas use and the use of renewable and carbon-free electricity from both PG&E and PG&E.
- Emissions from **solid waste** decreased 33 percent from 2005 to 2023, caused by waste reduction, recycling, and composting programs.
- Emissions from **off-road equipment** increased 19 percent from 2005 to 2023 possibly due to an increase in construction activity.

Forecasted GHG Emissions with State and Local Existing and Planned Activities

Setting clear emissions reduction targets is a critical step in addressing climate change and achieving long-term sustainability goals. Targets let us measure how well our city is doing to reduce GHG emissions over time. The State of California has statewide targets for achieving GHG emissions reductions and cities are encouraged to adopt the same targets or stricter ones to ensure alignment across the state.

Forecasted GHG Emissions with State and Local Existing Actions (MTCO₂e)



GHG Emission Reduction Targets

- 40% below 1990 levels by 2030
- 85% below 1990 levels by 2045 and net zero emissions (carbon neutrality)

Existing Mitigation Activities

There are several State, regional, and local activities that are underway or already planned, which will lower San Bruno's GHG emissions or increase resiliency and resource conservation.

- Solar panels:** Residents, business owners, and the City are installing solar panels on buildings, including the Recreation and Aquatics Center, to increase the amount of resilient, carbon-free electricity used in San Bruno.
- Bike lanes:** The City plans to add 6 miles of bike lanes to encourage biking instead of driving.
- Green buildings:** The new YouTube campus building will be built to LEED Green Building standards, which reduces its energy usage.
- Clean fuel standards:** State law requires increased fuel efficiency standards, moving toward all new vehicles being zero-emission by 2035. San Bruno is doing its part by increasing installations of electric vehicle chargers to make electric vehicles more feasible.

The State has also passed regulations that will result in GHG emission reductions in San Bruno, including clean fuel standards for cars, trucks, and buses, energy efficiency standards in buildings, and renewable energy procurement requirements. The City/County Association of Governments or San Mateo County requires developments of a certain size to include transportation demand management strategies.

However, even with these existing activities San Bruno falls short of its target. The CAP will have strategies to close the gap and achieve San Bruno's GHG emission reduction targets.



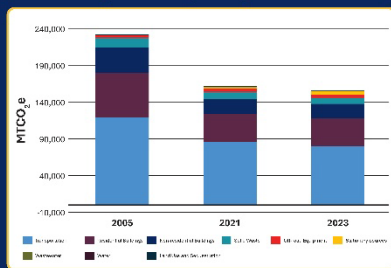
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¿De dónde provienen las emisiones de GEI en San Bruno?

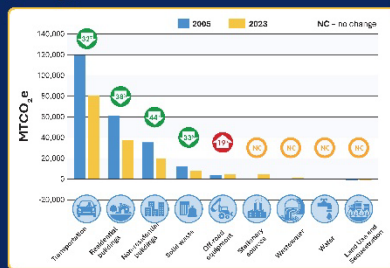
Resultados de los inventarios de GEI a escala comunitaria (2005, 2021 y 2023)



Fuentes de emisión de GEI a escala comunitaria

- Transporte:** Combustible utilizado en coches, camiones, autobuses y otros vehículos.
- Edificios residenciales:** Electricidad y gas natural utilizados en los hogares.
- Edificios no residenciales:** Electricidad y gas natural utilizados en negocios, edificios públicos y algunos edificios industriales.
- Residuos sólidos:** Emisiones procedentes de la descomposición de la basura arrojada a un vertedero.
- Equipos todoterreno:** Combustible utilizado en equipos como los de jardinería y construcción.
- Fuentes estacionarias:** La electricidad y el gas natural utilizados para alimentar grandes instalaciones, como edificios industriales o institucionales, o las emisiones de determinados procesos industriales.
- Aguas residuales:** Emisiones liberadas como subproducto del proceso de tratamiento de aguas residuales.
- Agua:** Energía utilizada para transportar y tratar el agua utilizada en la comunidad.
- Uso del suelo y secuestro:** Cambio en la cantidad de árboles y espacios abiertos por el desarrollo, la plantación de árboles y la protección de espacios abiertos.

Emisiones de GEI por sectores, 2005 y 2023 (MTCE)



Nota: No hay datos sobre fuentes estacionarias, agua y aguas residuales para 2005 y, por lo tanto, no hay cambios entre 2005 y 2023.

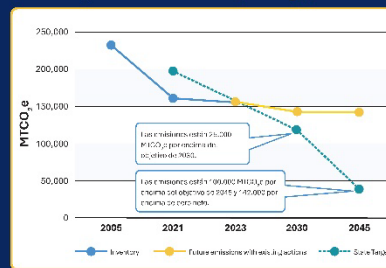
Trends

- Los **automóviles y camiones** son la mayor fuente de emisiones en San Bruno. Esta categoría incluye a los residentes y trabajadores que conducen dentro, fuera y alrededor de San Bruno. Las emisiones procedentes del transporte disminuyeron un 37% entre 2005 y 2023 debido a menos viajes, vehículos más eficientes en combustible y al aumento de los vehículos eléctricos.
- Los **edificios** son la segunda mayor fuente de emisiones en San Bruno, que incluye la electricidad y el gas natural utilizados en edificios residenciales y no residenciales. Las emisiones de los edificios disminuyeron un 40 por ciento de 2005 a 2023, debido a una disminución de 12 por ciento en el uso de gas natural y el uso de electricidad renovable y libre de carbono tanto de PG&E.
- Las emisiones procedentes de **residuos sólidos** disminuyeron un 33% de 2005 a 2023, debido a los programas de reducción de residuos, reciclaje y compostaje.
- Las emisiones de los **equipos todoterreno** aumentaron un 19% de 2005 a 2023, posiblemente debido al aumento de la actividad de construcción.

Emisiones de GEI pronosticadas con actividades estatales y locales existentes y planeadas

Establecer objetivos claros de reducción de emisiones es un paso fundamental para hacer frente al cambio climático y alcanzar objetivos de sostenibilidad a largo plazo. Los objetivos nos permiten medir la eficacia de nuestra ciudad en la reducción de las emisiones de GEI a lo largo del tiempo. El Estado de California tiene objetivos estatales de reducción de las emisiones de GEI y se anima a las ciudades a que adopten los mismos objetivos o unos más estrictos para garantizar la alineación en todo el estado.

Emisiones de GEI pronosticadas con las medidas estatales y locales existentes (MTCE)



Objetivos de reducción de emisiones de GEI

- 40% por debajo de los niveles de 1990 en 2030
- 80% por debajo de los niveles de 1990 en 2045 y como emisiones netas (neutralidad del carbono)

Actividades de mitigación existentes

Hay varias actividades estatales, regionales y locales en marcha o ya planificadas que reducirán las emisiones de GEI de San Bruno o aumentarán la resiliencia y la conservación de recursos.

- Paneles solares:** Residentes, propietarios de negocios y la Ciudad están instalando paneles solares en edificios, incluyendo el Centro Recreativo y Acuático, para aumentar la cantidad de electricidad resistente y libre de carbono utilizada en San Bruno.
- Carriles para bicicletas:** La ciudad planea añadir 10 km de carriles bici para fomentar el uso de la bicicleta en lugar de conducir.
- Edificios ecológicos:** El nuevo edificio del campus de YouTube se construirá según las normas ULLD Green building, lo que reduce su consumo de energía.
- Normas sobre combustibles limpios:** La ley estatal exige un aumento de los estándares de eficiencia energética en edificios y requisitos de adquisición de energías renovables. La Asociación de Gobiernos de la Ciudad/Condado de San Mateo exige que las urbanizaciones de cierto tamaño incluyan estrategias de gestión de la demanda de transporte.

El Estado también ha aprobado normativas que reducen las emisiones de gases de efecto invernadero en San Bruno, como normas sobre combustibles limpios para coches, camiones y autobuses, normas de eficiencia energética en edificios y requisitos de adquisición de energías renovables. La Asociación de Gobiernos de la Ciudad/Condado de San Mateo exige que las urbanizaciones de cierto tamaño incluyan estrategias de gestión de la demanda de transporte. Sin embargo, incluso con estas actividades existentes, San Bruno no alcanza su objetivo. El PAC tendrá estrategias para cerrar la brecha y alcanzar los objetivos de reducción de emisiones de GEI de San Bruno.



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STATION 3: HOW WILL WE LOWER EMISSIONS IN SAN BRUNO?



How will we lower emissions in San Bruno?



What can I do to reduce my household emissions?

San Bruno's electricity provider, Peninsula Clean Energy (PCE), offers several programs and rebates to help San Bruno residents lower their energy use and associated GHG emissions.

Upgrade to ECO100: Residents can upgrade to ECO100 service to receive electricity from 100% renewable sources, like wind and solar.

Electrify appliances: PCE offers rebates to reduce the costs of upgrading natural gas-powered appliances to energy-efficient electric models.

Purchase an EV: PCE helps customers find federal and state rebates to lower the cost of purchasing an electric vehicle.

