

# Hayward Climate Action Plan Update: Greenhouse Gas (GHG) Emissions Reduction Measures Buildout Terminology, Guidance, and List

## 1 Measures and Actions

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**Measures** are developed under each sector pursuant to the GHG Inventory and Forecast and in line with the Community Protocol and the California Air Resources Board (CARB) 2017 Climate Change Scoping Plan:

- Building Energy
- Transportation
- Water
- Waste
- Carbon Sequestration

**Greenhouse Gas (GHG) Reduction Measures** identify specific goals (i.e., Hayward activity data targets by 2025, 2030, 2035, 2040, and 2045) to address amounts of GHG emissions from each sector. A single measure generally addresses a subsector or represents an incremental step towards impacting an overall sector; for example, three measures may be established under transportation to address active transportation, shared transportation, and single passenger vehicles.

**GHG Reduction Actions** identify the supportive programs, policies, financial pathways, and other commitments that will accomplish a measure goal. See the figure below for a depiction of how the goals, measures, and actions are connected.



## 2 Key Pillars

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These specific key pillars have been identified, through our experience, to be specific community impact areas that together will activate or guide the buildout of actions for each measure. In general, the actions under a single measure should collectively address all the key pillars. The suggested key pillars are:

- Structural Change (e.g., ordinance or code)
- Education (e.g., educational events or materials)
- Equity (e.g., actions that ensure the overall measure and approach can pass the “equity guardrails” described below)
- Funding (e.g., grants or rebates that help pay for the implementation of a measure)
- Partnerships (e.g., community organizations that are best positioned to consistently or sustainably move a measure forward)
- Feasibility Studies (e.g., analysis necessary to identify the best path or the feasibility of implementing a specific measure)

## 3 Equitable Community Goals

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Community goals are additional benefits beyond GHG emissions reductions that the community would see from implementing the measures and actions. Establishing equity guardrails serve as the foundation of the entire GHG reduction strategy by acting as minimum standards that must be met for any measure to be considered. The equity guardrails are developed based on specific community concerns and help distill the diverse and higher-level discussions about equity into a mechanism that can be used to inform policy and create concrete change. Defining equitable community goals can help determine action buildout. Some of the major equitable community goals (i.e., co-benefits we could consider are):

- Access to Human Health and Safety Benefits
- Ecosystem Health
- Resilience and Safety
- Affordability and Anti-Displacement
- Equitable Access to Community Benefits
- High Road Jobs/Economy

Table 1 Hayward CAP Update GHG Emissions Reduction Measures List

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Sector: Building Energy</b>							
<b>Measure BE-1: Require all-electric new residential construction in the City by 2023 and non-residential construction by 2026.</b>							
Existing (FY2021 Strategic Roadmap)	BE-1.1	Structural Change	Continue to enforce the adopted Hayward Electrification Reach Code for new residential buildings banning natural gas and adopt the drafted Hayward Electrification Ordinance for new non-residential buildings that stipulate buildings be either all-electric or be constructed as mixed-fuel, but with extra energy efficiency, solar, and battery storage and provides no exemptions.	Action item in City of Hayward Strategic Roadmap FY20210 to FY2023. March 2022 Reach Code adopted to ban natural gas in new residential buildings; 2020 Reach Code adopted requiring all-electric new development for low-rise and non-residential buildings.		PW & DSD	
New	BE-1.2	Structural Change	Adopt a Reach Code, effective January 1, 2026, that will ban gas in all new construction.	Need to forecast how many non-res buildings will be built with gas in 2023-2025.			
New	BE-1.3	Education/ Funding	Compile a suite of case studies conducted by BayREN, the Building Decarbonization Coalition and other relevant sources that show cost effective strategies for electric buildings by prototype and detail the cost savings associated with all-electric construction. Share the information on the City's website.			Environmental Services	
New	BE-1.4	Education/ Partnership	Partner with BayREN to provide/share technical resources, including hosting workforce development trainings for installers, local contractors, and building owners/operators, to discuss benefits and technical requirements of electrification within Hayward. Promote the cost savings, environmental benefits, and versatility of electrification to builders, property owners, and contractors on the City website and at the City permit counters.				
New	BE-1.5	Partnerships/ Equity	Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers and community groups regarding the purpose and impact of the Hayward Electrification Reach Code and to identify equity concerns.				
New	BE-1.6	Partnership	Engage with an organization such as Building Decarbonization Coalition to work with local building industry stakeholders in educating developers and other stakeholders on new appliances and approaches to building electrification.				

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-1.7	Feasibility Studies	Partner with EBCE to conduct an electrification infrastructure and capacity feasibility study to identify expected increases in electricity demand due to building and vehicle electrification, ensure capacity to meet that demand, and identify any infrastructure improvements.			Env Svcs	
New	BE-1.8	Feasibility Studies	Utilize the Low Carbon Concrete Code Amendment Toolkit and review current best practices to develop implementation strategies, compliance forms, and specifications for compliant mixes.				
New	BE-1.9	Structural Change	Develop and adopt a building code amendment that sets standards to ensure that composition of concrete use in construction projects (residential and commercial) reduced GHG emissions while mainlining adequate durability and strength.				
<b>Measure BE-2: Electrify existing residential buildings in order to achieve 91 therms/person in 2030 and 25 therms/person in 2045</b>							
New	BE-2.1	Feasibility Studies	Develop a single-family residential building electrification strategy with a detailed existing building analysis and electrification costs analysis to understand cost implications, identify potential equity concerns/impacts, and develop strategies to electrify 10% of existing buildings by 2030.			Env Svcs Housing Planning Building	
New	BE-2.2	Structural Change	Once costs and funding/financing options are identified, adopt an electrification ordinance for existing single-family residential buildings by 2026 to be implemented through the building permit process that bans expansion of natural gas infrastructure.	March 2022 Reach Code adopted to ban natural gas in new residential buildings; 2020 Reach Code adopted requiring all-electric new development for low-rise and non-residential buildings – build on existing success with new development ordinances/reach codes with focus on existing buildings. Berkeley has at time of replacement requirement starting in 2027 in their Roadmap.		Env Svcs Housing Planning Building	
New	BE-2.3	Partnership	Support the BAAQMD’s efforts to ban gas furnaces and water heaters. (Requires replacement of any natural gas fueled equipment with an all-electric alternative at time of replacement.)				

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-2.4	Structural Change	Adopt an ordinance requiring end of flow for natural gas by 2045.	Example City: Half Moon Bay This may not need to be in a reach code, but will likely be considered when we prepare the next reach code in 2025.  Would like to see a feasibility study to show that businesses can transition over to all electric without a cost that will put them out of business.		Env Svcs Economic Dev Housing Planning Building	
New	BE-2.5	Structural Change/Partnership	Work with community stakeholders including realtors, contractors, and building officials to develop a suite of electrification readiness requirements to be completed within 60 days of completion of a home sale.	Could include new 220 wiring to appliances, panel upgrades, etc. Modeled after Oakland sewer pipe and sidewalk ordinances.			
Existing (NR-5)	BE-2.6	Structural Change	Continue to implement and enforce the Hayward Residential Energy Performance Assessment and Disclosure Ordinance and expand the program with an additional staff member and to include a comprehensive permit compliance program that includes routine training of City staff, targeted education campaign on permit/ordinance for local contractors and developers, dedicating City staff time to building inspections at time-of-sale, charging fees for noncompliance, providing easy to understand compliance checklists online and with permit applications, and facilitating permitting online.	On September 12, 2016, staff presented a report to the Council Sustainability Committee regarding a potential ordinance that would require energy audits of existing buildings and would require disclosure of energy performance. The Committee directed staff to focus efforts on providing customers with information that would encourage them to voluntarily make energy efficiency updates to existing homes and commercial buildings. City notes that permitting compliance program on existing buildings would be challenge due to staff limitations – time of sale could be successful but still strain on staff resources			
New	BE-2.7	Partnership/Education	Partner with BayREN and StopWaste to work with the local contractors, realtors, homeowner associations, and labor unions to develop a comprehensive building code and compliance training program, including hosting workforce development trainings discussing the benefits and technical requirements of electrification.				

