COUNCIL REPORT

CITY OF MOUNTAIN VIEW

DATE: December 4, 2018

CATEGORY: New Business

DEPT.: City Manager's Office

TITLE: **Analysis of Environmental Sustainability Task Force 2 Recommendations**

RECOMMENDATION

1. Provide preliminary input on any Council priority projects to be included in Environmental Sustainability Action Plan 4 (ESAP-4).

2. Direct staff to initiate five early actions related to the ESTF-2 recommendations.

3. Appropriate and transfer $235,000 into the General Operating Fund, Community Development Department, from the General Operating Fund Reserve for three early actions. (Five votes required)

4. Authorize the City Manager to execute a letter of commitment to the EV charger granting agency as evidence of authority to apply for the grant and implement the EV charger installation project, for a not-to-exceed amount of $125,000.

BACKGROUND

In February 2008, the Mayor convened an Environmental Sustainability Task Force of more than 65 residents and business leaders to help the City shape its short- and long-term sustainability goals. Concluding its work in September 2008, the Task Force proposed more than 89 recommendations across 11 topic areas, which became the foundation for Mountain View's sustainability activities.

Since 2008, the City has undertaken numerous sustainability initiatives, such as: (1) adopting short- and long-term greenhouse gas (GHG) reduction targets through 2050; (2) developing and implementing three Environmental Sustainability Action Plans (94 actions between 2008 and 2019) with input from the Council Environmental Sustainability Committee; (3) producing three broader climate action plans (one for municipal operations, one for the community, and one for California Environmental Quality Act (CEQA) compliance); (4) adopting a green building code; (5) implementing

a successful residential energy conservation program called Energy Upgrade Mountain View; (6) developing and implementing several recycling and zero waste programs (including single-family residential and commercial composting, and polystyrene food container and reusable bag ordinances); (7) undertaking numerous transportation-related initiatives (with increased staffing) to make it easier and safer to get around Mountain View without a car; and (8) successfully encouraging the community to reduce water usage.

2015 Communitywide GHG Emissions

In 2015, Mountain View generated a total of 768,365 metric tons of carbon dioxide equivalent (MT CO_2e) emissions communitywide, with transportation accounting for 59.5 percent of total emissions (up from 53.1 percent in 2005) and building energy making up an additional 32.9 percent (down from 42.0 percent in 2005). Total 2015 emissions were 9.1 percent higher than in 2005, and 21.3 percent above the 2015 reduction target of 10 percent. With a 2020 reduction target of 15 percent to 20 percent, and emissions likely to have increased since 2015 due to residential and commercial growth, the 21.3 percent gap will likely increase.

Environmental Sustainability Task Force 2

One of the major goals established by the City Council for Fiscal Years 2017-19 was to: "Promote environmental sustainability with a focus on measurable outcomes." As part of its goal-setting process in spring 2017, the Council voted to establish a second Environmental Sustainability Task Force (ESTF-2 or Task Force). The purpose of ESTF-2 was to: (1) evaluate and recommend whether and how current City sustainability plans and goals should be modified based on new technologies and processes for addressing climate change; and (2) provide on-the-ground support of staff's community engagement efforts. Comprised of 33 community members, ESTF-2 held its first meeting on September 28, 2017. Following 17 general meetings, dozens of working group meetings, and significant community outreach, the 2017-18 Task Force[1] presented its final report to the City Council on June 26, 2018.

The Task Force report contained 36 recommendations across five topic areas: Transportation (8), Buildings and Land Use (12), Circular Economy (7), Outreach, Regional Collaboration, and Advocacy (4), and Measurement and Metrics (5). The vast majority of the recommendations are community-focused, while a small number pertains to municipal operations. Each recommendation includes certain assumptions

[1] Final Report of the 2017-2018 Environmental Sustainability Task Force: http://mountainview.legistar.com/gateway.aspx?M=F&ID=4781bd4b-f8a1-4b63-8dc3-47947c4fe068.pdf

and projections regarding the cost, ease of implementation, and impact on reducing GHG emissions.