Install solar and battery systems: PCE, the State of California, and the federal government all offer rebates for installing solar panels or solar and battery storage systems. PCE also purchases excess power that you generate from solar panels, reducing your monthly bill.



There are several ways to lower GHG emissions in San Bruno.

Below are 7 strategy concepts that the City and community members can implement to reduce their impact.

Place a dot in the corresponding space if you support, oppose, or are unsure about implementing a certain strategy concept. Share your comments on the nearby pad of paper.

STRATEGY CONCEPT 1:	STRATEGY CONCEPT 2:	STRATEGY CONCEPT 3:	STRATEGY CONCEPT 4:	STRATEGY CONCEPT 5:	STRATEGY CONCEPT 6:	STRATEGY CONCEPT 7:
Increase energy efficiency and the use of carbon-free power in buildings. By improving insulation and replacing appliances that use natural gas with appliances that use electricity, especially water heaters and space heaters, property owners can reduce GHG emissions from buildings significantly. <i>*Co-benefits:</i> More efficient appliances, lowered utility bills	Encourage solar energy generation on buildings. Buildings equipped with solar panels can generate their own energy, which reduces utility bills and GHG emissions. If solar panel systems are also coupled with battery energy storage systems, buildings can continue to use electricity generated onsite during a power outage. <i>*Co-benefits:</i> Cost-saving over time, enhanced energy resilience.	Increase the use of transit and active transportation modes. Making transit and active modes of transportation, including walking and biking, more accessible and dependable options for the community reduces the use of gasoline-powered vehicles and the associated emissions. <i>*Co-benefits:</i> Public health benefits, community connection, improved air quality	Encourage the use of electric vehicles. Replacing gasoline- and diesel-powered vehicles with electric vehicles improves air quality and reduces the reliance on fossil fuels. This strategy involves increasing the availability of EV chargers in the community and promoting the various rebates available to residents who purchase EVs. <i>*Co-benefits:</i> Cost-saving over time, improved air quality	Increase water efficiency. This strategy involves replacing water fixtures in buildings with more efficient models, encouraging the use of recycled water, and implementing drought-tolerant landscaping techniques. <i>*Co-benefits:</i> Cost-saving, more reliable water supply, increased environmental health	Reduce the amount of solid waste sent to landfills. This strategy encourages more recycling and composting to keep waste out of landfills, where it produces greenhouse gases. Recycling also cuts emissions from making new products, while composting turns food and yard waste into healthy soil. <i>*Co-benefits:</i> Less waste, reduced waste management costs, improved soil health.	Reduce GHG emissions from City operations. The City can lead by example in reducing operational GHG emissions by retrofitting buildings for energy efficiency, installing solar panels and battery storage, promoting alternative commutes for employees, and minimizing waste at facilities and events. <i>*Co-benefits:</i> Cost-saving for City, cleaner air
Support	Support	Support	Support	Support	Support	Support
Unsure	Unsure	Unsure	Unsure	Unsure	Unsure	Unsure
Oppose	Oppose	Oppose	Oppose	Oppose	Oppose	Oppose



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¿Cómo reduciremos las emisiones en San Bruno?



¿Qué puedo hacer para reducir mis emisiones domésticas?

El proveedor de electricidad de San Bruno, Peninsula Clean Energy (PCE), ofrece varios programas y descuentos para ayudar a los residentes de San Bruno a reducir su consumo de energía y las emisiones de GEI asociadas.

Cambiar a ECO100: Los residentes pueden contratar el servicio ECO100 para recibir electricidad de fuentes 100% renovables, como la eólica y la solar.

Electrificar los electrodomésticos: El PCE ofrece descuentos para reducir los costos de modernización de los electrodomésticos que funcionan con gas natural por modelos eléctricos energéticamente eficientes.

Comprar un vehículo eléctrico: PCE ayuda a los clientes a encontrar descuentos federales y estatales para reducir el costo de la compra de un vehículo eléctrico.

Instalar sistemas solares y de baterías: PCE, el estado de California y el gobierno federal ofrecen reembolsos por instalar paneles solares o sistemas solares y de almacenamiento en baterías. PCE también compra el exceso de energía que usted genera con los paneles solares, reduciendo su factura mensual.



Hay varias formas de reducir las emisiones de GEI en San Bruno.

A continuación se presentan 7 conceptos estratégicos que la ciudad y los miembros de la comunidad pueden aplicar para reducir su impacto.

Ponga un punto en el espacio correspondiente si apoya, se opone o no está seguro de implementar un concepto de estratégico determinado. Comparte sus comentarios en el bloc de papel cercano.

CONCEPTO ESTRATÉGICO 1:	CONCEPTO ESTRATÉGICO 2:	CONCEPTO ESTRATÉGICO 3:	CONCEPTO ESTRATÉGICO 4:	CONCEPTO ESTRATÉGICO 5:	CONCEPTO ESTRATÉGICO 6:	CONCEPTO ESTRATÉGICO 7:
<p>Aumentar la eficiencia energética y el uso de energía libre de carbono en los edificios.</p> <p>Al mejorar el aislamiento y reemplazar los aparatos que utilizan gas natural por aparatos que utilizan electricidad, especialmente los calentadores de agua y calentadores de espacio, los propietarios pueden reducir significativamente las emisiones de GEI de los edificios.</p> <p>*Co-beneficios: Electrodomésticos más eficientes, facturas más bajas</p>	<p>Fomentar la generación de energía solar en los edificios.</p> <p>Los edificios equipados con paneles solares pueden generar su propia energía, lo que reduce las facturas de los servicios públicos y las emisiones de GEI. Si los sistemas de paneles solares también se combinan con sistemas de almacenamiento de energía en baterías, los edificios pueden seguir utilizando la electricidad generada en el sitio durante un corte de energía.</p> <p>*Co-beneficios: Ahorro de costos a largo plazo, mayor resistencia energética</p>	<p>Aumentar el uso del transporte público y los medios de transporte activos.</p> <p>Hacer que el transporte público y los modos activos de transporte, incluyendo caminar y andar en bicicleta, sean opciones más accesibles y confiables para la comunidad, reduce el uso de vehículos a gasolina y las emisiones asociadas.</p> <p>*Co-beneficios: Beneficios para la salud pública, conexión con la comunidad</p>	<p>Fomentar el uso de vehículos eléctricos.</p> <p>Sustituir los vehículos de gasolina y diésel por vehículos eléctricos mejora la calidad del aire y reduce la dependencia de los combustibles fósiles. Esta estrategia implica aumentar la disponibilidad de cargadores de VE en la comunidad y promover las diversas rebajas disponibles para los residentes que compran VE.</p> <p>*Co-beneficios: Ahorro de costos a largo plazo, mejora de la calidad del aire</p>	<p>Aumentar la eficiencia hídrica.</p> <p>Esta estrategia consiste en reemplazar las instalaciones de agua de los edificios por modelos más eficientes, fomentar el uso de agua reciclada y implementar técnicas de riego tolerantes a la sequía.</p> <p>*Co-beneficios: Ahorro de costos, suministro de agua más fiable, mejora la salud ambiental.</p>	<p>Reducir la cantidad de residuos sólidos enviados a los vertederos.</p> <p>Esta estrategia fomenta el aumento de la tasa de reciclaje y compostaje de residuos en lugar de enviarlos a un vertedero donde se descomponen y producen emisiones de GEI. El reciclaje también reduce las emisiones asociadas a la tracción de nueva producción de plástico, vidrio, metal. La descomposición de los residuos orgánicos es un proceso que contribuye a las emisiones de GEI de los vertederos. Al compostar dentro estos residuos a un uso beneficioso que enriquece el suelo y reduce las emisiones de GEI.</p> <p>*Co-beneficios a lo largo del tiempo: Menos residuos, reducción de los costos de gestión de residuos, mejora la salud del suelo.</p>	<p>Reducir las emisiones de GEI de las operaciones de la Ciudad.</p> <p>La ciudad puede producir con el ejemplo en la reducción de las emisiones operativas de GEI mediante la modernización de edificios para la eficiencia energética, la instalación de paneles solares y almacenamiento de baterías, la promoción de viajes alternativos para los empleados y la minimización de residuos en instalaciones y eventos.</p> <p>*Co-beneficios: Menos residuos, reducción de los costos de gestión de residuos, mejora la salud del suelo.</p>
Apoyo	Apoyo	Apoyo	Apoyo	Apoyo	Apoyo	Apoyo
Inseguro	Unsure	Inseguro	Inseguro	Inseguro	Inseguro	Inseguro
Inseguro	Inseguro	Inseguro	Oppose	Inseguro	Inseguro	Inseguro



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STATION 4: WHO AND WHAT IS VULNERABLE TO CLIMATE HAZARDS IN SAN BRUNO?



Who and what is vulnerable to climate hazards in San Bruno?

Understanding Vulnerability

A vulnerability assessment is a study that looks at how climate change hazards may affect people and assets in San Bruno and which populations and places are most at risk. The assessment helps identify priorities for adaptation planning.