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-2.8	Education	Conduct engagement efforts for the general public and targeted to low-income communities of color during development of the electrification strategy to understand the community's concerns around electrification.	Centering equity in existing building electrification work requires intentional partnership with local low-income communities of color to avoid exacerbating existing inequities in the built environment.			
New	BE-2.9	Equity	Partner with Hayward Below Market Rate (BMR) housing stock owners (such as Eden Housing) to commit to electrifying all BMR housing by 2045. Establish a plan, financing strategies, and schedule for implementing this action by 2026( <a href="https://www.hayward-ca.gov/services/city-services/finding-affordable-housing">https://www.hayward-ca.gov/services/city-services/finding-affordable-housing</a> )	Also an option to have all housing equity/affordability actions as a standalone Cornerstone measure for the CAP.		Env Svcs Housing Planning Building	
New	BE-2.10	Equity	Identify and partner with local community-based organizations with connections to low-income communities of color to assist in development of the electrification strategy			Env Svcs Housing Planning Building	
New	BE-2.11	Partnership	Devote staff time to collaborate with the County and other cities in the region to advocate for regulatory changes at the State level (e.g., CARB) to allow neighborhood level electrification and banning of natural gas.				
New	BE-2.12	Partnership/Funding	Work with Pacific Gas & Electric (PG&E), and East Bay Community Energy (EBCE) to conduct a feasibility study assessing the cost and funding strategy for incentivizing all-electric retrofits through on-bill financing.				
Existing (NR-12)	BE-2.13	Feasibility Study/Funding	Conduct feasibility study to evaluate the current uptake and effectiveness of Proper Assessed Clean Energy (PACE) financing for installation of renewable energy systems in single-family and multi-family homes. If feasibility study indicates effectiveness, continue to offer Property Assessed Clean Energy (PACE) financing for single-family and multi-family homes to install renewable energy systems.	The City has offered Property Assessed Clean Energy (PACE) financing for commercial and industrial properties since 2010. PACE financing can be used for the installation of renewable energy systems.			
New	BE-2.14	Equity	Review incentives, rebates, and financing options for procedural equity and ensure that existing and updated incentive programs are being equitably distributed to the community. Hurdles to equitable implementation could include credit checks, excessive procedural hurdles and lack of targeted outreach.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-2.15	Structural Change	Adopt a time of retrofit ordinance that requires all buildings with retrofit work who meet a certain threshold, such as, valued over \$100,000 or includes fire damage to complete energy efficiency/electrification actions.	See Energy Code Cost Effectiveness Explorer and City of Piedmont Code. More flexibility – some retrofit work is \$100,000 but doesn't require any rewiring. But something like fire damage, the walls are usually already open, so may be more cost effective to rewire. Same with kitchen remodels.	Effective Jan. 1, 2026?		
New	BE-2.16	Partnerships	Partner with a financing/management company such as BlocPower to provide electrification services and financing to the community with prioritization of historically under-invested communities.				
New	BE-2.17	Funding	Work with PG&E and EBCE to identify opportunities for natural gas infrastructure pruning to reduce the chance of stranded assets, provide potential funding, and establish an efficient transition to carbon neutral buildings.				

**Measure BE-3: Decarbonize existing commercial and multi-family buildings in order to achieve 53 therms per service person in 2030 and 24 therms per service person in 2045**

New	BE-3.1	Feasibility Studies	Conduct a feasibility strategy to identify commercial and multi-family building decarbonization barriers and develop a commercial and multi-family building decarbonization strategy with analysis supporting future adoption of a commercial and multi-family building decarbonization ordinance.	Strategic Roadmap measure C10			
New	BE-3.2	Structural Change	Based on the results of the feasibility study adopt a decarbonization policy for existing commercial and multi-family buildings by 2026 to be implemented through the building permit process which bans expansion of natural gas infrastructure and requires appliances to be decarbonized over time where technologically feasible (exceptions can be made where zero-carbon or low-carbon alternatives to do not exist).	Supports existing CAP policy NR-4.11 and 2020 Resolution to Adopt Electrification Reach Codes for the 2019 that phase out the use of natural gas/no longer permit new natural gas lines			

**GHG Reduction Measures**

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-3.3	Structural Change	Adopt a building performance standard for commercial and multi-family buildings over 100,000 square feet. Identify and adopt a GHG per square footage benchmark to be lowered over time. Compliance would be measured through the Commercial Energy Performance Assessment and Disclosure Program.	Example: City of Boulder and City of Berkeley			
New	BE-3.4	Structural Change	Enforc the to-be-adopted electrification ordinance compliance through the same permitting compliance program as for residential building electrification.				
Existing (NR-6)	BE-3.5	Structural Change	Adopt the Commercial Energy Performance Assessment and Disclosure Ordinance for commercial and multi-family buildings which requires energy use disclosure consistent with State law (AB 1103), which requires use of the ENERGY STAR Portfolio Manager benchmarking tool.	Existing, but no progress made based on ECERE tool			
New	BE-3.6	Education/ Partnership	Partner with an electrification/efficiency expert to provide guidance to commercial buildings covered by the building performance standard.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	BE-3.7	Education	<p>Develop an education campaign to promote electrification and include items in the program such as:</p> <ol style="list-style-type: none"> <li>1. Continue to engage with local business and business organizations (e.g., Chamber of Commerce, the Keep Hayward Clean and Green Taskforce, the Alameda County Green Business Program) to inform and facilitate electrification for commercial business owners</li> <li>2. Continue to promote the use of the Energy Star Portfolio Manager program and energy benchmarking training programs for nonresidential building owners.</li> <li>3. Utility bill inserts to advertise the incentive programs or grants available and the cost benefits of electric appliances</li> <li>4. Targeted outreach to builders, developers, local contractors, and property managers with an informational brochure describing the financial benefits of replacing natural gas appliances with all electric appliance when they apply for permits</li> <li>5. Provide informational webinars and an updated website to advertise and promote All-Electric Building Initiative rebates and incentives</li> </ol>				
New	BE-3.8	Equity	<p>Conduct outreach to small businesses and minority-owned businesses to understand potential equity impacts of a decarbonization policy as part of the existing building decarbonization study.</p>				
Existing (NR-13)	BE-3.9	Funding	<p>Conduct feasibility study to evaluate the current uptake and effectiveness of Property Assessed Clean Energy (PACE) financing for installation of renewable energy systems in commercial and industrial properties. If feasibility study indicates effectiveness, continue to offer PACE financing for commercial and industrial properties to install renewable energy systems.</p>	<p>The City has offered Property Assessed Clean Energy (PACE) financing for commercial and industrial properties since 2010. PACE financing can be used for the installation of renewable energy systems.</p>			
New	BE-3.10	Partnerships	<p>Continue to work with Bay Area Regional Energy Networks (BayREN), EBCE, and StopWaste to continue to improve and implement commercial electrification rebates and financing opportunities and other offered incentives.</p>	<p>Existing partnerships, just formalized in CAP</p>			