At the June 26, 2018 meeting, the City Council expressed sincere thanks for the Task Force's significant efforts and the thoughtfulness and comprehensiveness of the recommendations. In response to requests by the Task Force to include funding in the Fiscal Year 2018-19 budget to implement some of the measures (particularly Recommendation O1), the Council signaled a need for more detailed work plans and data, and a willingness to fund staff-proposed "early actions" prior to the Fiscal Year 2019-20 budget. One of those early actions was to authorize $150,000 in the Fiscal Year 2018-19 budget to hire a consulting firm to help the City more fully understand the level of staffing needed, and the most effective organizational structure. This Environmental Sustainability program assessment and strategic plan process will conclude in the spring and inform sustainability staff and program funding in the Fiscal Year 2019-20 budget (see Additional City Initiatives section, below). A second early action was to place the sustainability program in the City Manager's Office to increase the level of prominence and leadership.

Since the Task Force report was completed shortly before the June Study Session, staff did not have time to analyze the recommendations in detail prior to the Study Session. This Council report serves as a preliminary review of the cost-benefit analysis in the Task Force recommendations and proposes five early actions. A table summarizing staff's analysis is included in Attachment 1, while detailed analysis of each recommendation can be found in Attachment 2, with recommendations in the order they appear in the ESTF-2 report.

There are significant resource considerations associated with the Task Force recommendations. The Task Force work was intended to inform the development of ESAP-4, which will establish actions for implementation during Fiscal Years 2019-20 through 2021-22. Prioritization and phased implementation of the Task Force recommendations is required in order for the City to establish a feasible and sustainable work plan that allows the City to accomplish its sustainability goals along with other City priorities.

If the City were to support full adoption of the Task Force recommendations, the realities of the cost and staff time required to implement all the measures presents a challenge within the 2030 time frame. The Task Force analysis estimated a total net cost to the City of approximately $62.6 million through 2030 for full implementation of the 36 recommendations. Preliminary staff analysis suggests the net cost to the City to be a minimum of $82.4 million through 2030 due to factors noted in the summaries for each recommendation below. Since staff was unable to estimate some costs for

Recommendations T5 and W5 due to elements of them already being under way, staff expects the full net cost to the City to be higher than $82.4 million. Also, staff estimates implementation of all measures would require a total of approximately 10,000 to 12,000 hours of additional staff time annually across all City departments, which equates to 5 to 6 full-time equivalent (FTE) staff.

ANALYSIS

The Task Force did a tremendous job researching and synthesizing a large amount of information. As part of its analysis of the recommendations, staff sought to add value to the Task Force's work, drawing on its professional network, access to best practices, and knowledge of the public process. The following themes emerged from staff's analysis:

- Most of the recommendations will be very staff time-intensive due to the complexity of the measures and number of staff required to implement them.

- The timeline for implementing various recommendations was optimistic.

    - Many of the recommendations will require significant up-front and ongoing community engagement.

    - Behavior change requires a range of incentives and extensive outreach, and progress can be slow and unpredictable.

    - The measures requiring multi-agency collaboration, such as some of the transportation recommendations, tend to move more slowly.

- The Task Force's greenhouse gas reductions and cost to implement calculations were increased or decreased by staff in a number of situations in order to reflect more accurate data and assumptions.

The City's intent in performing this analysis is to support implementation of the recommendations in as efficient and effective a manner as possible. We also want to set appropriate expectations by being realistic about what is feasible in what time frame.

Staff, or a consultant, reviewed and analyzed each Task Force recommendation, seeking to understand and adjust, as necessary, the assumptions the Task Force used to calculate costs and benefits. The analysis in the attachments to this Council report reflects any changes staff believes are required to the Task Force cost or benefit estimations or to the assumptions or variables used in the calculations, acknowledging

that the Task Force deserves significant credit for quantifying the impacts of the recommendations as carefully as it did.

It is important to note that the ESTF-2 recommendations are highly interdependent and, in many cases, meant to be implemented as a suite of related initiatives, rather than as single discrete projects. Therefore, in some cases, it has been difficult to assign either costs or GHG emissions reductions to a single recommendation. Staff has indicated some of these interdependencies in both the detailed analysis (Attachment 2) and the summary analysis of each recommendation below.

Cost and GHG emissions reduction calculations may change as these recommendations are adapted for implementation by lead departments. Environmental Sustainability staff will work with lead departments to develop more comprehensive assessments for the initiatives proposed for early action or developed as part of ESAP-4, reflecting any recommended changes. Based on the City's GHG emissions inventories, it is clear that transportation, buildings, and land use are high-priority areas for GHG emissions reductions.