Climate Hazards Affecting San Bruno

- Air Quality and Smoke**
Increased wildfires in California are causing more frequent poor air quality days in San Bruno, affecting respiratory health and outdoor activities.
- Drought**
More frequent and severe droughts affect water supplies, landscaping, and increase wildfire risk. San Bruno relies on the Helch Helchy Regional Water System, which depends on Sierra Nevada snowpack.
- Extreme Heat and Warm Nights**
Between 2035 and 2064, San Bruno could see more than double the number of extreme heat days annually (days with a high temperature over 86°F). Warm nights prevent overnight cooling, worsening heat impacts.
- Flooding**
Areas of eastern San Bruno near San Bruno Creek, including the Belle Air neighborhood, are in FEMA-designated flood zones. Climate change is increasing the intensity of rainstorms and atmospheric rivers, worsening flood risks.
- Landslides**
Hillside neighborhods and areas around Junipero Serra County Park have high landslide susceptibility, especially during intense rainfall events.
- Sea Level Rise and Emergent Groundwater**
Eastern San Bruno near Highway 101 is vulnerable to sea level rise impacts. By 2050, sea levels could rise by as much as 16 inches, affecting approximately 63 acres in San Bruno. Rising sea levels also push groundwater higher in low-lying areas, causing emergent groundwater that can damage foundations, underground utilities, and infrastructure even in areas not directly flooded by seawater.
- Severe Weather**
More intense storms can cause power outages, downed trees, and infrastructure damage throughout San Bruno. Climate projections for the Bay Area indicate that San Bruno will experience more severe storms with stronger atmospheric rivers and damaging winds. Public Safety Power Shutoff events, meant to reduce wildfire risks during high wind conditions, can leave residents without electricity for extended periods.
- Wildfire**
Wildfires are expected to become more frequent and intense throughout California and to occur throughout most or all of the year. In recent years, we have already seen many of these changes. Large sections of the hillside neighborhoods are within wildfire hazard zones, especially areas next to the open space around San Andreas Lake.

Who are Priority Vulnerable Populations?

Based on the vulnerability assessment, these groups face the greatest climate risks:

Low-Resourced Households, including low-income and housing-constrained households:

- often have limited financial resources to prepare for hazards (such as buying emergency supplies or making home improvements);
- frequently lack insurance or emergency funds;
- often live in older buildings with inadequate cooling/heating;
- may face language barriers that limit access to emergency information and services;
- typically have fewer transportation options for evacuation during emergencies;
- low-resourced households are most vulnerable to air quality, extreme heat, flooding, sea level rise, severe weather, and wildfire.

Outdoor Workers:

- face direct exposure to poor air quality, extreme heat, wildfire smoke;
- are often from immigrant communities and low-resourced households, who may lack health insurance, face language barriers, and feel economic pressure to work despite hazardous conditions;
- have jobs that require physical labor, which increases susceptibility to heat illness;
- outdoor workers are most vulnerable to air quality, ecosystem pests, extreme heat, landslides, severe weather, and wildfire.

Persons with Chronic Illnesses and/or Disabilities:

- may have chronic health conditions that can be worsened by hazards;
- depend on electricity for medical equipment;
- may face mobility challenges during evacuations;
- persons with chronic illnesses and/or disabilities are most vulnerable to air quality, drought, extreme heat, flooding, landslides, sea level rise, severe weather, and wildfire.

Older Adults:

- are likely to experience health impacts from extreme heat and poor air quality due to age-related changes in the body's ability to regulate temperature and respiratory function;
- often live alone with limited support networks;
- may have physical limitations that make it difficult to evacuate quickly or take protective actions during disasters;
- are often on fixed incomes, which can limit ability to prepare for or recover from disasters;
- older adults are most vulnerable to air quality, drought, extreme heat, flooding, landslides, severe weather, and wildfire.

Key Terms:

Exposure: The presence of people and assets (buildings, infrastructure, natural systems, and resources) in areas subject to harm.

Sensitivity: How affected a population or asset would be if exposed to a climate hazard.

Adaptive Capacity: The ability of a person, group, assets, or system to adjust to potential damage, take advantage of opportunities, or respond to changes.

Vulnerability: The degree to which natural, built, and human systems are susceptible to harm from climate hazards and the absence of capacity to adapt.

What are Priority Vulnerable Assets?

Transportation Infrastructure

Damage to transportation infrastructure can isolate neighborhoods, prevent evacuations during emergencies, disrupt communities and daily activities, and impede emergency response vehicles, affecting the entire community's safety and mobility.

Transportation systems are most vulnerable to air quality, extreme heat, flooding, landslides, sea level rise, severe weather, and wildfire. Assets at risk include:

- Critical roads and highways (101, 280, 380, El Camino Road);
- Caltrain, BART, and San Mateo Airport;
- San Francisco International Airport.

Emergency Services

When emergency services are compromised by climate hazards, response times increase, and the community's safety is at risk. This is particularly concerning for vulnerable populations who may require swift emergency medical care during outdoor events.

Emergency services are most vulnerable to air quality, extreme heat, flooding, landslides, severe weather, and wildfire. Buildings and services most at risk include:

- Fire stations and police facilities;
- Emergency medical response;
- Emergency operations.

Homes and Residential Structures

Damage to homes can result in displacement, financial hardship, and in some cases homelessness. Many homes in San Bruno lack adequate cooling for increasingly frequent heat waves, and rising insurance costs in hazard-prone areas create additional financial burdens.

Homes and apartments are most vulnerable to extreme heat, flooding, landslides, sea level rise, and severe weather. Neighborhoods of risk include:

- Neighborhoods near Highway 101, which are vulnerable to flooding and sea level rise;
- Homes in the hillside neighborhoods, which are vulnerable to landslides and wildfire.

Utility Infrastructure

Disruptions to utility services affect daily life, health, and safety. Power outages can be life-threatening for especially vulnerable residents, disrupt business operations, spoil food, and disable home security systems. Communication outages can prevent people from receiving emergency alerts or calling for help.

These infrastructure networks are most vulnerable to extreme heat, landslides, sea level rise, severe weather, and wildfire. Infrastructure most at risk include:

- Electricity and natural gas systems;
- Overhead power lines can be damaged by high winds and falling trees, while underground infrastructure can be damaged by flooding and landslides;
- Communication networks;
- Cell towers, internet service, and emergency alert systems;
- Water and wastewater systems.

Natural Resources

These natural resources provide critical services like cooling shade during heat waves, flood mitigation, improved air quality, and wildlife habitat. Damage to these resources reduces their protective benefits and diminishes quality of life and recreational opportunities for residents.

- Oak woodlands in western San Bruno including areas in and around Junipero Serra County Park;
- San Bruno Creek and riparian areas;
- Urban forests and trees;
- Most vulnerable to drought, ecosystem pests, extreme heat, flooding, landslides, severe weather, wildfire.



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¿Quién y qué es vulnerable a los riesgos climáticos en San Bruno?

Comprender la vulnerabilidad

Una evaluación de la vulnerabilidad es un estudio que analiza cómo los peligros del cambio climático pueden afectar a las personas y los bienes de San Bruno y qué poblaciones y lugares están en mayor riesgo. La evaluación ayuda a identificar las prioridades para la planeación de la adaptación.

Riesgos climáticos que afectan a San Bruno



Calidad del aire y humo

El aumento de los incendios forestales en California está causando días de mala calidad del aire más frecuentes en San Bruno, lo que afecta a la salud respiratoria y a las actividades al aire libre.



Sequia

Las sequías, más frecuentes y graves, afectan a, suministro de agua y a los jardines, y aumentan el riesgo de incendios forestales. San Bruno depende del sistema regional de suministro de agua Hetch Hetchy, que a su vez depende del manto de nieve de Sierra Nevada.



Calor extremo y noches cálidas

En 2035 y 2054, San Bruno podría ver más del doble de días de calor extremo al año (días con una temperatura máxima de más de 80°F). Las noches cálidas evitan el enfriamiento nocturno, empeorando los impactos del calor.



Inundaciones

Las zonas del este de San Bruno corren el riesgo de inundación, incluyendo el vecindario de Valle Air, están en zonas de inundación designadas por la FEMA. El cambio climático está aumentando la intensidad de las tormentas de lluvia y los ríos atmosféricos, aumentando los riesgos de inundación.



Desprendimientos

Las inclinaciones de la tierra y las rocas que rodean el Parque del Condado Junipero Sierra tienen alta susceptibilidad a los deslizamientos de tierra, especialmente durante eventos de lluvias intensas.



Aumento del nivel del mar y aguas subterráneas emergentes

La zona este de San Bruno, cerca de la autopista 101, es vulnerable a los efectos de la subida del nivel del mar. Para 2050, el nivel del mar podría subir hasta 10 pulgadas, afectando oportunamente a áreas en San Bruno. El aumento del nivel del mar también empuja las aguas subterráneas más alto en las zonas bajas, creando aguas subterráneas emergentes que pueden dañar los cultivos, servicios públicos subterráneos, y las infraestructuras, incluso en zonas no inundadas directamente por el agua del mar.



