

## MATRIX FOR TASK FORCE REVIEW

### RENEWABLE ENERGY, ELECTRIFICATION AND ENERGY EFFICIENCY ACTIONS

Below are Climate Action Plan (CAP) actions that were initially discussed at the November 17, 2021 Task Force Meeting. As a recap, a subcommittee was formed to provide an opportunity for further review and evaluation of CAP actions related to the built environment and energy. The matrix includes the CAP action based on the Larkspur CAP as a template. Redlines and edits are based on the subcommittee recommendations presented at the November meeting.

The Task Force should be prepared to discuss the actions, and should utilize the [subcommittee’s summary provided at the November 17<sup>th</sup> meeting](#); [speaker presentations and video of the November 17 meeting](#); [video of the November meeting](#); and columns 2 and 3 representing subcommittee notes and staff recommendations.

<b>Task Force Review (12/15/21)</b> (A) Add to CAP; (R) Remove; (M) Modify	<b>Possible CAP Actions.</b> <i>The text below is based on Larkspur CAP as a starting point. Redlines and deleted text represent subcommittee edits presented at the November 17th CAP Task Force Meeting.</i>	<b>Subcommittee Notes</b>	<b>Staff/Consultant Recommendation</b>
	<p><b>RE-C1: Renewable Energy Generation and Storage</b>                      Accelerate installation of residential and commercial solar and energy storage systems.</p> <ul style="list-style-type: none"> <li>a. Provide permit streamlining and reduce or eliminate fees, as feasible.</li> <li>b. Update building codes, development codes, design guidelines, and zoning ordinances, as necessary, to further facilitate small, medium, and large-scale installations, where appropriate.</li> <li>c. Encourage installation of solar panels over parking areas on commercial projects and large-scale residential developments through ordinance, engagement campaigns, or agency incentives.</li> <li>d. Identify and promote financing and loan programs for residential and non-residential projects.</li> <li><u>e.</u> Encourage battery storage in conjunction with renewable energy generation projects through engagement campaigns and partner agency incentives.</li> <li><u>e-f.</u> <u>Develop a study on opportunities and specific action steps for expansion of rooftop solar and battery storage.</u></li> </ul>	<p><b>Modify.</b> Include additional details related to implementation or “Capacity Planning” for this and other sections, such as education, outreach, process optimization (e.g., streamlining permits), implementation resources, etc.</p>	<p><b>Discuss proposed edit with Task Force.</b></p> <p>Note: implementation or “capacity planning” mentioned in subcommittee notes will occur after approval of actions as part of the implementation work plan and priority setting.</p>

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	<b>RE-C2: GHG-Free Electricity</b> 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.	<b>Accept</b>	<b>Accept as is</b>
	<b>RE-C3: Building and Appliance Electrification <u>for New Construction and Major Remodels</u></b>  Larkspur: <del>Prohibit the use of natural gas end uses in new residential buildings in the City's green building ordinance that aligns with the 2022 California Building Standards code update. Extend the same prohibition to new nonresidential buildings in the 2025 code cycle.</del>  Subcommittee: <u>Adopt an ordinance that requires all new construction and major remodels to be all-electric upon the date of Climate Action Plan adoption. Explore opportunities to collaborate with the County on the development of this ordinance, which is projected to be adopted by the County by January 2023</u>	<b>Modify.</b> Provide permit streamlining and reduce or eliminate fees, as feasible.	<b>Discuss with the Task Force</b>  Due to requirements to amend the building code and reference a cost-effectiveness study, an all-electric ordinance should be adopted with the 2022 Building Code update (i.e., by the end of 2022 for implementation on January 1, 2023). This would also work with the County's timetable for a countywide collaboration process.

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	<p><b><u>RE- XX Replacement of Natural Gas Appliances and Equipment on Burnout</u></b></p> <p>Larkspur: <del>Consider adopting an ordinance in 2024 that requires homeowners to replace natural gas appliances, such as water heaters, stoves, cooktops, clothes dryers, and heating systems with high efficiency electric appliances at time of replacement, where feasible.</del></p> <p>Subcommittee:</p> <p><u>a. Adopt an ordinance that phases in requirements to replace natural gas appliances and equipment with electric appliances and equipment at time of replacement while addressing issues of feasibility and equity.</u></p> <p><del>a-b.</del> <u>Explore opportunities to collaborate with the County on development of this ordinance.</u></p> <p><del>b-c.</del> <u>Upon adoption of the Climate Action Plan update, adopt an electrification education requirement as a condition for natural gas appliances and equipment.</u></p>	<p><b>Modify.</b> Based on research and Fairfax CAP. The subcommittee continues to recommend “Adopt” rather than “Consider” in support of implementing a phased electrification plan. The phasing of implementation and the introduction of the education requirement are more effective ways to address near-term constraints than weakening the commitment to addressing existing buildings.</p> <p>Consider consolidation of sections: “Replacement on Burnout” and “Replacement by 2030” into a single three-phased approach.</p>	<p><b>Discuss with Task Force</b></p> <p>Since no other jurisdictions have adopted a burnout ordinance yet, recommend making this a “consider” action.</p> <p>Specifically call out “high efficiency” electric appliances.</p> <p>Timing should be identified as part of the CAP work plan.</p>
	<p><b><u>RE-CX Replacement of Natural Gas Appliances and Equipment by 2030</u></b></p> <p><u>Adopt an ordinance that phases in requirements to replace all natural gas appliances and equipment with electric appliances and equipment by 2030.</u></p> <p><u>a. Develop a process to assess the existing building stock.</u></p> <p><u>b. Identify potential financing models and funding sources to allow for electrification of all existing buildings in a manner that is feasible and equitable.</u></p> <p><del>a-c.</del> <u>Develop a model RFP for financing and deployment partners.</u></p>	<p><b>New Action.</b> See notes above</p>	<p><b>Discuss with Task Force</b></p> <p>Since no other jurisdictions have adopted a similar ordinance yet, recommend making this a “consider” action.</p> <p>Timing to be identified as part of the CAP work plan.</p>