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Measure BE-4: Support EBCE in providing 100% carbon-free electricity by 2030 and reduce opt-out rates.</b>							
New	BE-4.1	Education	Engage with community (residential and non-residential) to advertise/highlight EBCE's plan to provide 100% carbon-free electricity by 2030. Provide information on the importance of this goal and the impact of buying electricity from EBCE.				
New	BE-4.2	Equity	In collaboration with EBCE, implement a pilot program to provide Hayward's affordable housing units EBCE's Renewable 100 service. Identify funding options with EBCE such as subsidy of pilot study through the non-discounted customers or grant funding.	The City has affordable housing units: <a href="https://www.hayward-ca.gov/services/city-services/finding-affordable-housing">https://www.hayward-ca.gov/services/city-services/finding-affordable-housing</a>			
New	BE-4.3	Structural Change	Adopt resolution that if EBCE does not meet 2030 goal of Bright Choice to be 100% carbon-free, that all of Hayward will be enrolled in Renewable 100 in 2030. Resolution should include identification of funding or subsidy plan to ensure no cost increase to CARE/FERA customers. This may include subsidization cost to CARE/FERA customers through non-discounted customer rate increase or obtainment of funding for low-income and disadvantaged communities.	Based on 2019 percent of customers in Bright Choice or that opted out to PG&E (~40% residents and ~ 16% commercial) it will be critical for near 100% of electricity used in the City to be carbon-free.			
New	BE-4.4	Feasibility Studies	Work with EBCE to conduct an annual analysis of opt-out rates in the City of Hayward to understand why residents and businesses opt out of EBCE or opt-down to Bright Choice over Renewable 100.				
<b>Measure EG-1: Generate on City facilities carbon-neutral electricity meeting 80% of the City's electricity needs by 2030. *Currently around 60%</b>							
New	EG-1.1	Structural Change	Streamline permitting for battery storage in buildings and critical facilities identified to need power during emergencies or power outages.			Building Division Fire Dept??	
New	EG-1.2	Structural Change	Conduct analysis on risks and benefits associated with relying on battery storage to achieve carbon neutral electricity and grid resiliency goals in the City and set a MW capacity goal for installed battery storage by 2030 and 2045.			Maintenance Svcs	

**GHG Reduction Measures**

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	EG-1.3	Equity	Formally include City facilities that serve as cooling centers to disadvantages communities in the Energy Assurance Plan and develop and implement energy resiliency strategies like on-site renewable energy generation or energy storage to ensure center remains active even in power shortages.			Library Fire Maintenance Svcs	
New	EG-1.4	Feasibility Study	As part of Energy Assurance Plan, include identifications of locations or complexes (i.e., City facilities, college campuses, critical facilities) in the City for installation of local renewable energy generation, energy storage projects, and/or ideal locations for development of a micro-grid as evaluated in EBCE feasibility study.	Builds on CS-13 (Energy Assurance Plan) that has not yet been started.		Maintenance Svcs/Facilities	
Build on Existing (NR-14)	EG-1.5	Feasibility Study	Develop the plan and schedule for implementation of the prioritized solar projects identified. The plan should include an identification of barriers and needs for implementation of the prioritized projects as well as identify funding sources and partnerships needed for successful implementation.	The City completed the city-wide study to estimate the total potential for renewable energy generation on City facilities including estimated cost and benefits. In 2018, the City listed potential renewable energy projects sufficient to achieve the City's goal of reaching zero net energy across all facilities by 2025. The Sustainable Committee directed staff to prioritize solar on City Hall, city parking structures, various reservoirs and pump stations, and the airport. Staff is currently investigating possible projects in coming years.		Public Works Maintenance Svcs	
Expansion of Existing (PFS-8.8)	EG-1.6	Partnership	Partner with PG&E to ensure smooth integration of renewable energy systems from the identified prioritized projects or other individual solar projects into the grid.	Expansion of Policy PFS-8.8			

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	EG-1.7	Funding/Education	Identify and advertise incentives available for the community members for installing solar to their homes such as Net Metering Programs through PG&E for bill credits, or the Disadvantaged Communities-single-family Solar Homes (DAC_SASH) program. Identify incentives available for businesses and homeowners to install energy storage systems, such as Self Generation Incentive Program (SGIP) and Equity Resiliency rebates that provides an upfront rebate for battery storage and/or the federal investment tax credit for solar batteries installed. Provide resource information to the community through websites, workshops, and partnerships.				
New	EG-1.8	Funding/Equity	Partner with affordable housing providers to conduct a feasibility analysis of battery storage and solar projects at the affordable housing in Hayward that are eligible for Equity Resilience Incentives under the SGIP Program.	“Equity Resiliency” projects include low-income households, customers living in high-fire risk areas, customers who experienced Public Safety Power Shutoffs (PSPS) events on two or more distinct occasions, and critical facilities that provide services to the affected areas		Env Svcs Housing Building	
Expansion of (PFS-4.12)	EG-1.9	Funding/Partnership	Determine opportunities for the Water Pollution Control Facility to expand of methane recovery systems and digester gas combustion systems at the facility, consistent with General Plan policy PFS-4.12.	Under PFS-4.12, the City supports efforts to develop, enhance, and maintain clean, green and renewable energy systems at the Water Pollution Control Facility including methane recovery and digester gas systems for which opportunities may existing for carbon credits, tax credits or grant funding.  The WPCF team has a Solids Master Plan slated for FY23, which will look into the feasibility of accepting food waste at the WPCF to generate more methane and expand the cogen power and possibly create a CNG station.		Public Works	

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	EG-1.10	Education	Provide educational materials and workshops to large commercial developers and large business property owners of the benefits of microgrids and energy resiliency. Provide resources to identify opportunities for solar installations and/or battery storage on site.	Can the City offer incentives in the permitting process (lower fees, expediated review, etc.) to encourage these installations?		Env Svcs Econ Dev	
Existing (FY2021 Strategic Roadmap)	EG-1.11		Prepare a plan to facilitate transition of natural gas appliances to electric in City Facilities. Plan should include an inventory of appliances available for replacement, identify cost where possible, and establish a timeline for replacement.	City of Hayward Strategic Roadmap FY2021 to FY2023 Priority C6		Maint Svcs Env Svcs	

Sector: Transportation

**Measure T-1: Develop and Implement an Active Transportation Plan to increase active transportation mode share to 15% by 2030 and maintain through 2045.**