Clima severo

Las tormentas más intensas pueden provocar cortes de electricidad, daños a calles y daños a las infraestructuras de todo San Bruno. Las proyecciones climáticas para el Área de la Bahía indican que San Bruno experimentará tormentas más frecuentes con vientos atmosféricos más fuertes y vientos dañinos. Los eventos de corte de energía de seguridad pública, destinados a reducir los riesgos de incendios forestales durante condiciones de vientos fuertes, pueden dejar a los residentes sin electricidad durante períodos prolongados.



Incendio forestal

Se espera que los incendios forestales se vuelvan más frecuentes e intensos en todo California y se vean durante la mayor parte o la totalidad del año. En los últimos años, ya hemos visto muchos de estos cambios. Grandes sectores de los vecindarios de las labores se encuentran dentro de zonas de riesgo de incendios forestales, especialmente las áreas próximas al espacio abierto alrededor del lago San Andrés.

¿Quiénes son las poblaciones vulnerables prioritarias?

Sobre la base de la evaluación de la vulnerabilidad, estos grupos se enfrentan a los mayores riesgos climáticos:

Hogares de bajos recursos, incluidos los hogares con bajos ingresos y con limitaciones de vivienda

- A menudo tienen recursos limitados para prepararse para los peligros (como comprar suministros de emergencia o hacer mejoras en el hogar).
- Tienen menos opciones de escape o fondos de emergencia.
- A menudo viven en edificios o lugares con alta exposición a amenazas climáticas.
- Pueden enfrentarse a barreras lingüísticas que limitan su acceso a la información y los servicios de emergencia.
- Esta falta de tener más opciones de escape o la evasión durante emergencias.
- Los hogares de bajos recursos son los más vulnerables a la contaminación del aire, el calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales.

Trabajadores al aire libre

- enfrentan una exposición directa a la mala calidad del aire, al calor extremo y al riesgo de enfermedades.
- A menudo provienen de comunidades de inmigrantes y hogares de bajos recursos, lo que les hace más vulnerables a los impactos del cambio climático.
- Pueden tener menos recursos para acceder a servicios de salud y atención médica.
- Los trabajadores al aire libre son más vulnerables a la contaminación del aire, al calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales.

Personas con enfermedades crónicas y/o discapacidades

- Pueden tener condiciones de salud que los hacen más vulnerables a los peligros.
- Dependencia de la asistencia de otros para las actividades.
- Pueden tener problemas de movilidad durante las evacuaciones.
- Las personas con enfermedades crónicas y/o discapacidades son más vulnerables a la contaminación del aire, al calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales.

Adultos mayores

- La edad afecta el desempeño físico en la salud y el calor extremo y la mala calidad del aire afectan a los miembros más vulnerables de la comunidad.
- A menudo viven solos con pocos recursos limitados.
- Pueden tener limitaciones físicas que dificultan la evacuación o el acceso a medidas de protección durante las inundaciones.
- A menudo tienen "ingresos" fijos, lo que puede limitar su capacidad para pagar servicios de emergencia o de evacuación.
- Los adultos mayores son más vulnerables al calor extremo, al calor, al calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales.

Términos clave:

Exposición: presencia de personas y bienes (edificios, infraestructuras, sistemas naturales y recursos) en zonas sujetas a daños.

Sensibilidad: Qué tan afectado sería una población o un activo si estuviera expuesta a un peligro climático.

Capacidad de adaptación: La habilidad de una persona, grupo, activo o sistema para ajustarse a ciertos peligros, aprovechar oportunidades o responder a cambios.

Vulnerabilidad: El grado en que los sistemas naturales, construidos y humanos son susceptibles a los daños causados por los peligros climáticos y la falta de capacidad de adaptación.

¿Qué son los activos vulnerables prioritarios?

Infraestructuras de transporte

Los daños en las infraestructuras de transporte pueden afectar los viajes, especialmente en caso de emergencia, de evacuación y la movilidad cotidiana en la comunidad.

Los sistemas de transporte por carretera, como la autopista 101, el calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales. Los daños en los sistemas de transporte pueden afectar la movilidad cotidiana en la comunidad.

- Carreteras y autopistas (101, 280, 380, 415, Camino Real).
- Servicios de tránsito (BART y Samtrans).
- Aeropuerto Internacional de San Francisco.

Servicios de emergencia

Los servicios de emergencia se ven comprometidos por los riesgos climáticos, lo que afecta la capacidad de responder a emergencias y la atención médica de emergencia.

Los servicios de emergencia son más vulnerables a la contaminación del aire, al calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales. Los daños en los servicios de emergencia pueden afectar la atención médica de emergencia.

- Pólizas de seguro y servicios de emergencia.
- Respuesta médica de emergencia.
- Operaciones de emergencia.

Viviendas y estructuras residenciales

Los daños en las viviendas pueden provocar desplazamientos, pérdida económica y, en algunos casos, pérdida de la vivienda. Muchos hogares de San Bruno corren el riesgo de sufrir daños por inundaciones, calor extremo, sequías, y el aumento del nivel del mar, el clima severo y los incendios forestales.

Los costos de reparación son más altos para las personas con menos recursos, lo que puede afectar su capacidad de permanecer en sus hogares.

- Viviendas en zonas de alto riesgo de inundación.
- Viviendas en zonas de alto riesgo de incendio.

Infraestructura de servicios públicos

Las interrupciones de los servicios públicos afectan a la vida diaria, la salud y la seguridad. Los cortes de electricidad pueden poner en peligro la vida de los residentes más vulnerables, especialmente a las personas con condiciones de salud preexistentes.

Los cortes de electricidad también pueden afectar la capacidad de responder a emergencias y la atención médica de emergencia.

- Líneas de transmisión y cables de fibra óptica.
- Líneas de distribución de energía eléctrica.
- Líneas de distribución de agua potable.

Recursos naturales

Los recursos naturales proporcionan servicios ecosistémicos como la regulación del clima, la calidad del agua y la biodiversidad. Los recursos naturales también proporcionan recreación y bienestar psicológico a los residentes.

- Bosques y ríos en el este de San Bruno, incluidas las zonas del Parque del Condado Junipero Sierra y sus alrededores.
- Áreas de recreación y áreas verdes.
- Bosques y ríos en el este de San Bruno.

Los recursos naturales son más vulnerables al calor extremo, al calor, al calor extremo, las inundaciones, y el aumento del nivel del mar, el clima severo y los incendios forestales.



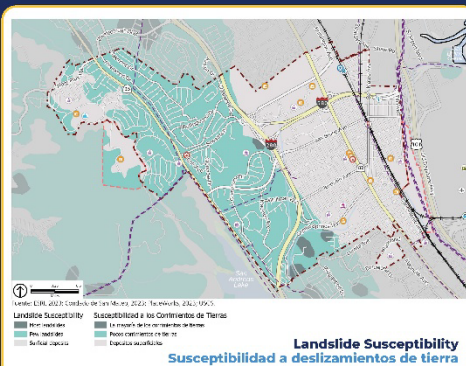
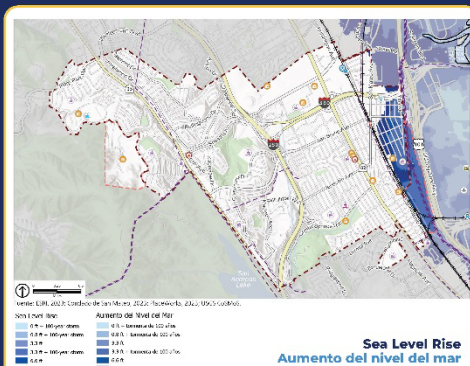
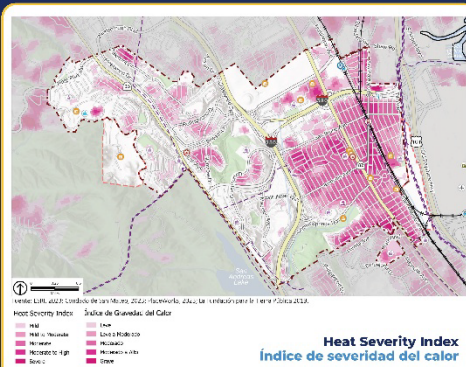
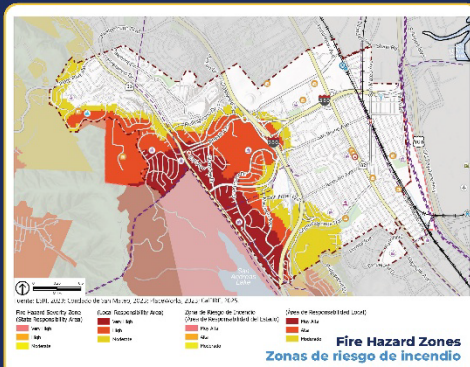
SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 1



Climate Hazards in San Bruno

Riesgos climáticos en San Bruno



- City of San Bruno
- Sphere of Influence
- San Mateo County Boundary
- Parks and Open Space
- BART Stations
- BART Network
- Caltrain Stations
- Caltrain Network
- Airport
- Law Enforcement
- Fire Stations
- Government Facilities
- California Power Plants
- Public Schools (K-12)
- Private Schools (K-12)
- College or University
- Communication Facilities
- Transmission Lines



SAN BRUNO CLIMATE ACTION PLAN

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STATION 5: HOW CAN SAN BRUNO BECOME MORE RESILIENT TO CLIMATE HAZARDS?