TRANSPORTATION

Revolutionize Transportation in Mountain View (T1)

The actions called for in this recommendation include a variety of measures that, collectively, aim to switch 30 percent of all trips away from single-occupancy vehicles, as noted below. Staff agrees the four proposed actions would enable a shift away from vehicle travel and support transportation electrification, which will be critical to reducing GHG emissions from transportation in Mountain View. There are no direct GHG emissions reductions or costs associated with this overarching recommendation since it is comprised of a comprehensive suite of initiatives detailed in the transportation recommendations that appear below. Recognizing a need to focus on a comprehensive, multi-modal approach to transportation, the City has increased staffing in the Transportation Division to support project implementation and increase capacity to focus on bicycle and pedestrian issues. In addition to a number of active transportation projects currently under way, the City has begun to develop a Comprehensive Modal Plan, which will integrate the various existing plans and studies into a single, comprehensive transportation plan so Council can prioritize improvements and services and evaluate funding strategies. When complete, the Comprehensive Modal Plan will inform and support the development of actions consistent with many of the following recommendations.

Related Recommendations: All Transportation recommendations.

Solve the Local Solo-Trip Problem: Pilot Discounted Pooled Ridesharing (T4B)

Staff analysis suggests this recommendation is unlikely to reduce GHG emissions and is, instead, likely to have negative impacts, including increased traffic congestion. Current research indicates that Transportation Network Companies (TNCs) like Uber and Lyft attract more riders from nonvehicle modes such as transit, walking, or biking than from private vehicles, especially for users of the "pooled" or shared ride options, resulting in a net increase in vehicle trips. In addition, many TNC trips are estimated to be "induced travel," referring to an increase in overall vehicle travel that would otherwise not have occurred absent the change in convenience to the user. (Essentially, if you make it easier for people to travel, they will travel more often and farther than they otherwise would.) Subsidizing the cost of these rides may only increase the amount of mode shift and induced trips. The City may want to consider alternative pricing incentives for reducing solo TNC trips. Instead of subsidizing shared TNC rides, some cities are adding fees to solo TNC rides to account for their negative impacts, such as increased congestion, GHG emissions, and air pollution.

Solve the Local Solo-Trip Problem: MV Shuttle 2.0 And 3.0 (T4A)

Staff supports continuing to investigate opportunities to improve the Mountain View Community Shuttle to reduce GHG emissions and provide convenient transportation options for the community. In staff's analysis, GHG reductions were adjusted to be lower than estimated by the Task Force, due to lower projected ridership levels in line with other regional services. The net cost to the City was adjusted to be higher than estimated due to projected increased costs from operating larger shuttles, and based on discussions with staff the unlikelihood of cost-sharing opportunities with VTA, as assumed in the ESTF-2 report. The Comprehensive Modal Plan effort will examine the services offered by the Mountain View Community Shuttle, the Transportation Management Association's (TMA's) MVgo shuttle, and VTA to identify gaps in service areas and service levels and explore opportunities to fill those gaps by combining resources and/or through supplemental City funding.

Related Recommendations: T7 – Expand TDM to all of Mountain View.

Restrict Parking to Encourage and Fund Alternative Modes (T6)

Staff agrees with the recommendation that paid parking is an extremely effective tool to reduce vehicle use and associated GHG emissions. Properly designed parking pricing systems will likely be an important part of any plan to effectively reduce GHG emissions from Mountain View's transportation sector. Economic Development staff is

currently working with a consultant to conduct a Downtown Paid Parking Study to examine options for implementing paid parking in downtown Mountain View in support of the City's broader Transportation Demand Management (TDM) initiatives. Staff is deferring a full GHG analysis of this recommendation until the Downtown Paid Parking Study is complete as the costs, revenue, GHG emissions reductions, and other impacts would be highly dependent on the specifics of any proposed pricing and implementation scenarios. The results of the Paid Parking Study are expected to be presented to City Council in 2019.

Related Recommendations: T7 – Expand TDM to all of Mountain View.

