



MEMORANDUM

TO: Climate Action Plan (CAP) Task Force

FROM: Danielle Staude, Senior Planner

SUBJECT: Background Material for CAP Meeting 5 (January 26, 2022)

DATE: January 21, 2022

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At the December 15, 2021 CAP meeting the Climate Action Plan (CAP) Task Force discussed implementing programs and actions to include in the “Building Decarbonization and Renewable Energy” section of the CAP. Modifications and edits were discussed at the meeting and are included as ATTACHMENT 1. Those items that the Task Force may wish to focus on the following modifications:

- RE-C3- Phase Out of Natural Gas: the built environment subcommittee discussed several emission reduction programs targeted towards the phase out of natural gas appliances and systems in buildings. These programs have been grouped together.
- CC-C2- Energy Audits: this program was not discussed at the last meeting so the Task Force may wish to review it prior to approving the program.

ATTACHMENT 2 contains draft programs and actions for the “transportation” section of the CAP. These programs are based on the City of Larkspur’s CAP as a starting point, with modifications made based on work conducted by the transportation subcommittee. The subcommittee will provide an overview and present those items that go beyond those programs in other local jurisdictions’ CAPs, including:

- Regulations to limit idling.
- Regulations for small off-road equipment, which includes landscaping equipment.
- A new section or call out related to vehicle miles travelled.

As a reminder, based on the Task Force’s previous direction, the City of Mill Valley is utilizing the Larkspur CAP as a starting template to streamline the Task Force discussion and as a means to develop similar programs that can be assembled and implemented county-wide. This approach is supported by staff as it provides the opportunity for further collaboration and efficient use of resources. The Task Force should be prepared to review and provide guidance to staff on those actions and programs that should be added to the Draft CAP; removed; and/or modified.

Building and Energy-Related Emission Reduction Programs

- Building Decarbonization and Renewable Energy -

RENEWABLE ENERGY, DECARBONIZATION AND RESILIENCY IN THE BUILT ENVIRONMENT (RE)

RE-C1: Renewable Energy Generation and Storage

Accelerate installation of residential and commercial solar and energy storage systems.

- a. Provide permit streamlining and reduce or eliminate fees, as feasible.
- b. Update building codes, development codes, design guidelines, and zoning ordinances, as necessary, to further facilitate small, medium, and large-scale installations, where appropriate.
- c. Encourage installation of solar panels over parking areas on commercial projects and large-scale residential developments through ordinance, engagement campaigns, or agency incentives.
- d. Identify and promote financing and loan programs for residential and non-residential projects.
- e. Encourage battery storage in conjunction with renewable energy generation projects through engagement campaigns and partner agency incentives.
- f. Collaborate with the County, Marin jurisdictions, agencies, and organizations, as appropriate, to study opportunities and specific action steps for expansion of rooftop solar and battery storage.

RE-C2: GHG-Free Electricity

Encourage residents and businesses to switch to 100 percent renewable electricity (MCE Deep Green, MCE Local Sol, and PG&E Solar Choice) through engagement campaigns and partner agency incentives and work with MCE Clean Energy to assure that it reaches its goal to provide Light Green electricity that is 95 percent GHG-free by 2022.

RE-C3 Phase Out of Natural Gas. The following program outlines three approaches to facilitate the elimination of natural gas appliances in buildings, all of which involve collaboration with local jurisdictions to provide the opportunity for a comprehensive county-wide approach to address this program.

RE-C3(a): Building and Appliance Electrification for New Construction and Major Remodels

Study alternatives and draft regulations for Council consideration that require all new construction and major remodels to be all-electric.

- a. Explore opportunities to collaborate with the County and other Marin jurisdictions on the development of these regulations in conjunction with the triennial Building Code update.

RE-C3(b): Replacement of Natural Gas Appliances and Equipment on Burnout

Study alternatives and draft regulations for Council consideration that phase in requirements to replace natural gas appliances and equipment with electric appliances and equipment at time of replacement.

- a. Explore opportunities to collaborate with the County and other Marin jurisdictions on development of these regulations.
- b. Explore options that provide equitable and achievable goals as part of study alternatives and draft regulations.

RE-C3(c): Replacement of Natural Gas Appliances and Equipment by 2030

Study alternatives and draft regulation for Council consideration that phase in requirements to replace all natural gas appliances and equipment with electric appliances and equipment by 2030.