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	<p><b><u>RE-CX Electrification Incentives, Assistance, Education, and Outreach</u></b>  <u>Seek financial incentives and technical assistance to support residents in making the transition for existing buildings.</u>  <u>Promote available rebate programs such as Electrify Marin and BayREN.</u>  <del>a. Promote available rebate programs such as Electrify Marin.</del>  <u>awareness and understanding of electrification options to the construction industry and the community through education and outreach and community partners.</u>  <del>a-b.</del>  <u>Facilitate creation of Home Ambassador electrification program and promote the program to the community.</u></p>	<p><b>New Action.</b> Based on research, Fairfax and Larkspur CAPs.</p>	<p><b>Discuss with Task Force</b></p> <p>This type of program might be best coordinated at the County level, potentially with BayREN funding.</p>
	<p><b>RE-C4: Innovative Technologies</b>            Investigate and pursue innovative technologies such as micro-grids, <u>distributed solar generation, distributed</u> battery storage, and demand-response programs that will improve <u>local resilience and</u> the electric grid’s resiliency and help to balance demand and renewable energy production.</p>	<p><b>Modify</b></p>	<p><b>Accept as edited</b></p>
	<p><b><u>RE-CX: Microgrid Study</u></b>  <u>Develop a study on opportunities to create solar-powered resilience microgrids for community use that would remain powered during an electric grid outage.</u></p>	<p><b>New Action.</b> Based on research and Fairfax CAP.</p>	<p><b>Discuss with Task Force</b></p>
	<p><b>RE-M1: Solar Energy Systems for Municipal Buildings</b>            Install solar energy systems at municipal buildings and facilities where feasible <u>by 2030</u> and investigate and pursue innovative technologies such as battery storage and demand response programs.</p>	<p><b>Modify</b></p>	<p><b>Discuss with Task Force</b></p>

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	<b><u>RE-MX Municipal Building and Appliance Electrification</u></b> <u>Replace all natural gas consumption/combustion and electrify all City buildings by 2030. Improve energy efficiency of City buildings.</u>	<b>New Action.</b> Based on research and Fairfax CAP.	<b>Discuss with Task Force</b> Delete energy efficiency language since it is addressed in EE-M2 (see page 7).
	<b>RE-M2: Municipal Deep Green Electricity</b> Continue to purchase 100% renewable energy through programs such as MCE Deep Green.	<b>Accept</b>	<b>Accept as is</b>
	<b>EE-C1: Energy Efficiency Programs</b> Promote and expand participation in residential and commercial energy efficiency programs. <ol style="list-style-type: none"> <li>a. Work with organizations and agencies such as the Marin Energy Watch Partnership, the Bay Area Regional Network, Resilient Neighborhoods, <u>Sustainable Mill Valley LED Partnership</u>, and the Marin Climate &amp; Energy Partnership to promote and implement energy efficiency programs and actions.</li> <li>b. Continue and expand participation in energy efficiency programs as they become available.</li> <li>c. Promote utility, state, and federal rebate and incentive programs.</li> <li><u>d. Participate and promote financing and loan programs for residential and non-residential projects such as Property Assessed Clean Energy (PACE) programs, PG&amp;E on-bill repayment, and California Hub for Energy Efficiency Financing (CHEEF) programs.</u></li> <li><u><del>e. Develop a process by which renters can obtain energy usage and efficiency information for rental units.</del></u></li> </ol>	<b>Modify.</b> Subcommittee recommends change “e” to:  Through outreach and education, provide guidance to renters of residential units on obtaining information on their energy usage.	<b>Discuss proposed edit “e” with Task Force</b>  This is something that should be provided by PG&E and MCE, not the City.