Existing (M-20)	T-1.1	Structural Change	<p>Amend the Off-Street Parking Regulation of Municipal Code to incorporate smart growth principles and to incentivize walking, biking, and public transit.</p> <ul style="list-style-type: none"> <li>• Creating a single “blended” parking requirement for commercial uses to facilitate future changes of use (i.e., changing a retail store to a restaurant);</li> <li>• Providing requirements or incentives for bicycle parking;</li> <li>• Allowing on-street parking along the property’s frontage to count towards satisfying a portion of the property’s off-street parking requirements;</li> <li>• Remove parking minimums and setting parking maximums to limit the amount of parking that can be built on a site;</li> <li>• Creating parking preferences or incentives for residents who rideshare or use low- or zero-emissions vehicles; and</li> <li>• Allowing property owners to develop and implement parking demand management plans that consider ways to reduce the need for off-street parking by using shared parking arrangements, valet parking services, paid parking, and other appropriate techniques.</li> <li>• Establish design standards or retrofit standards from the Complete Streets Assessment to promote multi-modal use.</li> </ul>	This program has not yet started due to limited staffing and fiscal resources.		Planning Transportation	
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GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-1.2	Structural Change	Based on the completed Complete Streets Assessment and the Complete Streets Inventory Baseline, develop a priority list of complete streets improvements such as retrofits and design standards that would accommodate walking, biking, transit use and carpooling. This effort should include a schedule for implementation, prioritization of improvements, identification of whether improvement will aid in walking, biking or transit access, and the plan should ensure that low-income communities are receiving equal focus for improvement implementation.	Building on Implementation Program (Complete Streets Assessments)		Transportation	
Existing (FY2021 Strategic Roadmap)	T-1.3	Structural Change	Implement the micro-mobility policy that establishes a deployment protocol and permitting process, identifies any restrictions for use for safety reasons, and promotes equitable access through requirements for consistent placement of micro-mobility devices (e-scooters, e-bikes, etc.) in underserved areas or reductions in usage fees for lower-income users.	Supports action item in City of Hayward Strategic Roadmap FY2021 to FY2023 - N1 And N6  City is just starting on a Micro Mobility Master Plan.		Transportation	
New	T-1.4	Equity	Prioritize active transportation and mobility projects in historically under-invested neighborhoods.			Transportation	
Existing (FY2021 Strategic Roadmap)	T-1.5	Structural Change	Continue to implement 2020 Bicycle and Pedestrian Master Plan goals of developing 153 new bicycle facilities and 32 miles of multi-use paths for pedestrians and cyclists.	Many efforts occurring over next 3 years – plan of implementation in City of Hayward Strategic Roadmap FY20210 to FY2023		Transportation	
New	T-1.6	Structural Change	Evaluate and update the City's Zoning Code, Transportation Demand Plan (or Administrative Rule 2.26), and California Green Building Code to ensure the City requires installation of bicycle parking for new commercial development and retrofits.	Supports existing efforts. TDM Plan has not yet begun due to limited staff and fiscal resources, along with other City priorities		Transportation Planning Building	

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
Update to Existing (M-7)	T-1.7	Structural Change/ Feasibility Study	<p>Update and conduct Underused Rights-of-Way Study such that a community/business survey and evaluation is completed to understand community perspective on potential barriers to conversions and identify barrier solutions.</p> <p>Based on findings convert x miles of under used roadways thoroughfare to active transportation corridors to create a contiguous/ connected environment City (i.e., downtown areas). As part of program, launch a public campaign to gain public and business support to ensure success of such efforts. Consider having pilot programs (i.e., shutting down street lanes for specific events/periods of time) to demonstrate advantages of proposed improvements.</p>				
New	T-1.8	Structural Change	Identify streets for permanent through traffic closures to promote walking, biking, and other forms of active transportation.				
New	T-1.9	Structural Change	Identify areas of the City to remove parking and/or additional traffic lanes to prioritize outdoor seating and make permanent outdoor dining established during Covid 19.	May be appropriate for Downtown. Also need to come up with standards or design for parklets if they are going to be a more permanent structure.		Planning Transportation	
Existing (HQL-2.3)	T-1.10	Partnership/E ducation	Partner with schools, employers, transit agencies, HARD, and community groups to teach bicycle and pedestrian safety in schools and workplaces and to educate residents and businesses about the health and environmental benefits of walking, bicycling, and using public transit.				
New	T-1.11	Partnership	Work with e-scooter or e-bikes companies to bring a e-bike share or e-scooter share to Hayward with focus on placing hubs in downtown and commercial areas that would meet the Downtown Specific Plan goals and design. Adopt an ordinance to allow and manage the mobility share.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-1.12	Equity/ Funding	Partner with community groups to obtain funding through the California Air Resources Board Car Sharing and mobility Options program for a pilot bike-share program in low-income communities and to connect low-income communities with the E-Bike Purchase Incentive Program through CalBike.	CARB recently approved a \$10 million E-Bike Affordability Campaign from CalBike for a voucher program to incentivize E-bike purchases. The program is anticipated to be rolled out in 2023 and will have income limits and/or higher incentives for lower income applicants.			
New	T-1.13	Equity	Ensure there is equitable access to safe bicycle and pedestrian infrastructure in all areas of the city. Prioritize the development of pedestrian and bicycle infrastructure in low-income communities where there is currently no or limited pedestrian and bicycle infrastructure				
New	T-1.14	Funding/Equity	Partner with local bike shops such as Cyclepath Hayward to provide subsidies to low-income residents for bicycles, helmets, pumps, and other bicycle equipment.				
New	T-1.15	Feasibility Studies	Based on the identified barriers to completing the Complete Streets Evaluation including limited staff and fiscal resources, develop strategies to reduce or eliminate barriers, such as identify staff to assign the Complete Streets Evaluation to.				
New	T-1.16	Funding	Devote staff time to tracking and applying for grant funding to complete projects that would improve active transportation or mobility in the community.				

**Measure T-2: Implement public and shared transit programs to reduce community-wide VMT 15% by 2030 and 30% by 2045.**

Update to Existing (NR-2.6)	T-2.1	Structural Change	Continue to promote infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented.			Planning, cross reference in Housing Element	
New	T-2.2	Structural Change	Adopt a policy or code into the Municipal code that establishes specific standards for new development of public space to be transit accessible and multi-functional by co-locating public facilities.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-2.3	Structural Change	Consistent with the Downtown Parking Management Plan and Downtown Specific Plan, adopt parking requirements into the Municipal code that are appropriate for a mixed-use, walkable, and transit-oriented district. Evaluate opportunities in the Downtown area to designate streets for transit only.	In July 2018, the City Council adopted a Downtown Parking Program. While it does not encompass all the activities described in the program language, it did establish consistent time restrictions, enforcement policies and provides remedies for merchants and residents who live in the downtown. The City is in the process of fully implanting the plan.			
New	T-2.4	Structural Change	Develop and adopt an ordinance requiring new multi-family development projects to install a car share or provide e-bikes/e-scooters to each new tenant.				
New	T-2.5	Structural Change	Evaluate and prioritize transit stops needing renovations that do not meet the adopted Pedestrian Design Standard for Transit Stop. Upgrade transit stops such that they include shade trees or structures and are designed to promote use.	The AC Transit Multimodal Corridor Guidelines was published in April 2018. All bus stops used to be managed by AC transit – City will be taking on cost to maintain and is currently figuring out how to meet that strain			
New	T-2.6	Structural Change	Consistent with the intention of Senate Bill 10, allow developers to build housing without off-street parking if they're close to frequent transit service	Major transit stop = 15 minute headway – use consistent language  With reduced/bundled parking vs. without		Planning	
New	T-2.7	Structural Change/Funding	Through the adoption of an ordinance or incorporation into large commercial building codes, require all employers to develop a Transportation Demand Management (TDM) Plan. TDM plans should include money-based incentives for employees to bike, walk, carpool, or take the bus to work. Require large employers (more than 25 employees) to subsidize biking, walking, or bus travel.	Currently a mitigation measure. What level of TDM would we be asking employer to do? Don't want to be in conflict with CEQA. Who enforces compliance?		Transportation Planning	
New	T-2.8	Partnership/Equity	Expand the Student Transit Pass Program (STPP), which provides free youth clipper cards with unlimited bus rides to middle and high schools students, to provide free AC transit to college students and low-income community members.			Transportation	