Support Bicycling As a Primary Mode of Transportation (T5)

Staff agrees that supporting active transportation infrastructure and programs can be an effective way to reduce GHG emissions from transportation, as well as providing substantial additional environmental and health benefits to the community. Staff revised the Task Force's GHG estimates to reflect more realistic projections of bicycle mode share by 2030 based on the amount of planned infrastructure and the proposed implementation timeline. It was not possible to develop cost estimates for implementation of all 104 high- and medium-priority Bicycle Transportation Plan (BTP) projects for this report. Staff will continue to update the estimates for individual projects as they are submitted through the Capital Improvement Program (CIP). Given the time necessary to plan and implement active transportation projects, staff does not believe it is feasible to implement all 104 high- and medium-priority BTP projects in the proposed timeline of this recommendation. As explained in the Attachment 2 detailed analysis, various factors, many of which are outside of the City's control, can increase the duration of a bicycle project and limit the number of projects that can be undertaken simultaneously. Community outreach, engagement, and consensus-building are essential to ensure that projects are successfully designed, implemented, and supported by the community. Where projects require encroachment permits or interaction with other jurisdictions such as Caltrans, Caltrain, the Water District, the County, or neighboring cities, additional agency and stakeholder engagement is needed and must be undertaken according to the time frame of the reviewing agency.

The City has increased staffing in the Transportation Division, adding a Transportation Manager and a second Transportation Planner focused on bicycle and pedestrian issues, and is working on a significant number of projects to support bicycling. The Multi-Modal Improvement Plan[2] outlines an Action List of 35 items to improve bicycle and pedestrian access and facilities, many of which are completed, under way, or scheduled.

[2] Mountain View Multi-Modal Improvement Plan: http://tjkm.com/cityfiles/mv/Mountain_View_MIP_082418.pdf

Work has started on 22 of the high- and medium-priority projects listed in the BTP. Mountain View is also working with Palo Alto, Menlo Park, and Redwood City on regional bicycle improvements. The City's current effort to develop a Comprehensive Modal Plan will help consolidate these and other active transportation plans to identify gaps in the bicycle transportation infrastructure and prioritize projects for implementation.

Expand EV Charging Infrastructure on Public Property and Rights-of-Way (T3)

Staff agrees that increased EV charging infrastructure is needed to support EV adoption in Mountain View and reduce GHG emissions from transportation. This recommendation is feasible with the additional staff and funding resources noted in the staff analysis (Attachment 2). Mountain View was a partner in a collaborative effort led by Santa Clara County to develop a comprehensive set of resources to assist cities in supporting EVs, including a Siting Analysis that predicts EV charging demand in various areas of Mountain View. While staff analysis concludes that this recommendation would require a greater investment of resources than estimated by the Task Force, it is still very cost-effective, and current and upcoming funding opportunities will offset some of the charger costs and/or the necessary electrical infrastructure. As an early action, staff will utilize the County's EV Siting Analysis to determine high-opportunity sites for additional EV chargers at City-owned parking lots and structures and in the public right-of-way, and apply for a grant(s) to support the initiative. Ultimately, the City plans to develop an overarching EV action plan to guide its efforts, possibly as part of ESAP-4.

Related Recommendations: BE7 and T2, which also address electric vehicle adoption and charging infrastructure.

Expand Transportation Demand Management (TDM) to All of Mountain View (T7)

Staff supports a comprehensive TDM program for both commercial and residential properties, but implementation will be contingent on additional staff resources as noted in the Task Force recommendation and staff analysis. Staff reduced the Task Force's estimated GHG reductions from the proposed residential TDM pilot to account for lower expected participation rates than proposed by ESTF-2. Estimated costs are also expected to be lower based on costs for similar programs. Pending sufficient staffing resources, Environmental Sustainability staff will undertake additional efforts to encourage mode shift away from private vehicles as part of its outreach program. As noted in Attachment 2, successful TDM outreach aimed at existing residents will likely require a significant investment of staff time and resources.

The City currently includes TDM requirements as conditions of development for new commercial and multi-family developments, including trip reduction targets and a requirement that these new developments join the TMA as part of their entitlements. It is still too early in the process to accurately estimate the resulting GHG emissions reduction benefits from these efforts. However, staff expects to see greater success in achieving vehicle trip reductions as more small and midsized employers, which generally do not have strong TDM programs, join the TMA.

Related Recommendations: T4A, which addresses the shuttle programs, some of which are operated as part of the TMA.

Implement Group-Buy Programs to Expand Personal EV Adoption (T2)

This recommendation is practical and feasible, though Silicon Valley Clean Energy (SVCE) may be a more appropriate lead agency to coordinate a group-buy effort. The Task Force-predicted number of EV purchases was very optimistic and were scaled down in the staff analysis to better reflect observed purchase rates in similar EV group-buy programs elsewhere. The net cost to the City is relatively low at an estimated $20,000 a year and would likely be reduced or eliminated if SVCE takes the lead in implementing a regional group-buy program. Staff supports discussing this possibility with SVCE.