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	<b>EE-C2: Energy Audits</b> Larkspur: <del>Investigate requiring energy audits for residential and commercial buildings prior to completion of sale, including identification of cost savings from energy efficiency measures and potential rebates and financing options.</del>  Subcommittee: <u>a. Promote energy audits for all residential, commercial, and municipal buildings through education and outreach.</u> <u>a.b. Require energy audits for residential and commercial buildings and for major remodels 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.</u>	<b>Modify.</b> Based on research and Fairfax CAP	<b>Discuss with Task Force</b>
	<b>EE-C3: Cool Pavement and Roofs</b> Use reflective, high albedo material for roadways, parking lots, sidewalks, and cool roofs to reduce the urban heat island effect and save energy. <ul style="list-style-type: none"> <li>a. Evaluate the use of high albedo pavements when resurfacing City streets or re-roofing City facilities.</li> <li>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.</li> <li>c. <u>Maintain and expand the use of urban tree cover for street-level temperature reduction.</u></li> </ul>	<b>Modify</b>	<b>Accept as edited</b>

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	<b>EE-C4: Green Building Reach Code</b> <ol style="list-style-type: none"> <li>a. Continue to adopt green building requirements for new and remodeled commercial and residential projects above the State building code.</li> <li>b. Consider adopting low embodied-carbon concrete standards similar to those adopted by the County of Marin.</li> </ol>	<b>Modify.</b> Add Cal Green Tier 2 and PassivHaus standards.  Include insulation requirements. (Specifics TBD following briefing on REACH / Cal Green 2 codes.)	<b>Accept as is</b>
	<b>EE-C5: Streamline Permit Process and Provide Technical Assistance</b> <ol style="list-style-type: none"> <li>a. Analyze current green building permit and inspection process to eliminate barriers and provide technical assistance to ensure successful implementation of green building requirements.</li> <li>b. Coordinate with other Marin County agencies to adopt consistent application requirements, where practicable.</li> <li>c. Work county-wide to identify incentives and make it easier for contractors and building counter staff to expedite.</li> </ol>	<b>Accept</b>	<b>Accept as is</b>
	<b>EE-M1: Streetlights</b> Replace inefficient street, parking lot and other outdoor lighting with LED fixtures.	<b>Modify.</b> Add provision related to outdoor landscape lighting. (Specifics TBD following briefing on REACH / Cal Green 2 codes.)	<b>Accept as is</b>
	<b>EE-M2: Energy Efficiency Audit and Retrofits</b> 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.	<b>Accept</b>	<b>Accept as is</b>

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	<b>EE-M3: Energy Conservation</b> Reduce energy consumption through behavioral and operational changes. <ul style="list-style-type: none"> <li>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.</li> <li>b. Incorporate energy management software, electricity monitors, or other methods to monitor energy use in municipal buildings, where feasible.</li> <li>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.</li> </ul>	<b>Accept</b>	<b>Accept as is</b>
	<u><b>XX Phase out the Use of On-site Fossil-Fuel Generators</b></u> <u>Encourage the use of non-fossil -fuel generators now and adopt an ordinance phasing out the acquisition of and use of fossil-fuel generators in the City of Mill Valley no later than 2030.</u> <ul style="list-style-type: none"> <li>a. <u>Seek financial incentives and technical assistance to support residents in making the transition to non-fossil=fuel generators and other options for power backup.</u></li> </ul>	<b>New Action</b>	<b>Discuss with Task Force with Transportation Actions</b>  See potential Air District regulations for portable generators with the Transportation background material.

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	<b><u>XX Electrify All Landscape Equipment</u></b> <u>Adopt an ordinance to phase out the use of all fossil-fuel landscape equipment.</u> <u>Seek financial incentives and technical assistance to support residents in making the transition to non-fossil-fuel landscape equipment.</u>	<b>New Action</b>	<b>Discuss with Task Force with Transportation</b> See potential Air District regulations for landscape equipment in Transportation material.
	<b><u>XX Sustainable Building Materials</u></b> <u>Adopt an ordinance to require the use of Forest Stewardship Council (FSC) certified material in new construction, major remodels, and outdoor use, upon adoption of the <a href="#">Climate Action Plan</a>.</u> a. <u>Revise permitting process to include materials choice related to FSC certification as a condition of planning approval by the Building Department.</u> b. <u>Discourage use of non-certified old-growth materials including cedar, redwood, and rainforest hardwoods for outdoor use (decking, fencing, siding, and landscape construction).</u>	<b>New Action</b>	<b>Discuss with Task Force</b>
	<b><u>XX Sustainable Building Materials in Design Guidelines</u></b> <u>Develop a plan and Design Guidelines on additional materials, such as those listed here, to be prepared by the Planning Commission and City Council, by Sept 1, 2022:</u> a. <u>Discourage the use of OSB (Oriented Strand Board) sheathing for exterior use and vinyl for interior materials.</u> a-b. <u>Provide education and outreach on materials choices and impact on climate in support of the above.</u> b-c. <u>Promote and encourage use of existing materials from buildings (historic or otherwise) that are being remodeled or torn down.</u>	<b>New Action</b>	<b>Discuss with Task Force</b>  Dates for implementation should be identified as part of the CAP work plan.  Spell out acronyms.

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	<u><b>XX Carbon Neutral Fund</b></u> <u>Establish a citywide goal to become carbon neutral by            setting up a fund (similar to an internal price on carbon) to            incentivize and support projects by residents to reduce their            carbon footprint.</u>	<b>New Action.</b> Subcommittee will provide further information on this idea.	<b>Discuss with Task Force</b>