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-2.9	Partnership	Collaborate and engage with AC Transit to understand how they are addressing the Innovative Clean Transit Rule and their plan to electrify their bus fleet.				
New	T-2.10	Funding	Dedicate staff time or create a staff position to pursue regional and State funding opportunities to implement planned City transit/TDM projects and programs.	Seems to be a general lack of funding to implement transit/TDM plans and programs - as seen in ECERE		Transportation	
Update to Existing (M-3)	T-2.11	Feasibility Study	Consistent with the previous CAP policy M-3 (Survey Transportation and Transit Gaps and Barriers), conduct local transportation surveys to better understand the community’s needs and motivation for traveling by car versus other alternatives such as AC Transit or BART. Use survey results to inform policy development and education/outreach campaigns that are transit focused. Consistent with the previous CAP policy M-3 (Survey Transportation and Transit Gaps and Barriers)	City planned to prepare a transportation and transit gaps and barriers survey – it has not yet been started.			
New	T-2.12	Feasibility Study	Assess the feasibility and GHG reduction impact of banning cars in high-traffic zone(s) or on individual roads in the City where other transit options are available by implementing a congestion charge that applies to passenger cars and car-sharing services like Uber and Lyft with exceptions for handicap drivers and residents of those areas.				
New	T-2.13	Funding	Dedicate staff time or create a staff position for supporting AC Transit in obtaining grant funding for region-wide service expansion				
New	T-2.14	Feasibility Studies/Partnerships	Partner with AC Transit to conduct a study to determine transit priority corridors and prioritize infrastructure improvements in existing neighborhoods that enable people to better access and use public transit	Supports existing policy HGL-2.1			

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Measure T-3: Develop disincentives for driving single passenger vehicles to support the bicycle/pedestrian and public transit mode share goals of Measures T-2 and T-3</b>							
Update to Existing (M-16)	T-3.1	Structural Change	Develop and adopt a Citywide Transportation Demand Management (TDM) Plan including strategies to reduce peak-hour traffic, such as staggered work hours, flexible schedule options, and telecommuting from home offices. Include updated policy incentives or disincentive options to achieve reductions in peak-hour traffic, reduce traffic congestions and promotes alternative transportation (biking, walking, and use of transit)				
Existing effort (FY2021 Strategic Roadmap)	T-3.2	Structural Change	Continue to require new development adopt transportation demand management strategies to reduce use of single occupancy vehicles and encourage the use of alternative modes of travel. Update development requirements, ordinances, and/or building codes requiring TDM as part of new developments as part of enforcement.	Existing Action item in City of Hayward Strategic Roadmap FY20210 to FY2023.			
New	T-3.3	Structural Change	Develop consistent standards for parking minimums and maximums across the city. Reduce parking minimums and parking maximums citywide, as improved active and public transit infrastructure becomes more available. Additionally, price all public parking spaces for all areas of the city based on available transportation options, travel demand, and land use.				
New	T-3.4	Feasibility Study/Funding	Evaluate parking pricing structures that would best work with the City of Hayward. Based on evaluation, implement dynamic parking pricing in downtown parking areas and earmark parking revenues to implement other active transportation and transit projects.				
New	T-3.5	Feasibility Study	Conduct an analysis of the potential community impacts and benefits of implementing disincentive-based policies for driving single passenger vehicles, including a congestion charge program, limiting parking options, increased local taxes (income tax, gasoline tax, or car registration tax), and TNC user taxes				
New	T-3.6	Equity	Conduct engagement efforts for the general public and targeted to low-income communities of color during analysis of the disincentive-based transportation policies to understand the community's potential concerns				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-3.7	Equity	Define equity metrics for implementation of disincentives based on feedback from local low-income communities of color and structure the disincentive programs to meet these metrics				
New	T-3.8	Funding	Fund active and public transit programs through an income-based tax or local gasoline tax and/or through paid parking fees.				
New	T-3.9	Funding	Implement a Transportation Network Company (TNC) user tax which would put a small fee on the use of Uber and Lyft and generate funds to pay for transit and mobility infrastructure.			Economic Development	
New	T-3.10	Funding/Equity	Implement a gasoline/diesel car registration tax starting in 2025 with exemption criteria established for low-income residents	State taxes.			
New	T-3.11	Structural Change	Increase Broadband Internet Access. Add a program to encourage more working from home and reducing the need to travel for work.	<p>This report concludes that the 6 SCAG counties (almost half of the CA population) could reduce GHG by up to 15% through ubiquitous broadband deployment/adoption.</p> <p>website:  <a href="https://www.cetfund.org/report/caltans-sustainable-communities-grant/">https://www.cetfund.org/report/caltans-sustainable-communities-grant/</a>  report:  <a href="https://www.cetfund.org/wp-content/uploads/2022/04/Caltrans-Grant-to-SCAG-Final-Report-PRINT_web.pdf">https://www.cetfund.org/wp-content/uploads/2022/04/Caltrans-Grant-to-SCAG-Final-Report-PRINT_web.pdf</a></p>			
<b>Measure T-4: Increase passenger zero-emission vehicle (ZEV) adoption to 15% by 2030 and 50% by 2045</b>							
Existing (M-9.11)	T-4.1	Structural Change	Continue to enforce the Hayward EV Charger Reach Code requiring electric vehicle charging stations in new multi-family development projects.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-4.2	Structural Change	Develop and adopt an electric vehicle charging infrastructure reach code to the most recent California Green Building Standards Code Tier 2 requirements.				
New	T-4.3	Structural Change	Work with EBCE to install X new publicly accessible level II chargers by 2030 through public private partnerships and on City owned properties.				
New	T-4.4	Structural Change	Continue to maintain a streamlined EV infrastructure permitting process and ordinance in accordance with AB 1236.				
New	T-4.5	Structural Change	Require that new private parking lots grant zero emission vehicles (ZEVs) access to preferred parking spaces.				
New	T-4.6	Education/Equity	Coordinate with local agencies and community-based organizations, agencies, and non-profits to conduct zero-emission vehicle (ZEV) education events for residents and targeted events for low-income communities that would evaluate the barriers to ZEV adoption, include information on costs/benefits of owning ZEVs, steps on how to receive incentives for ZEVs, and other benefits.				
New	T-4.7	Equity	Explore opportunities with CARB, BAAQMD, or other agencies to start a purchase rebate program and provide higher trade-in value for combustion vehicles to assist lower-income households to purchase EVs.				
New	T-4.8	Education	Develop outreach and education materials and distribute to local businesses and organizations on the financial, environmental, and health and safety benefits of ZEVs. Provide information on available funding opportunities.				
New	T-4.9	Funding	Work with EBCE and PG&E to incentivize residential electric vehicle charger installations through on-bill financing				
New	T-4.10	Funding	Evaluate opportunities for EV or hydrogen charging infrastructure through State and utility programs, like LCFS or PG&E EV Fast Charge Program. Disseminate information via outreach and education materials.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-4.11	Feasibility Study/Partnership	Partner with EBCE to aid in EBCE's survey of existing publicly accessible electric vehicle chargers and their locations and identify a prioritized list of locations in Hayward for new electric vehicle charging stations with particular consideration for equitable distribution of chargers to residents of multi-family homes, low-income people, people on a fixed income, and communities of color.	.			
New	T-4.12	Partnership	Support zero-emission vehicle (ZEV) car share companies in coming to the City. Coordinate with car share companies and community-groups to develop an affordable, zero-emission vehicle (ZEV) car share to serve affordable housing and/or multifamily developments with a priority to target low-income communities of color.			Economic Development	
New	T-4.13	Partnership	Collaborate with neighboring jurisdictions and the Alameda County Transportation Commission to develop a connected network on ZEV car share.				
<b>Measure T-5: Increase municipal passenger zero-emission vehicle (ZEV) adoption to 75% by 2030 and 100% by 2045 and decarbonize emergency and heavy-duty vehicles as feasible</b>							
Update to Existing (NR- 2.9)	T-5.1	Structural Change	Establish and adopt Zero-emission Fleet Conversion and Purchase Policy, expanding on the Strategic Roadmap policy C8, that requires new and replacement municipal fleet vehicle purchases are EVs or ZEVs. Policy will also include a schedule for replacement of fleet vehicles to meet a 100% carbon neutral fleet by 2040. Transition 15% of city fleet to EV/hybrid models by end of FY2023 and 50% by end of FY2030.	Supports existing policy NR-2.9 and Action item in City of Hayward Strategic Roadmap FY2021 to FY2023 C8		Fleet	
Existing (FY2021 Strategic Roadmap)	T-5.2	Structural Change/ Feasibility Study	Conduct feasibility and cost assessment to determine the number of EV/ZEV chargers and funds needed to support the fleet transition to 50% EV/ZEV by 2030. Expand EV/ZEV charging infrastructure for city fleet and employees in alignment with feasibility study.	City of Hayward Strategic Roadmap FY2021 to FY2023 N9		Fleet	
New	T-5.3	Funding	Secure funding from programs such as the California Air Resources Board's Clean Vehicle Rebate Project and the Clean Truck and Bus Voucher Incentive Program to increase procurement of EV or ZEV cars, trucks, and other vehicles and installation of EV/ZEV charging/fueling infrastructure at municipal facilities.			Fleet	