How can San Bruno become more resilient to climate hazards?



Becoming a Resilient San Bruno

Climate resilience refers to the ability to prepare for, respond to, and recover from climate-related hazards and stresses. The Safety Element update will include policies to strengthen San Bruno's resilience to current and future climate hazards.

ACTIVITY: What effects of climate hazards have you experienced?

The City is considering the following draft policies for San Bruno's Safety Element update. These policies aim to reduce risks from climate hazards and improve community resilience. We want your feedback on which policies you think are most important and effective.

Please place a dot next to the impacts you have experienced in San Bruno:

Vote Here:

<input type="checkbox"/>	• Power outages during storms or high fire risk periods.
<input type="checkbox"/>	• Damage to home or property from flooding.
<input type="checkbox"/>	• Health impacts from poor air quality.
<input type="checkbox"/>	• Difficulty sleeping during heat waves.
<input type="checkbox"/>	• Travel disruptions due to flooding.
<input type="checkbox"/>	• Rising utility costs from increased fire or other disaster risks.
<input type="checkbox"/>	• Increased insurance costs or loss of coverage.
<input type="checkbox"/>	• Water use restrictions.
<input type="checkbox"/>	• Injuries or death in your household, or of friends or other family from a natural disaster or other extreme event.
<input type="checkbox"/>	• Other:

ACTIVITY: Rate These Safety and Resilience Policies

Please place a green dot next to policies you strongly support, a yellow dot next to policies you are neutral about, and a red dot next to policies you do not support.

Emergency Preparedness and Evacuation		Infrastructure Resilience	
<input type="checkbox"/>	Permit activities, such as evacuation kit preparation, CERT training, and home hardening, that reduce the risk of loss of life, injury, loss of property, or resource due to natural hazards.	<input type="checkbox"/>	Renovate existing City owned facilities and design new City facilities to incorporate renewable energy generation systems, battery energy storage systems, and energy-efficient design and features, as feasible.
<input type="checkbox"/>	Coordinate with surrounding jurisdictions, school districts, recreation and park districts, and community-based organizations to ensure adequate and equitably located emergency shelters, community resilience centers, and alternate care sites are available when natural disasters and other highly hazardous conditions occur.	<input type="checkbox"/>	Encourage the installation of emergency power supplies, including solar panels and battery energy storage systems, for residential and nonresidential properties.
Flooding and Sea Level Rise		Wildfire	
<input type="checkbox"/>	Collaborate with surrounding jurisdictions to ensure the ongoing maintenance and readiness of potential evacuation routes serving the City, including making improvements to existing roads to support safe evacuations, as needed.	<input type="checkbox"/>	Rebuild or retrofit Fire Station No. 51 and 52 to accommodate current and future Fire Department needs, Americans with Disabilities Act standards, and seismic requirements.
<input type="checkbox"/>	Require new development in or near fire prone areas (wildland urban interface), flood prone areas, and/or areas of known slope instability to have access to at least two emergency evacuation routes.	<input type="checkbox"/>	Identify and remove mature and/or diseased Eucalyptus trees in rights-of-way and other open areas, if they pose a fire hazard or other threat to health and safety.
<input type="checkbox"/>	Protect areas subject to flooding hazards by implementing storm drainage improvements, and by requiring building design and engineering that meets or exceeds known flood risk requirements.	<input type="checkbox"/>	Continue to clear fire hazardous materials from Cuestinor Canyon that pose a threat to nearby residents. Care should be taken to prevent unnecessary harm to healthy vegetation. Ensure continued use by the Fire Department should the existing fire road be transitioned to a multi-use trail.
<input type="checkbox"/>	Prohibit new structures in a 35-foot buffer zone around creeks to accommodate and maintain built and natural infrastructure for flood protection, habitat restoration, and public access. A wider buffer zone to accommodate habitat migration shall be included where feasible.	<input type="checkbox"/>	Require installation and maintenance of fire protection measures in mapped fire hazard severity zones and wildland-urban interface areas, including but not limited to: <ul style="list-style-type: none">• Proper siting, road and building clearances, and access;• Brush clearance (non-fire resistant landscaping 50 to 100 feet from structures);• Use of fire resistant materials (pressure treated, fire resistant shingles or shakes);• Landscaping with fire resistant species; and• Installation of early warning systems (alarms and sprinklers). Other requirements based on the latest version of the California Fire Code.
Drought and Extreme Heat			
<input type="checkbox"/>	Require drought-tolerant landscaping in new development, in accordance with applicable State and local laws. Ensure that new landscaping aligns with vegetation and soil/water management strategies to minimize wildfire or flood risks.		
<input type="checkbox"/>	Encourage new and existing development to incorporate building and site design features that reduce the effects of extreme heat, improve indoor air quality, and reduce energy demand.		



ACTIVIDAD: ¿Qué efectos de los riesgos climáticos has experimentado?

Por favor, ponga un punto al lado de los impactos que ha experimentado en San Bruno:

Vote Here:

- Costes de electricidad durante tormentas o periodos de alto riesgo de incendio.
- Daños en la vivienda o los bienes por inundación.
- Regeneraciones sanitarias de la mala calidad del aire.
- Dificultad para dormir durante los olas de calor.
- Interrupciones de los viajes debido a las inundaciones.
- Aumento de los costes de los servicios públicos por el incremento del riesgo de incendios u otros catástrofes.
- Aumento de los costes del seguro o pérdida de cobertura.
- Restricciones del uso del agua.
- Lesiones o fallecimiento en su hogar, o de amigos u otros familiares a causa de una catástrofe natural u otro suceso extremo.
- Otros:

ACTIVIDAD: Califique estas políticas de seguridad y resiliencia

Coloque un punto verde junto a las políticas que apoya firmemente, un punto amarillo junto a las políticas sobre las que es neutral y un punto rojo junto a las políticas que no apoya.

<h3>Preparación para emergencias y evacuación</h3> <p>Planearse actividades, como la preparación de kits de evacuación, la formación C.A. y el reforzamiento de viviendas, que reduzcan al riesgo de pérdida de vidas, personas, pérdidas de bienes o cosechas ante el peligro de incendios.</p> <p>Coordinarse con las autoridades locales, autoridades, los distritos escolares, las defensas rurales y de parques, y las organizaciones comunitarias para garantizar la disponibilidad de refugio y de albergues adecuados y el refugio de evacuados, centros de recepción y evacuación de la gente de emergencia, organizaciones o personas que produzcan cuidados naturales y otros cuidados de emergencia.</p> <p>Coordinar con las autoridades locales para garantizar el mantenimiento continuo y la preparación de las poblaciones de evacuación que sirven a la Ciudad, incluyendo la capacitación de mujeres en las carreteras existentes para apoyar evacuación de riesgos, según sea necesario.</p> <p>Reconocer nuevos desarrollos en o cerca de zonas propensas a incendios (interfaz urbano-forestal), zonas de alta vulnerabilidad y/o zonas de inestabilidad: conciencia de las acciones necesarias al menos dos veces de evacuación e emergencia.</p>	<h3>Resiliencia de las infraestructuras</h3> <p>Reforzar las instalaciones municipales existentes y actualizar nuevas instalaciones para múltiples usos para incorporar sistemas de generación de energía renovable, sistemas de almacenamiento de energía en baterías y un diseño y unas características de eficiencia energética, en la medida de lo posible.</p> <p>Reforzar la instalación de fuentes de alimentación de emergencia, incluidos paneles solares y sistemas de almacenamiento de energía en baterías, para proporcionar resiliencia y su resiliencia.</p>
<h3>Inundaciones y subida del nivel del mar</h3> <p>Proteger las Lagunas costeras, el riesgo de inundación moderado la ubicación de infraestructuras y/o de zonas que agotan el suelo y la exigencia de que el diseño y la ingeniería de las edificaciones cumplan con su función en regímenes de riesgo en mayoría de riesgo e inundación.</p> <p>Prohibir nuevas estructuras en una zona temporal de 35 pies o menos de los arroyos para ampliar y mantener infraestructura para manejar y reducir la exposición contra inundaciones, especialmente de habitantes y comunidades. Siempre que sea posible, se incluirá una zona de amortiguamiento para acomodar la migración del hábitat.</p>	<h3>Incendio forestal</h3> <p>Reconocer la modernización de las prácticas de combustión y 51 y en 2012 para adaptarse a las necesidades actuales y futuras del Cuerpo de Bomberos, los estándares de la Ley de Estado nómadas con discapacidades y los requisitos mínimos.</p> <p>Identificar y eliminar los combustibles muertos y/o enfermos en las viviendas, áreas de pasto y otras zonas abiertas, si suponen un peligro de incendio u otra amenaza para la salud y la seguridad.</p> <p>Seguir reduciendo del Cuñal Creosoles los materiales peligrosos para las incendios que se pueden tener en áreas para las personas cercanas. Se debe tener cuidado para evitar daños innecesarios a la vegetación sana. Garantizar un uso continuado por parte del Departamento de Bomberos en caso de que el cambio contra incendios existente se convierta en un sereno a largo plazo.</p>
<h3>Sequía y calor extremo</h3> <p>Exigir un paisaje más tolerante a la sequía y a los meses de verano, de acuerdo con las leyes estatales y acciones aplicables. Garantizar que el nuevo paisaje sea aliado con las estrategias de gestión de las viviendas y las aguas naturales para minimizar los riesgos de incendios forestales e inundaciones.</p> <p>Promover que los edificios nuevos y existentes incorporen características de diseño que minimicen el efecto de calor urbano, minimicen la calidad del aire interior y reduzcan la demanda de energía.</p>	<p>Exigir la instalación y el mantenimiento a más días de protección contra incendios en las zonas catalogadas de riesgo de incendio y en las zonas de exterior urbano, rurales, acuáticas, entre otros, las siguientes:</p> <ul style="list-style-type: none"> Utilización adecuada, espacio libre para carreteras y edificios, y vecindario. Desbroce de la maleza (ardiente) no más tarde a finales de un turno de cinco 200-1000 pies de los edificios. El uso de un material resistente a fuego, como los pisos, impregnados a presión y resinas de alto fuego. Paisajismo con especies resistentes al fuego. Instalación de sistemas de alerta rápida (alarmas y sensores). Otros requisitos basados en la última versión del Código de Edificación de la Ciudad.