- a. Explore opportunities to collaborate with the County and other Marin jurisdictions on development of these regulations.
- b. Develop a process to assess the existing building stock.
- c. Identify potential financing models and funding sources to allow for electrification of all existing buildings in a manner that is feasible and equitable.
- d. To support regulations, develop a proposal and contract to assist with financing and the deployment partners.

RE-C4: Electrification Incentives, Assistance, Education, and Outreach

Seek financial incentives and technical assistance to support residents in making the transition for existing buildings. Promote available rebate programs such as Electrify Marin and BayREN.

- a. Promote awareness and understanding of electrification options to the construction industry and the community through education and outreach and community partners.
- b. Work with the County and regional partners, as appropriate, to create and/or implement a Home Ambassador electrification program and promote the program to the community.

RE-C5: Innovative Technologies

Investigate and pursue innovative technologies such as micro-grids, distributed solar generation, distributed battery storage, and demand-response programs that will improve local resilience and the electric grid's resiliency and help to balance demand and renewable energy production.

RE-C6: Microgrid Study

Develop a study on opportunities to create solar-powered resilience microgrids for community use that would remain powered during an electric grid outage.

RE-M1: Solar Energy Systems for Municipal Buildings

Were feasible, incorporate into the City's Facilities Plan actions to install solar energy systems at municipal buildings and facilities where feasible and investigate and pursue innovative technologies such as battery storage and demand response programs.

RE-M2: Municipal Building and Appliance Electrification

Were feasible, incorporate into the City's Facilities Plan actions to replace natural gas appliances/equipment with electric and electrify City buildings.

RE-M3: Municipal Deep Green Electricity

Continue to purchase 100% renewable energy through programs such as MCE Deep Green.

ENERGY EFFICIENCY AND SUSTAINABLE MATERIALS IN THE BUILT ENVIRONMENT (EE)

EE-C1: Energy Efficiency Programs

Promote and expand participation in residential and commercial energy efficiency programs.

- a. Work with organizations and agencies such as the Marin Energy Watch Partnership, the Bay Area Regional Network, Resilient Neighborhoods, Sustainable Mill Valley LED Partnership, and the Marin Climate & Energy Partnership to promote and implement energy efficiency programs and actions.
- b. Continue and expand participation in energy efficiency programs as they become available.
- c. Promote utility, state, and federal rebate and incentive programs.
- d. Participate and promote financing and loan programs for residential and non-residential projects such as Property Assessed Clean Energy (PACE) programs, PG&E on-bill repayment, and California Hub for Energy Efficiency Financing (CHEEF) programs.
- e. Through outreach and education, provide guidance to renters on how to obtain energy usage and efficiency information for rental units.

EE-C2: Energy Audits

- a. Promote energy audits for all residential, commercial, and municipal buildings through education and outreach.
- b. Work with the County and regional partners, as appropriate, to study alternatives and draft regulations for Council consideration that would require energy audits for residential and commercial buildings prior to putting a property up for sale, including cost savings from energy efficiency measures and potential financing options, and provide with other disclosure requirements to potential buyers.

EE-C3: Cool Pavement and Roofs

Use reflective, high albedo material for roadways, parking lots, sidewalks, and cool roofs to reduce the urban heat island effect and save energy.

- a. Evaluate the use of high albedo pavements when resurfacing City streets or re-roofing City facilities.
- b. Adopt mandatory building code measures to require new development to use high albedo material for driveways, parking lots, walkways, and patios, and cool roofing.
- c. Maintain and expand the use of urban tree cover for street-level temperature reduction.

EE-C4: Green Building Reach Code

- a. Continue to adopt green building requirements for new and remodeled commercial and residential projects above the State building code.
- b. Consider adopting low embodied-carbon concrete standards similar to those adopted by the County of Marin.
- c. Consider requiring separate metering for electricity and natural gas usage for new units, as permitted by law.

EE-C5: Streamline Permit Process and Provide Technical Assistance

- a. Analyze current green building permit and inspection process to eliminate barriers and provide technical assistance to ensure successful implementation of green building requirements.

- b. Coordinate with other Marin County jurisdictions to adopt consistent application requirements, where practicable.
- c. Work countywide to identify incentives and make it easier for contractors and building counter staff to expedite.