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-5.4	Funding	Evaluate credit generation opportunities within the Low Carbon Fuel Standard (LCFS) program for ZEV/EV fueling and charging stations for the municipal fleet to offset cost of infrastructure development needed to support transition.			Fleet	
<b>Measure T-6: Increase business zero-emission vehicle (ZEV) adoption to 10% by 2030 and 80% by 2045</b>							
New	T-6.1	Funding	Identify incentives for accelerated business fleet electrification and communicate that information to local businesses.			Economic Development	
New	T-6.2	Education	Engage with local employers and business fleet owners in the City to identify opportunities for accelerated fleet conversion to ZEV/EV. Provide information on the requirements of the Advanced Clean Fleets rule and available funding sources for fleet replacements (e.g., LCFS, Clean Truck and Bus Voucher).				
New	T-6.3	Partnership	Develop and maintain a collaborative of stakeholders (e.g., local major employers, commercial business) to lead the creation of best practices and the pursuit of funding for ZEV/EV infrastructure as well as public and private zero-emission business vehicle fleets.				
New	T-6.4	Structural Change	Work with stakeholders to develop and implement a plan for City-supported accelerated fleet electrification. As part of the plan, identify opportunities for accelerated fleet electrification and promote ZEV/EV adoption within business fleets.				
New	T-6.5	Feasibility Studies	Conduct an investigation of business vehicle fleets in Hayward and identify employers and businesses subject to the Advanced Clean Fleets rule as well as those to target for accelerating ZEV/EV adoption.				
<b>Measure T-7: Transition 15% of off-road equipment to zero-emission by 2030 and 80% by 2045</b>							
New	T-7.1	Structural Change	Develop a small off-road equipment (SORE) ordinance in alignment with CARB's goals requiring that at time of replacement, zero emission landscape equipment be used starting in 2025 and portable generators be zero-emissions by 2029.	Need construction equipment to happen at state-level.  CARB working on landscaping rules - gas powered engine ban by 2024.			

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	T-7.2	Structural Change	Develop and implement a plan to replace all City owned end-of-life off-road equipment with zero-emission equipment. Plan should include evaluation of current City-owned equipment, alternative low or zero-emission options, prioritize equipment to replace first (e.g., largest GHG emission reduction potential), and a timeline for replacements that align with goals and feasibility of replacement.			Fleet	
New	T-7.3	Education	Develop an Off-road Equipment Replacement Program/Outreach Campaign that provides information to contractors, residents, and fleet operators in Hayward regarding alternatives to fossil-fueled off-road equipment, public health and safety benefits of alternative equipment technology, and funding opportunities available (i.e., Clean Off-Road Equipment Voucher Incentive Program [CORE]).	<a href="https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-voucher-incentive-project/about">https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-voucher-incentive-project/about</a>			
New	T-7.4	Funding	Partner with BAAQMD to identify funding opportunities to encourage residents to replace gas-powered landscaping equipment and off-road engines with zero emission equipment.				
New	T-7.5	Partnership/ Funding	Partner with BAAQMD to develop a rebate and incentive program for upgrading off-road equipment and switching to biofuels.				
New	T-7.6	Feasibility Study	Conduct a study to assess the technological and economic feasibility of replacing the City-owned off-road equipment fleets.			Fleet	
New	T-7.7	Feasibility Study	Conduct an investigation of major off-road equipment fleets in Hayward and identify fleets with highest decarbonization potential.				

Sector: Waste

Measure SW-1: Implement and enforce SB 1383 requirements to reduce community-wide landfilled organics 75% by 2030 and 90% by 2045

New	SW-1.1	Structural Change	Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.	Existing policy PFS-7.4 indicates City shall comply with State goals – adopting ordinances to enforce compliance aids in enforceability and defensibility of action (i.e., current language of policy is unclear how enforcement is being handled)			
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Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
Existing hauling agreement	SW-1.2	Structural Change	Continue to implement exclusive hauling agreement with WMAC that regulates haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.				
New	SW-1.3	Structural Change	Continue to implement edible food recovery ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383. Ordinance requires all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.	City adopted ORRO Enforcement of existing policy PFS-7.16 and PFS-7.7.20			
New	SW-1.4	Structural Change	Implement enforcement and fee for incorrectly sorted materials with sensitivity to shared collection. Utilize funding to implement programs and efforts to increase community-wide organic waste diversion.				
New	SW-1.5	Education	Work with StopWaste to conduct targeted outreach with food recovery organizations, generators, haulers, facilities, and local agencies to promote strategies to implement requirements of SB 1383				
New	SW-1.6	Education	Encourage businesses to educate their employees about organic waste diversion and proper sorting annually by providing training resources and rebate program to fund employee time for training.				
New	SW-1.7	Partnership	Partner with local community organizations, public agencies like StopWaste and businesses to implement all required activities under SB 1383.				
New	SW-1.8	Equity	Provide free compost bins and kitchen-top food waste containers to low-income communities of colors and elderly households in order to increase compost participation. Evaluate opportunities to have a community compost center at City-owned Affordable Housing Units managed by the City				
New	SW-1.9	Equity	Establish relationships with multi-family property owners/managers to develop signage for their properties. Present at all Home-Owner Associations in Hayward annually and provide supplies and education for proper sorting.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	SW-1.10	Partnership	Establish an edible food recovery program to minimize food waste. Leverage CalRecycle support for projects that prevent food waste or rescue edible food. Partner with existing food pantries like CSUEB, South Hayward Parish to identify and advertise locations for surplus food to be taken in the community.				
New	SW-1.11	Partnership	<p>Work with contracted hauler (Waste Management of Alameda County) to:</p> <ul style="list-style-type: none"> <li>▪ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility</li> <li>▪ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route.</li> <li>▪ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025 place or replace labels on all containers.</li> <li>▪ Develop and implement a comprehensive monitoring and quality control program with a focus on consumer behavior change.</li> </ul>				
New	SW-1.12	Partnership/Funding	Work with local organizations, StopWaste, and investigate various funding/ grant opportunities to fund edible food recovery organizations so they can expand and handle increased volume.				
New	SW-1.13	Partnerships	Partner with schools, retirement communities, and other large institutions to create waste diversion and prevention program/procedure/plan.	How do we incorporate CAP/EJ comments – like having more locally grown food?			
New	SW-1.14	Feasibility Studies/ Partnership	Partner with StopWaste to conduct a feasibility study and identify next steps to ensure edible food reuse infrastructure in Hayward is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity within Hayward or County that Hayward community would have access to.				