SAN BRUNO CLIMATE ACTION PLAN

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How can San Bruno become more resilient to climate hazards?

¿Cómo puede San Bruno volverse más resiliente a los riesgos climáticos?



ACTIVITY: What Else Should We Consider?

What other policies should San Bruno consider to increase climate resilience?
Please write your ideas on a sticky note and place it here:

ACTIVIDAD: ¿Qué más debemos considerar?

¿Qué otras políticas debería considerar San Bruno para aumentar la resiliencia climática?
Por favor, anota tus ideas en una nota adhesiva y colócala aquí:

ACTIVITY: Personal Preparedness

What have you done to prepare your household for climate hazards? What more would you like to do?
What would help you become better prepared? Please write your thoughts on a sticky note and place it here:

ACTIVIDAD: Preparación personal

¿Qué has hecho para preparar tu hogar ante los riesgos climáticos? ¿Qué más te gustaría hacer?
¿Qué te ayudaría a estar mejor preparado? Escribe tus ideas en una nota adhesiva y colócala aquí:



SAN BRUNO CLIMATE ACTION PLAN COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

APPENDIX 2: WORKSHOP PHOTOS AND COMMENT TRANSCRIPTION

This appendix presents photographs of the boards as presented at the workshop, transcriptions of written comments, and the results of the interactive activities. Only photos of workshop boards with feedback are shown here. For images of all workshop boards, please see **Appendix 1**.





SAN BRUNO CLIMATE ACTION PLAN COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

STATION 3: HOW WILL WE LOWER GHG EMISSIONS IN SAN BRUNO?

How will we lower emissions in San Bruno?

There are several ways to lower GHG emissions in San Bruno. Below are 7 strategy concepts that the City and community members can implement to reduce their impact.

Place a dot in the corresponding space if you support, oppose, or are unsure about implementing a certain strategy concept. Share your comments on the nearby sticky notes.

STRATEGY CONCEPT 1:	STRATEGY CONCEPT 2:	STRATEGY CONCEPT 3:	STRATEGY CONCEPT 4:	STRATEGY CONCEPT 5:	STRATEGY CONCEPT 6:	STRATEGY CONCEPT 7:
Increase energy efficiency and the use of carbon-free power in buildings. By improving insulation and replacing appliances that use natural gas with appliances that use electricity, especially water heaters and space heaters, property owners can reduce GHG emissions from buildings significantly. *Co-benefits: More efficient appliances, lowered utility bills	Encourage solar energy generation on buildings. Buildings equipped with solar panels can generate their own energy, which reduces utility bills and GHG emissions. If solar panel systems are also coupled with battery energy storage systems, buildings can continue to use electricity generated onsite during a power outage. *Co-benefits: Cost-saving over time, enhanced energy resilience.	Increase the use of transit and active transportation modes. Making transit and active modes of transportation, including walking and biking, more accessible and dependable options for the community reduces the use of gasoline-powered vehicles and the associated emissions. *Co-benefits: Public health benefits, community connection, improved air quality	Encourage the use of electric vehicles. Replacing gasoline- and diesel-powered vehicles with electric vehicles improves air quality and reduces the reliance on fossil fuels. This strategy involves increasing the availability of EV chargers in the community and promoting the various rebates available to residents who purchase EVs. *Co-benefits: Cost-saving over time, improved air quality	Increase water efficiency. This strategy involves replacing water fixtures in buildings with more efficient models, encouraging the use of recycled water, and implementing drought-tolerant landscaping techniques. *Co-benefits: Cost-saving, more reliable water supply, increased environmental health	Reduce the amount of solid waste sent to landfills. This strategy encourages more recycling and composting to keep waste out of landfills, where it produces greenhouse gases. Recycling also cuts emissions from making new products, while composting turns food and yard waste into healthy soil. *Co-benefits: Less waste, reduced waste management costs, improved soil health.	Reduce GHG emissions from City operations. The City can lead by example in reducing operational GHG emissions by retrofitting buildings for energy efficiency, installing solar panels and battery storage, promoting alternative commutes for employees, and minimizing waste at facilities and events. *Co-benefits: Cost-saving for City, cleaner air
Support Unsure Oppose	Support Unsure Oppose	Support Unsure Oppose	Support Unsure Oppose	Support Unsure Oppose	Support Unsure Oppose	Support Unsure Oppose

What can I do to reduce my household emissions?

San Bruno's electricity provider, Peninsula Clean Energy (PCE), offers several programs and rebates to help San Bruno residents lower their energy use and associated GHG emissions.

Upgrade to ECO100. Residents can upgrade to ECO100 service to receive electricity from 100% renewable sources, like wind and solar.


Electricity appliances: PCE offers rebates to reduce the costs of upgrading natural gas-powered appliances to energy-efficient electric models.

Purchase an EV: PCE helps customers find federal and state rebates to lower the cost of purchasing an electric vehicle.


Install solar and battery systems: PCE, the State of California, and the federal government all offer rebates for installing solar panels or solar and battery storage systems. PCE also purchases excess power that you generate from solar panels, reducing your monthly bill.



SAN BRUNO CLIMATE ACTION PLAN COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2



¿Cómo reduciremos las emisiones en San Bruno?



Hay varias formas de reducir las emisiones de GEI en San Bruno.

A continuación se presentan 7 conceptos estratégicos que la ciudad y los miembros de la comunidad pueden aplicar para reducir su impacto.

Ponga un punto en el espacio correspondiente si apoya, se opone o no está seguro de implementar un concepto de estratégico determinado. Comparte sus comentarios en el bloc de papel cercano.