EE-C6: Sustainable Building Materials

Study alternatives and draft regulations for Council consideration to require the use of Forest Stewardship Council (FSC) certified material in new construction, major remodels, and outdoor use.

- a. Discourage use of non-certified old-growth materials including cedar, redwood, and rainforest hardwoods for new construction, major remodels, and outdoor use (decking, fencing, siding, and landscape construction) by establishing regulations or requiring mandatory measure(s) based on the CalGreen Checklist, such as A5.405.1 and A5.405.2.
- b. Revise permitting process to include materials choice related to FSC certification as a condition of plan approval by the Building Department.
- c.

EE-C7: Sustainable Building Materials in Design Guidelines

Develop a plan and Design Guidelines on additional materials, such as those listed here, to be prepared by the Planning Commission and the Planning Council:

- a. Discourage the use of OSB (Oriented Strand Board) sheathing for exterior use and vinyl for interior materials.
- b. Provide education and outreach on materials choices and impact on climate in support of the above.
- c. Promote and encourage use of existing materials from buildings (historic or otherwise) that are being remodeled or torn down.

EE-M1: Municipal Outdoor Lighting and Streetlights

Replace inefficient street, parking lot, landscaping, and other outdoor lighting with LED fixtures.

EE-M2: Energy Efficiency Audit and Retrofits

Work with the Marin Energy Management Team to identify and implement energy efficiency projects in municipal buildings and facilities and electrification of existing building systems and equipment that use natural gas.

EE-M3: Energy Conservation

Reduce energy consumption through behavioral and operational changes.

- a. Establish energy efficiency protocols for building custodial and cleaning services and other employees, including efficient use of facilities, such as turning off lights and computers, thermostat use, etc.
- b. Incorporate energy management software, electricity monitors, or other methods to monitor energy use in municipal buildings, where feasible.
- c. Investigate 9/80 work schedule and remote work opportunities for employees to reduce use of City facilities and to shut down City facilities entirely where feasible.

Draft Transportation-Related Emission Reduction Programs

Low Carbon Transportation (LTC)

LCT-C1: Zero Emission Vehicles

Work collaboratively on a Countywide Electric Vehicle Acceleration Plan that will result in at least 45% of passenger vehicles registered in Marin County that make trips that start and/or end in Mill Valley are zero emission vehicles (ZEVs), including plug-in electric vehicles (EVs) and hydrogen fuel cell electric vehicles.

Document the number of new-vehicle registrations for passenger vehicles are for zero emission vehicles (ZEVs), including plug-in electric vehicles (EVs) and hydrogen fuel cell electric vehicles as a means of evaluating outreach effectiveness and in preparation of the State of California's restriction on the sale of gas-powered automobiles by 2035.

Incorporate the following actions in the County-wide Electric Vehicle Acceleration Plan, where feasible:

- a) Institute financial incentives that promote the use of ZEVs and discourage the use of vehicles with internal combustion engines, such as providing free parking for ZEVs.
- b) Provide wayfinding signage to public EV chargers.
- c) Work with MCE, PG&E, Transportation Authority of Marin (TAM), and other entities to identify multi-family and workplace charging sites appropriate for available incentive programs.
- d) Participate in a countywide effort by MCE, PG&E, Drive Clean Bay Area, and others to provide rebates for new or used electric vehicles and/or charging stations.
- e) Pursue opportunities to expand the City's EV charging network by identifying suitable Level 2 and Level 3 DC fast charging locations and considering innovative programs, such as installing chargers at existing streetlight and curbside locations and creating a battery-powered resilience hub for charging EVs during power outages.
- f) Encourage schools to install charging stations in school parking lots.