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Measure SW-2: Increase community-wide overall landfill diversion of waste to 83% by 2030 and 85% by 2045</b>							
New	SW-2.1	Structural Change	Adopt an overall waste diversion ordinance requiring compliance with SB 1383. Ensure ordinances established are consistent with SB 1383 requirements; revise if necessary	Numerous Existing policies under PFS-7 indicates City shall comply with State goals – adopting ordinances to enforce compliance aids in enforceability and defensibility of action (i.e., current language of policy is unclear how enforcement is being handled)			
New	SW-2.2	Structural Change	Review recent circular economy bills signed by the governor (i.e., SB 343, AB 881, AB 1201, AB 962, AB 1276) and incorporate requirements into hauling agreements, and municipal codes for full-service restaurants and local manufacturing businesses.				
Existing (PFS-5)	SW-2.3	Structural Change	Continue to enforce the Hayward Construction and Demolition Debris Recycling Ordinance.				
New	SW-2.4	Structural Change	Adopt a City wide Zero Waste Goal and develop a Zero Waste Strategic Plan by 2026 to achieve 90% reduction in waste stream by 2040.				
New	SW-2.5	Structural Change	Route collected landfilled waste through a Materials Recovery Facility (MRF) to increase diversion before final disposal. Offer financial support for low-income residents to offset increase trash rates.	Consider use of Organics MRF (OMRF) to begin in 2033. City already offers discounts to low-income residents. Depending on cost of OMRF, we could consider additional low-income discount.			
New	SW-2.6	Structural Change	Create a requirement for large events to hire an event waste management team.				
New	SW-2.7	Partnership	Regularly evaluate and update new franchise agreement with Waste management of Alameda County to meet SB 1383 requirements and to implement new components to further divert waste from landfills. Work with hauler to determine data necessary to meet zero waste goals and establish protocol for regular collection and reporting of associated metrics. Identify dedicated staff responsible for this.				

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	SW-2.8	Structural Change/Funding	Implement a fee at point of use for single-use foodware by food service providers.	Builds on City of Hayward 2021FY and 2023FY Strategic Roadmap Goal to develop an ordinance regulating single-use food ware.			
Existing effort (FY2021 Strategic Roadmap)	SW-2.9	Education/Equity	Partner with StopWaste to conduct targeted, multi-lingual, culturally appropriate, and geographically diverse waste prevention educational and technical assistance campaigns based on outcomes of a waste characterization study (WCS). Such as food waste prevention, edible food recovery strategies, proper storage, how to fix clothes/electronics, how to donate, reusable alternatives, Effects of over consumption, sustainable consumption habits, buying second hand, buying durable, sharing, repurposing. Continue to conduct outreach regarding AB 1276 to full-service restaurants.	Strategic Roadmap C12 – conduct outreach regarding AB1276 (single-use disposables)			
Existing (PFS-7.14 & PFS-7.1)	SW-2.10	Partnership	Continue to work with StopWaste and haulers to monitor participation in residential recycling programs, create education materials for the community, provide technical assistance to business to implement mandatory recycling, and identify other opportunities and means to promote zero waste efforts.				
New	SW-2.11	Partnership	Work with StopWaste and the business community to design and promote extended producer responsibility such as take-back programs.				
New	SW-2.12	Feasibility Study	Conduct a consumption-based GHG emissions inventory to understand the community’s worst consumption habits and emission reduction potential and provide educational materials on a closed-loop circular economy.				
New	SW-2.13	Structural Change	Work with local businesses to establish post-consumer recycled content requirements that meet SB 343 recyclability claims as part of their purchasing criteria.				
New	SW-2.14	Partnership/Equity	Partner with local organizations, schools, and libraries to establish pop-up repair cafes for commonly broken and easily repaired items. Partner with library to promote reuse by increasing accessibility to shared tools through a tool lending library.			Library	

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	SW-2.15	Feasibility Study	Conduct regular waste characterization studies of all waste streams to evaluate progress, hone approaches, customize outreach/policy, and inform targeted campaigns and policy (e.g., every 4-5 years). Fill in waste generation gaps by collecting data from take-back locations (grocery stores, auto shops, carpets, mattresses, battery collection, etc.).				
New	SW-2.16	Structural Change	Based on waste characterization studies increase bans on "problem materials" (i.e., items without means of recycling or recycling markets, such as sale of polystyrene, produce bags, plastic packaging, straws, plastics #4-7, mixed materials).	Maybe include something about enforcing bans; or trying incentives instead of bans			
Existing effort (FY2021 Strategic Roadmap)	SW-2.17	Funding	Explore funding opportunities to increase the circular food economy in Hayward as part of the Alameda County All in Eats Initiative	Strategic Roadmap C13			

## Sector: Water and Wastewater

## Measure WW-1: Reduce water consumption and associated emissions.

Existing (PSF-6)	WW-1.1	Structural Change	Continue to implement the City's Bay-Friendly Water Efficient Landscape ordinance to decrease single-family residential water consumption.			Utilities	
Existing (NR-4)	WW-1.2	Structural Change	Continue to implement and enforce the Water Conservation Standards within the Municipal Code via the Nonessential water Use Ordinance for households, businesses, industries, and public infrastructure.			Utilities	

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
Existing effort (FY2021 Strategic Roadmap)	WW-1.3	Structural Change	Coordinate with the City of Hayward Water Distribution Division to install new Advanced Metering Infrastructure (AMI) system that would include easy-to-use web-based tools that allow customers to track and monitor water use.	This would aid tracking how water conservation efforts are reducing water use and provide information on what communities or types of customers to target to promote water conservation more effectively. Tracking water conservation will also aid in tracking GHG emission reduction progress from these efforts.  Identified in City of Hayward Strategic Roadmap FY2021 to FY2023. – N18a. This is launching this summer.			
Existing	WW-1.4	Structural Change	Continue to implement rebate and water conservation device tracking system to track the number of rebates and water devices distributed.				
Existing (NR-3)	WW-1.5	Structural Change	Continue to implement the Recycled Water Program which includes expanding facilities if necessary to deliver recycled water to additional customers, working with customers to complete site retrofits, connecting customers to the recycled water system, and ensuring customer deliveries.	Strategic Roadmap Initiative C16 – pursue on water conservation measures like increasing recycled water supplies.  Next step: Create a Master Plan.		Utilities	
Existing (PFS-2)	WW-1.6	Education/ Funding	Continue to offer water conservation programs to the community including educational programs like water education program for schools and water wise landscape classes as well as incentives like free water conserving deuces, and rebates for rain barrels and turf replacement.				
New	WW-1.7	Education/ Equity	As part of the water conservation programs offered implement a public education campaign that in addition to highlighting water conservation practices, with focus on low-income households with high utility bill burdens.				
New	WW-1.8	Equity	Ensure that water conservation educational materials, programs and outreach efforts are in multiple languages and accessible for low-income or disadvantaged communities.				