CONCEPTO ESTRATÉGICO 1:	CONCEPTO ESTRATÉGICO 2:	CONCEPTO ESTRATÉGICO 3:	CONCEPTO ESTRATÉGICO 4:	CONCEPTO ESTRATÉGICO 5:	CONCEPTO ESTRATÉGICO 6:	CONCEPTO ESTRATÉGICO 7:
<p>Aumentar la eficiencia energética y el uso de energía libre de carbono en los edificios.</p> <p>Al mejorar el aislamiento y reemplazar los aparatos que utilizan gas natural por aparatos que utilizan electricidad, especialmente los calentadores de agua y calentadores de espacio, los propietarios pueden reducir significativamente las emisiones de GEI de los edificios.</p> <p>*Co-beneficios: Electrodomésticos más eficientes, facturas más bajas</p>	<p>Fomentar la generación de energía solar en los edificios.</p> <p>Los edificios equipados con paneles solares pueden generar su propia energía, lo que reduce las facturas de los servicios públicos y las emisiones de GEI. Si los sistemas de paneles solares también se combinan con sistemas de almacenamiento de energía en baterías, los edificios pueden seguir utilizando la electricidad generada en el sitio durante un corte de energía.</p> <p>*Co-beneficios: Ahorro de costes a largo plazo, mayor resistencia energética</p>	<p>Aumentar el uso del transporte público y los medios de transporte activos.</p> <p>Hacer que el transporte público y los medios activos de transporte, incluyendo las camisas y andar en bicicleta, sean opciones más accesibles y confiables para la comunidad, reduce el uso de vehículos a gasolina y las emisiones asociadas.</p> <p>*Co-beneficios: Beneficios para la salud pública, conexión con la comunidad</p>	<p>Fomentar el uso de vehículos eléctricos.</p> <p>Sustituir los vehículos de gasolina y diésel por vehículos eléctricos mejora la calidad del aire y reduce la dependencia de los combustibles fósiles. Esta estrategia implica aumentar la disponibilidad de cargadores de VE en la comunidad y promover las diversas rebajas disponibles para los residentes que compren VE.</p> <p>*Co-beneficios: Ahorro de costes a largo plazo, mejora de la calidad del aire</p>	<p>Aumentar la eficiencia hídrica.</p> <p>Esta estrategia consiste en reemplazar las instalaciones de agua de los edificios por modelos más eficientes, fomentar el uso de agua reciclada y implementar técnicas de paisajismo tolerantes a la sequía.</p> <p>*Co-beneficios: Ahorro de costes, suministro de agua más fiable, mejora la salud ambiental.</p>	<p>Reducir la cantidad de residuos sólidos enviados a los vertederos.</p> <p>Esta estrategia fomenta el aumento de la tasa de reciclaje y compostaje de residuos en lugar de enviarlos a un vertedero donde se descomponen y generan emisiones de GEI. El reciclaje también reduce las emisiones asociadas a la fabricación de nuevos productos de plástico, vidrio y metal. La descomposición de los residuos orgánicos se produce contribuyendo a las emisiones de GEI de los vertederos. El compostaje, destino estos residuos a un uso beneficioso que enriquece el suelo y reduce las emisiones de GEI.</p> <p>*Co-beneficios: Menos residuos, reducción de los costes de gestión de residuos, mejora la salud del suelo.</p>	<p>Reducir las emisiones de GEI de las operaciones de la Ciudad.</p> <p>La ciudad puede predicar con el ejemplo en la reducción de las emisiones operativas de GEI mediante la modernización de edificios para la eficiencia energética, la instalación de paneles solares y almacenamiento de baterías, la promoción de viajes alternativos para los empleados y la minimización de residuos en instalaciones y eventos.</p> <p>*Co-beneficios: Menos residuos, reducción de los costes de gestión de residuos, mejora la salud del suelo.</p>
Apoyo		Apoyo	Apoyo	Apoyo	Apoyo	Apoyo
Inseguro	Unsure	Inseguro	Inseguro	Inseguro	Inseguro	Inseguro
Inseguro	Inseguro	Inseguro	Oppose	Inseguro	Inseguro	Inseguro



¿Qué puedo hacer para reducir mis emisiones domésticas?

El proveedor de electricidad de San Bruno, Peninsula Clean Energy (PCE), ofrece varios programas y descuentos para ayudar a los residentes de San Bruno a reducir su consumo de energía y las emisiones de GEI asociadas.

Cambiar a ECO100: Los residentes pueden contratar el servicio ECO100 para recibir electricidad de fuentes 100% renovables, como la eólica y la solar.

Electrificar los electrodomésticos: El PCE ofrece descuentos para reducir los costes de modernización de los electrodomésticos que funcionan con gas natural por modelos eléctricos energéticamente eficientes.

Comprar un vehículo eléctrico: PCE ayuda a los clientes a encontrar descuentos federales y estatales para reducir el coste de la compra de un vehículo eléctrico.

Instalar sistemas solares y de baterías: PCE, el estado de California y el gobierno federal ofrecen reembolsos por instalar paneles solares o sistemas solares y de almacenamiento en baterías. PCE también compra el exceso de energía que usted genera con los paneles solares, reduciendo su factura mensual.





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STATION 5: HOW CAN SAN BRUNO BECOME MORE RESILIENT TO CLIMATE HAZARDS?

How can San Bruno become more resilient to climate hazards?

Becoming a Resilient San Bruno

Climate resilience refers to the ability to prepare for, respond to, and recover from climate-related hazards and stresses. The Safety Element update will include policies to strengthen San Bruno's resilience to current and future climate hazards.

ACTIVITY: What effects of climate hazards have you experienced?

The City is considering the following draft policies for San Bruno's Safety Element update. These policies aim to reduce risks from climate hazards and improve community resilience. We want your feedback on which policies you think are most important and effective.

Please place a dot next to the impacts you have experienced in San Bruno.

Vote Here:

- Power outages during storms or high fire risk periods.
- Damage to home or property from flooding.
- Health impacts from poor air quality.
- Difficulty sleeping during heat waves.
- Travel disruptions due to flooding.
- Rising utility costs from increased fire or other disaster risks.
- Increased insurance costs or loss of coverage.
- Water use restrictions.
- Injuries or death in your household, or of friends or other family from a natural disaster or other extreme event.
- Other:

ACTIVITY: Rate These Safety and Resilience Policies

Please place a green dot next to policies you strongly support, a yellow dot next to policies you are neutral about, and a red dot next to policies you do not support.

Emergency Preparedness and Evacuation	Infrastructure Resilience
<ul style="list-style-type: none">Promote activities, such as evacuation kit preparation, CERT training, and home hardening, that reduce the risk of loss of life, injuries, loss of property, or resources due to natural hazards.	<ul style="list-style-type: none">Renovate existing City-owned facilities and design new City facilities to incorporate renewable energy generation systems, battery energy storage systems, and energy-efficient design and features, as feasible.
<ul style="list-style-type: none">Coordinate with surrounding jurisdictions, school districts, recreation and park districts, and community-based organizations to ensure adequate and equitably located emergency shelters, community resilience centers, and alternate care sites are available when natural disasters and other highly hazardous conditions occur.	<ul style="list-style-type: none">Encourage the installation of emergency power supplies, including solar panels and battery energy storage systems, for residential and nonresidential properties.
<ul style="list-style-type: none">Collaborate with surrounding jurisdictions to ensure the ongoing maintenance and readiness of potential evacuation routes serving the City, including making improvements to existing roads to support safe evacuations, as needed.	Wildfire <ul style="list-style-type: none">Rebuild or retrofit Fire Station No. 51 and 52 to accommodate current and future Fire Department needs, Americans with Disabilities Act standards, and seismic requirements.
<ul style="list-style-type: none">Require new development in or near fire-prone areas (wildland-urban interfaces), flood-prone areas, and/or areas of known slope instability to have access to at least two emergency evacuation routes.	<ul style="list-style-type: none">Identify and remove mature and/or diseased Eucalyptus trees in rights-of-way and other open areas, if they pose a fire hazard or other threat to health and safety.
Flooding and Sea Level Rise <ul style="list-style-type: none">Protect sites subject to flooding hazards by implementing storm drainage improvements, and by requiring building design and engineering that meets or exceeds known flood risk requirements.	<ul style="list-style-type: none">Continue to clear fire hazardous materials from Oakmoor Canyon that pose a threat to nearby residents. Care should be taken to prevent unnecessary harm to healthy vegetation. Ensure continued use by the Fire Department should the existing fire road be transformed to a multi-use trail.
<ul style="list-style-type: none">Prohibit new structures in a 35-foot buffer zone around creeks to accommodate and maintain built and natural infrastructure for flood protection, habitat restoration, and public access. A wider buffer zone to accommodate habitat migration shall be included where feasible.	<ul style="list-style-type: none">Require installation and maintenance of fire protection measures in mapped fire hazard severity zones and wildland-urban interface areas, including but not limited to:<ul style="list-style-type: none">Proper siting, road and building clearances, and access;Brush clearance (non-fire resistant landscaping 55 to 100 feet from structures);Use of fire resistive materials (pressure-impregnated, fire resistive shingles or shakes);Landscaping with fire resistive species; and;Installation of early warning systems (alarms and sprinklers).
Drought and Extreme Heat <ul style="list-style-type: none">Require drought-tolerant landscaping in new development, in accordance with applicable State and local laws. Ensure that new landscaping aligns with vegetation and stormwater management strategies to minimize wildfire or flood risks.	<ul style="list-style-type: none">Other requirements based on the latest version of the California Fire Code.
<ul style="list-style-type: none">Encourage new and existing development to incorporate building and site design features that reduce the effects of extreme heat, improve indoor air quality, and reduce energy demand.	

Additional information and feedback from community members will be included in the final report.



SAN BRUNO CLIMATE ACTION PLAN

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CITY OF SAN BRUNO

Becoming a Resilient San Bruno

Climate resilience refers to the ability to prepare for, respond to, and recover from climate-related hazards and stresses. The Safety Element update will include policies to strengthen San Bruno's resilience to current and future climate hazards.

ACTIVITY: What effects of climate hazards have you experienced?

The City is considering the following draft policies for San Bruno's Safety Element update. These policies aim to reduce risks from climate hazards and improve community resilience. We want your feedback on which policies you think are most important and effective.