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- g) Accommodate the installation of new electric vehicle charging stations in existing commercial parking lots and gas stations by streamlining the permit process and reducing financial barriers, where practicable.
- h) Utilize the California Building Code (CalGreen Tiers and reach codes) to increase electrification for potential vehicle use. Continue to require remodeled single-family and multi-family projects to install electrical service and conduits for potential electric vehicle use, and require large remodels and new commercial and multi-family projects to install electric vehicle chargers for use by employees, customers, and/or residents.
- i) Consider requiring remodeled gas stations to provide EV fast chargers.
- j) Participate in regional efforts and grant programs to encourage widespread availability of EV charging stations.
- k) Target policies to support ZEV adoption, including used vehicles, in low income and disadvantaged communities.
- l) Participate in programs to promote EV adoption, including "Drive an EV" events and other media and outreach campaigns produced by partners such as Drive Clean Bay Area, and promote those programs through City communication channels, such as MV Connect, the City of Mill Valley website, and neighborhood social media. Seek opportunities to promote EVs at local events within Mill Valley, such as parades, festivals, and similar gatherings.
- m) Encourage or require, as practicable, ride hailing and delivery service companies to utilize zero emission vehicles.
- n) Collaborate countywide to consider developing regional Level 3 DC fast charging hubs and ZEV car share programs.

LCT-C2: Bicycling and Micromobility

- a) Encourage bicycling and micromobility as an alternative to vehicular travel. Promote safe bicycling and micromobility, including e-bikes, electric scooters, and electric skateboards, through outreach channels and partner agencies.
- b) Establish and maintain a system of bicycle facilities that are consistent with the City's Bicycle and Pedestrian Transportation Plan and Complete Streets policies.

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- c) Implement the City's Bicycle and Pedestrian Transportation Plan's recommendations to support and expand bicycling and micromobility.
 - Continue to support and promote the Bicycle Friendly Community Silver designation status and take steps to adapt toward the Gold status recommendations made by the League of American Bicyclists (LAB).¹
 - Task the Bicycle & Pedestrian Advisory Committee (BPAC) with identifying and prioritizing bicycle and micromobility projects with the greatest potential for VMT reduction, including long-term bikeway projects, short-term bikeway projects, and bicycle parking facilities.
- d) Update the Capital Improvement Program to maintain and improve the system of multiuse pathways and bicycling facilities that are consistent with the City's Bicycle and Pedestrian Master Plan and Complete Streets policies.
- e) Continue regional collaboration efforts to establish a bike and/or scooter share program.
- f) Continue to require new and remodeled multi-family and commercial buildings to install bicycle parking facilities based on the California Building Code and reach codes.

Call Out associated with LCT Programs Below: Reduction in Vehicle Miles Traveled (VMT)

The following programs help to reduce and/or transition the amount of Vehicle Miles Traveled to cleaner sources of transportation:

- LCT-C2: Bicycling and Micromobility,
- LCT-C3: Walking,
- LCT-C4: Safe Routes to School,
- LCT-C5: Public Transit, LCT-C6 Smart Train,
- LCT-C7 Employee Trip Reduction,
- LCT-C8 Parking Requirements,
- LCT-C10 Smart Growth Development, and
- LCT-M3 City Employee Commute.

It is anticipated that the implementation of the above-referenced programs will reduce emissions by XX < Insert once GHG emissions are quantified.>.

LCT-C3: Walking

Encourage walking as an alternative to vehicular travel through outreach channels and partner agencies.

- a) Establish and maintain a system of pedestrian facilities that are consistent with the City's Bicycle and Pedestrian Master Plan and Complete Streets policies to facilitate pedestrian access throughout the City and particularly to and from transportation facilities.
- b) Task the Bicycle & Pedestrian Advisory Committee (BPAC) with identifying and prioritizing pedestrian projects with the greatest potential for VMT reduction.

¹ <https://bikeleague.org/content/building-blocks-bicycle-friendly-communities>

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- c) Update and implement the Capital Improvement Program as necessary to construct and maintain this pedestrian system.

LCT-C4: Safe Routes to School

Continue to support the Safe Routes to School Program and strive to increase bicycling, walking, carpooling, and taking public transit to school.

- a) Work with school districts, the Transportation Authority of Marin (TAM) and other organizations to promote school and student participation.
- b) Identify issues associated with unsafe bicycle and pedestrian facilities between neighborhoods and schools, apply for Safe Routes to School grants, and execute plans to improve pedestrian and bicycle facilities.

LCT-C5: Public Transit

Support and promote public transit by taking the following actions:

- a) Work with Marin Transit and Golden Gate Transit to maximize ridership by making transit more frequent, accessible, cost-beneficial, and convenient through expansion and/or improvement of transit routes, schedules, and bus shelters.
- b) Work with TAM, employers, and others to provide “first and last mile” programs to maximize utilization of public transit.
- c) Continue to collaborate with transit and transportation operators to develop shorter route shuttle programs, similar to Marin Transit’s stagecoach program.
- d) Encourage school districts to restore a “Yellow School Bus” program and student use of regular transit to reduce school traffic.
- e) Encourage transit providers, including school buses, to use renewable diesel as a transition fuel and to purchase electric buses whenever replacing existing buses.