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	WW-1.9	Equity	Perform targeted outreach to low-income communities and elderly households to provide free water conservation devices and aid disadvantaged community members in obtaining available rebates for water conservation devices.				
New	WW-1.10	Partnerships/Equity	Partner with programs such as Green House Call or other similar programs to support community members with installation of water saving devices with a particular focus of support for low-income, elderly, or disadvantaged elderly residents.				
Existing (NR-6.13)	WW-1.11	Partnership	Continue to coordinate with commercial and industrial customers including the Hayward Area Recreation and Park District and the Hayward Unified School District to advance water recycling programs.				
Existing (FY2021 Strategic Roadmap)	WW-1.12	Feasibility Studies	Develop a Recycled Water Master Plan to assess the feasibility of expanding the recycled water system and establish a roadmap for a recycled water expansion program. The plan will identify the locations available for recycled water use, the capacity needed to fully replace potable water use at identified locations, and establish a schedule for potable water replacement with recycled water for appropriate applications.	Identified in City of Hayward Strategic Roadmap FY2021 to FY2023. - N23b			

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Sector: Carbon Sequestration</b>							
<b>Measure CS-1: Increase carbon sequestration by planting 1,000 new trees annually through 2030 to sequester carbon and create urban shade to reduce heat island effect</b>							
Update to Existing (HQL-8.4)	CS-1.1	Structural Change	Expand the Hayward Street Tree Ordinance to include a street tree requirement for all zoning districts; has a shade tree requirement for new development; requires greening of parking lots; and increases permeable surfaces in new development.	An ordinance would strengthen the 2040 General Plan/ Existing Climate Action Plan Policy HQL-8.4 and build on the City' Street Tree Ordinance and Tree Preservation (Article 15 of Municipal Code). Ordinance amendment is currently underway.  Rather than an ordinance, consider Groundworks or similar program <a href="http://www.groundworkrichmond.org/">http://www.groundworkrichmond.org/</a>		Planning	
Existing (FY2021 Strategic Roadmap)	CS-1.2	Structural Change	Update the Hayward Tree Preservation Ordinance by 2023 to ensure existing carbon stock is maintained and that replacement trees are climate resilient and drought tolerant for Hayward's climate. Ordinance updates may include development requirements to protect or replace value-to-value existing trees and greenspace.	Strategic Roadmap C15		Planning	
New	CS-1.3	Structural Change/ Funding	Implement a tree removal in-lieu fee that provides funding for the City to plant a new tree equivalent to every tree removed from private property.			Planning	
Existing (HQL-5)	CS-1.4	Education	Develop and adopt the Hayward Urban Forest Management Plan that identifies City's potential capacity for new tree planting, identify a timeframe for implementation, provides a management plan for existing trees, and establishes a tracking system to assess progress towards annual benchmark.	City notes current program has not started do to funding limitations		Landscaping	
New	CS-1.5	Equity	Adopt a standard policy and set of practices for expanding the urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.	EJ Workshop topic  Maybe model after Alameda County program.		Landscaping	

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
New	CS-1.6	Feasibility Study/Equity	Conduct an urban canopy study to identify areas in Hayward that have below average canopy coverage and implement a tree planting program focusing on the least covered portions of the City. Establish a goal of having no significant difference in canopy coverage between high and low-income areas citywide by 2030.			Landscaping	
New	CS-1.7	Structural Change	Adopt an ordinance or add to local building code to require cool roofs on all new flat or low-slope roofs and require compliance for re-roofs as well for all building types.				
New	CS-1.8	Education	In addition, or as an expansion to the Adopt-a-Block Program establish an adopt-a-tree or adopt-a-street program that is specific to further greening and tree planting. The program will enable individuals, businesses, and community organizations to plant and care for trees in selected communities. Program should provide formalized information on appropriate trees eligible for planting in Hayward (i.e., native, drought tolerant, locations)	Includes adopt-a-drain. City will be responsible for pruning and trimming trees. Community helps water trees.		MSD KHC&G	
New	CS-1.9	Funding	Dedicate staff time or create a staff position for obtaining grant funding for tree planting. Identify and apply for applicable federal (e.g., USDA) and state (e.g., California ReLeaf, Affordable Housing and Sustainable Communities Program (AHSC), Urban and Community Forestry Program) available grants for Tree Planting projects.	Link for some potential grant opportunities: <a href="https://californiareleaf.org/resources/public-grants/">https://californiareleaf.org/resources/public-grants/</a>		Landscape	
New	CS-1.10	Funding	Explore opportunities to use general tax revenues of the municipality, permit fees or surcharges on property owners and business owners, or revenues from the municipal tree ordinance enforcement to fund the Urban Forest Management Program.			Landscape	
New	CS-1.11	Funding	Establish a Tree Trust or Tree Endowment where the interest on the principal can be used for purchasing trees, paying for tree maintenance, or for staff resources for the Urban Forest Management Program.	Who is putting money into this fund? Who would then manage fund?		Landscape	
New	CS-1.12	Partnerships	Partner with private developers, CSU, Chabot College, HARD, HUSD, and other community-based organizations to support and contribute to the Urban Forest Management Program			Landscape	

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
<b>Measure CS-2: Increase carbon sequestration by applying 0.08 tons of compost per capita annually in the community through 2030 and 2045.</b>							
New	CS-2.1	Structural Change	Enforce compliance with SB 1383 by establishing a minimum level of compost application per year on applicable/appropriate land throughout the City including City-owned land.			Env Svcs & Landscape	
New	CS-2.2	Feasibility Study	Identify locations within the City to apply compost to help meet the procurement requirements of SB 1383.			Env Svcs & Landscape	
New	CS-2.3	Structural Change	Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.				
Builds on Existing (HQL-7)	CS-2.4	Structural Change/Equity	Work with Hayward Area Recreation and Park District to develop and adopt urban park guidelines that 1) provide flexible solutions for developing urban parks in infill areas where traditional neighborhood and community parks are not feasible; 2) establishes guidelines for achieving the greatest carbon sequestration potential of parks via design; and 3) are equitable in ensuring such urban parks are accessible for lower-income residents while avoiding displacement.			Planning	
New	CS-2.5	Education	Work with StopWaste to provide residents, businesses, and developers with educational material on where compost can be taken and how it can be used (i.e., landscaping).	Supports Policy PF-7.15. Work with StopWaste			
Builds on Existing (HQL-8)	CS-2.6	Funding	Explore opportunities to use the parkland in-lieu fees from the updated City's Property Developers - Obligations for Parks and Recreation Ordinance (Article 16 of City's municipal code) to implement the Carbon Management Activities Program (NR 15) and to develop and adopt Urban Park Guidelines (HQL-7)	Builds on the 2040 General Plan/ Existing Climate Action Plan Policy HQL-8. City adopted the Parkland In-Lieu Fee program in 2019 and amended its ordinances			
New	CS-2.7	Partnerships	Collaborate with Chabot College, Cal State East Bay, and local schools to identify opportunities to apply compost to landscaping.				
New	CS-2.8	Partnerships	Work with Alameda County and StopWaste to identify opportunities for a regional compost procurement program to help meet the organics procurement provisions of SB 1383.			Env Svcs	

GHG Reduction Measures

Status	ID	Pillar	Measures and Respective Actions	Notes	Timeframe	Responsible Department	Cost
Existing effort (2021 Update in Negotiations for New Solid Waste Franchise Agreement)	CS-2.9	Partnership	Work with the City’s franchise under the new franchise agreement with Waste Management of Alameda County to refine the organics processing to increase the quality and quantity of compost to apply it throughout the community.				
New	CS-2.10	Feasibility Study	Conduct a study to identify opportunities to create new natural areas in existing open spaces, parklands, and fields with native species, biodiverse ecology, higher carbon sequestration potential and improved recreational connectivity for the community.				
Strategic Roadmap C14b			Implement Shoreline Master Plan, including mitigating sea level rise in the industrial corridor through building requirements and outreach.				