Please place a dot next to the impacts you have experienced in San Bruno:

Vote Here:

	• Power outages during storms or high fire risk periods.
	• Damage to home or property from flooding.
	• Health impacts from poor air quality.
	• Difficulty sleeping during heat waves.
	• Travel disruptions due to flooding.
	• Rising utility costs from increased fire or other disaster risks.
	• Increased insurance costs or loss of coverage.
	• Water use restrictions.
	• Injuries or death in your household, or of friends or other family from a natural disaster or other extreme event.
	• Other: _____

ACTIVITY
Please place
Emergen
Flood
Dro

Additional things that some people mentioned in regards to future development were: are green roofs, better? more solar?





SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

Bruno become more resilient to disasters?

ACTIVITY: Rate These Safety and Resilience Policies

Please place a green dot next to policies you strongly support, a yellow dot next to policies you are neutral about, and a red dot next to policies you do not support.

Emergency Preparedness and Evacuation

	Promote activities, such as evacuation kit preparation, CERT training, and home hardening, that reduce the risk of loss of life, injuries, loss of property, or resources due to natural hazards.
	Coordinate with surrounding jurisdictions, school districts, recreation and park districts, and community-based organizations to ensure adequate and equitably located emergency shelters, community resilience centers, and alternate care sites are available when natural disasters and other highly hazardous conditions occur.
	Collaborate with surrounding jurisdictions to ensure the ongoing maintenance and readiness of potential evacuation routes serving the City, including making improvements to existing roads to support safe evacuations, as needed.
	Require new development in or near fire prone areas (wildland urban interface), flood-prone areas, and/or areas of known slope instability to have access to at least two emergency evacuation routes.

Flooding and Sea Level Rise

	Protect sites subject to flooding hazards by implementing storm drainage improvements, and by requiring building design and engineering that meets or exceeds known flood risk requirements.
	Prohibit new structures in a 35-foot buffer zone around creeks to accommodate and maintain built and natural infrastructure for flood protection, habitat restoration, and public access. A wider buffer zone to accommodate habitat migration shall be included where feasible.

Drought and Extreme Heat

	Require drought-tolerant landscaping in new development, in accordance with applicable State and local laws. Ensure that new landscaping aligns with vegetation and stormwater management strategies to minimize wildfire or flood risks.
	Encourage new and existing development to incorporate building and site design features that reduce the effects of extreme heat, improve indoor air quality, and reduce energy demand.

Infrastructure Resilience

	Renovate existing City-owned facilities and design new City facilities to incorporate renewable energy generation systems, battery energy storage systems, and energy-efficient design and features, as feasible.
	Encourage the installation of emergency power supplies, including solar panels and battery energy storage systems, for residential and nonresidential properties.

Wildfire

	Rebuild or retrofit Fire Station No. 51 and 52 to accommodate current and future Fire Department needs, Americans with Disabilities Act standards, and seismic requirements.
	Identify and remove mature and/or diseased Eucalyptus trees in rights-of-way and other open areas, if they pose a fire hazard or other threat to health and safety.
	Continue to clear fire hazardous materials from Crestmoor Canyon that pose a threat to nearby residents. Care should be taken to prevent unnecessary harm to healthy vegetation. Ensure continued use by the Fire Department should the existing fire road be transitioned to a multi-use trail.
	Require installation and maintenance of fire protection measures in mapped fire hazard severity zones and wildland-urban-interface areas, including but not limited to: <ul style="list-style-type: none">• Proper siting, road and building clearances, and access;• Brush clearance (non-fire resistant landscaping 50 to 100 feet from structures);• Use of fire resistive materials (pressure-impregnated, fire resistive shingles or shakes);• Landscaping with fire resistive species; and;• Installation of early warning systems (alarms and sprinklers).• Other requirements based on the latest version of the California Fire Code.

Handwritten note: "I don't know if this is a good idea or not. I think it's a good idea to have a buffer zone around creeks, but I'm not sure about the 35-foot buffer zone. I think it's a good idea to have a buffer zone around creeks, but I'm not sure about the 35-foot buffer zone."

Handwritten note: "I don't know if this is a good idea or not. I think it's a good idea to have a buffer zone around creeks, but I'm not sure about the 35-foot buffer zone. I think it's a good idea to have a buffer zone around creeks, but I'm not sure about the 35-foot buffer zone."

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Handwritten note: "COST?"



SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

How can San Bruno become more resilient to climate hazards?
¿Cómo puede San Bruno volverse más resiliente a los riesgos climáticos?

ACTIVITY: What Else Should We Consider?
What other policies should San Bruno consider to increase climate resilience?
Please write your ideas on a sticky note and place it here:

ACTIVIDAD: ¿Qué más debemos considerar?
¿Qué otras políticas debería considerar San Bruno para aumentar la resiliencia climática?
Por favor, anote sus ideas en una nota adhesiva y colócala aquí:

Require the city to use solar panels on all city buildings.

Solar panels in as many places possible... use more alternative, cleaner energy!

Exit drills and plans

Public Transit CV has more green landing lots, pedestrian, updates on projects

Actively promote local, healthy and vibrant programs around the climate resilience, like 2050s plan, healthy road, RFS and EV program and the smart program (e-bus landing)

ACTIVITY: Personal Preparedness
What have you done to prepare your household for climate hazards? What more would you like to do?
What would help you become better prepared? Please write your thoughts on a sticky note and place it here:

ACTIVIDAD: Preparación personal
¿Qué has hecho para preparar tu hogar ante los riesgos climáticos? ¿Qué más te gustaría hacer?
¿Qué te ayudaría a estar mejor preparado? Escribe tus ideas en una nota adhesiva y colócala aquí:

I have an ER and CERT kit ready and a plan for where I want to be in case of a seismic apocalypse (JL) Emergency.

I have not prepared but would like to initiate action



SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

CITY OF SAN BRUNO

ACTIVITY: What Else Should We Consider?

What other policies should San Bruno consider to increase climate resilience?
Please write your ideas on a sticky note and place it here:

ACTIVIDAD: ¿Qué más debemos considerar?

¿Qué otras políticas debería considerar San Bruno para aumentar la resiliencia climática?
Por favor, anote sus ideas en una nota adhesiva y colóquela aquí:

*REQUIRE ALL
EXISTING LOW
RISING WASTEWATER
MITIGATION TO THE
MAYOR WHAT THEY
CAN.*

*Solar panels in as
many places possible...
use more alternative,
cleaner energy*

*Exit drills and
plans*

*Public transit LV buses
More green landscape,
incentives, updates
on progress*

*Actively promote local, county,
and state programs aimed for
climate resilience. Like HEEHRA before
funding ran out, PCE's and EV program,
and the Homes program (it's our land)*



SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

ACTIVITY: Personal Preparedness

What have you done to prepare your household for climate hazards? What more would you like to do?
What would help you become better prepared? Please write your thoughts on a sticky note and place it here:

ACTIVIDAD: Preparación personal

¿Qué has hecho para preparar tu hogar ante los riesgos climáticos? ¿Qué más te gustaría hacer?
¿Qué te ayudaría a estar mejor preparado? Escribe tus ideas en una nota adhesiva y colócala aquí:

I have an ER and CERT kit ready and a plan for where/what to do in case of a zombie apocalypse (j/k!) Emergency.

I have not prepared but would like to initiate action



SAN BRUNO CLIMATE ACTION PLAN

COMMUNITY WORKSHOP 1 SUMMARY APPENDIX 2

TRANSCRIPTION OF WRITTEN COMMENTS

Personal Preparation:

- I have an ER and CERT kit ready and a plan for where/what to do in case of an emergency.
- I have not prepared but would like to initiate action.

Other Considerations:

- Require all entities who perform wildfire mitigation to heave away what they clear.
- Public transit, EV buses, more green landscape, incentives, updates on progress.
- Solar panels in as many places as possible / use more alternative and cleaner energy.
- Exit drills and plans.
- Actively promote local, county, and state programs aimed for climate resilience (like HEEHRA before funding ran out, PCE's used EV program, and the HOMES program - if it ever launches).

GHG Reduction Strategy Concepts:

- ***Strategy Concept 1 – Increase energy efficiency and the use of carbon-free power in buildings:*** Support, but ensure that the associated cost is not passed on to renters by improving grant programs.
- ***Strategy Concept 3 – Increase the use of transit and active transportation modes:*** Expanding active modes of transportation pairs well with PCE programs for e-bikes and used EVs.
- ***Strategy Concept 6 – Reduce the amount of solid waste sent to landfills:*** People use many things and can be wasteful. Too many plastics with toxic "forever chemicals". Cut back use of these materials that are bad for the environment, and hold businesses accountable for use of these materials.

Draft safety and resilience policies:

- ***Installation of solar panels and battery energy storage systems on private buildings:*** DERs [Distributed Energy Resources] are good!
- ***Eucalyptus tree removal:*** Only if 10+ trees are planted for every tree removed.
- ***FHSZ protection measures requirements:*** Cost!
- ***Drought-tolerant landscaping requirements:*** Affordability and any state funding in mind... Is "new development" more expensive and better? How so?