LCT-C7: Employee Trip Reduction

Reduce vehicle miles traveled commuting to work through the following actions:

- a) Work with the Transportation Authority of Marin (TAM), the Metropolitan Transportation Commission (MTC), and the Bay Area Air Quality

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Management District (BAAQMD) to promote transportation demand programs to local employers, including rideshare matching programs, vanpool incentive programs, emergency ride home programs, telecommuting, transit use discounts and subsidies, showers and changing facilities, bicycle racks and lockers, and other incentives to use transportation other than single occupant vehicles.

- b) Update the City's Trip Reduction Ordinance to reflect the most recent BAAQMD regulations.
- c) Work with MTC to identify and notify non-compliant businesses in Mill Valley and encourage their participation in providing transportation demand management programs.
- d) Work with TAM on developing a county-wide Transportation Demand Management Program to encourage trip reduction throughout County.

LCT-C8: Parking Requirements

Promote a walkable city by reducing minimum parking requirements where feasible, including for senior citizen housing, affordable housing located near transit, or as indicated by parking studies. Apply minimum parking requirements in commercial areas to encourage residential development and community-serving uses in those areas near neighborhoods and transit. Elsewhere, reduce minimum parking requirements based on implementation of robust transportation demand programs and proximity and frequency of transit services.

Encourage unbundling of parking costs (e.g., separating the cost of renting a parking space from the cost of renting an apartment).

LCT-C9: Traffic System Management and Vehicle Idling

- a) Continue to implement signal synchronization to minimize wait times at traffic lights and to reduce congestion through increased traffic flow.
- b) Utilize intelligent traffic management systems to improve traffic flow and guide vehicles to available parking.
- c) Encourage drivers and autonomous vehicles to limit vehicle idling through public outreach and engagement campaigns.
- d) Investigate adopting policies for public employees to minimize idling of city vehicles.

- e) Consider drafting regulations for City Council consideration that would limit and restrict vehicle idling (beyond State regulations).

LCT-C10: Smart Growth Development

Promote land use and development policies that prioritize infill housing and mixed-use development near commercial services and transit facilities, as opposed to development in peripheral areas that require use of vehicles to access transit and services.

LCT-C11: Small Off-Road Equipment

Encourage the use of non-fossil-fuel onsite generators. Work with the County and regional and state agencies to support phasing out the purchase and/or use of fossil-fuel-powered onsite generators in the City of Mill Valley. Work collaboratively with these partners to develop financial incentives and technical assistance to support income-qualified residents in making the transition to non-fossil-fuel onsite generators and other options for power backup. Develop a plan for enforcement.

Work with the County and regional and state agencies to phase out the use of all fossil-fuel-powered small off-road engines (SORE) currently regulated by CARB. Equipment includes leaf blowers, mowers, chainsaws, edgers, hedge trimmers and string trimmers, log splitters, portable generators and pressure washers.

As part of the phase out consider financial incentives and technical assistance to support income-qualified residents in making the transition to non-fossil-fuel small off-road engines, and develop a plan for enforcement.

LCT-M1: Zero and Low Emission City Vehicles

Purchase or lease zero-emission vehicles for the City fleet whenever feasible, and when not, the most fuel-efficient models available. Promote City adoption and procurement of zero-emission vehicles and electric vehicles charging infrastructure to the public.

LCT-M2: Low Carbon Fuels

Use low-carbon fuel such as renewable diesel as a transition fuel in the City's fleet and encourage the City's service providers and joint powers agencies to do the same, until vehicles are replaced with zero emissions vehicles.

LCT-M3: City Employee Commute

Continue to provide City employees with incentives and/or reduce barriers to use alternatives to single occupant auto commuting, such as transit use discounts and subsidies, bicycle facilities, showers and changing facilities, ridesharing services, vanpools, emergency ride home service, flexible schedules, and telecommuting when practicable.

LCT-M4: Municipal Small Off-Road Equipment

Replace portable generators, leaf blowers and other landscape equipment with zero emission equipment.