Related Recommendations: BE7 and T3, which address electric vehicle charging infrastructure.

BUILDINGS AND LAND USE

Adopt a Decarbonization Policy for Buildings (B1)

This recommendation calls for the completion of a Building Baseline Study and Decarbonization Roadmap to develop an implementation plan for reducing natural gas use in new and existing buildings in Mountain View and the embodied carbon in building materials and construction practices. While this recommendation does not directly reduce GHG emissions on its own, it is an important step to support at least nine of the other recommendations in the Buildings and Land Use category through development of a cohesive implementation plan. This type of study would be completed by a consultant, with a likely timeline of approximately 12 to 15 months.

Related Recommendations: All building-related recommendations, including BN3, BN1, BE1, BE12, BE9, BN8, BN6, BE4, and BN4, are necessary to fully implement this strategy. Recommendations M1, M10, O1, O3, O2A, and O2B are also needed to support this recommendation through key staff support, outreach, and measurement.

Create Financial and Nonfinancial Incentives for New Above-Code Buildings (BN3)

Staff agrees that expanding green building incentives, such as those included in the North Bayshore Precise Plan, to more areas of the City is worth pursuing. However, it is unlikely that a uniform incentive program could be applied Citywide. Each green building Floor Area Ratio (FAR) bonus program is tailored for a specific area of the City, with different FAR requirements based on factors such as neighborhood context, desired heights, and character. Additionally, GHG emissions reductions are likely to be lower than estimated by ESTF-2 due to more modest energy efficiency gains than originally predicted. However, the initial participation rates have been very high for the green building incentives in North Bayshore, with essentially all new developments using the bonus FAR structure that requires green building elements such as those outlined in this recommendation. Staff recommends including green building incentives as part of the development of all new area plans, as is being done with the new East Whisman Precise Plan.

Update Green Building Code to Move Toward Low-Carbon Buildings (BN1)

Staff agrees that building electrification could achieve significant GHG reductions and supports consideration of voluntary and mandatory measures to achieve all-electric design in new and existing buildings. All-electric "reach codes" (i.e., requirements beyond what is required by the State Building Code) for all new construction, as well as electrification measures for existing buildings, would need to be demonstrated to be cost-effective (resulting in net cost savings to the consumer) in Mountain View's climate zone in order to be adopted as mandatory measures. The Bay Area Regional Energy Network (BayREN) is leading an effort in partnership with all interested cities in the region to complete a cost-effectiveness study for an all-electric reach code for the 2019 Building Code update cycle, which would be funded by the Statewide Codes and Standards group. Staff recommends participating in the process to develop the scope of this cost-effectiveness study, which will determine if any building electrification measures could be made mandatory as part of the 2019 code update. All-electric building standards could also be considered as a voluntary measure as part of green building incentives for FAR bonus programs.

Related Recommendations: B1, which would create a Building Decarbonization Road Map, and BE1, which provides financial incentives to decarbonize heating in existing buildings.

Measure Effectiveness of Housing Near Transit (BN8)

Staff supports the continued development of TDM requirements and incentives to reduce vehicle miles traveled (VMT) from new development, but consideration of the

recommended measures is complicated by the City's work to comply with new, related Statewide requirements. Many of the VMT-reduction measures suggested in this Task Force recommendation were included as part of residential TDM measures in the North Bayshore Precise Plan and are expected to be included in the East Whisman Precise Plan as well. Currently, each FAR/density bonus program, including VMT reduction targets in the form of TDM measures, is tailored for the specific area of the City to which it applies. The City is supportive of continuing to expand TDM to other areas of the City as staff time allows.

Recent changes in State legislation (related to SB 743) require evaluation of the VMT impacts of new development as part of the CEQA process. Staff is working with VTA to determine appropriate thresholds of significance for VMT in new development. The feasibility of the related Task Force measures will likely depend on the results of this ongoing effort. Staff anticipates the revised CEQA criteria to be completed in 2019.

Related Recommendations: T7, which expands TDM to all of Mountain View.

Incentivize Switching Residential HVAC and Water Heaters from Natural Gas to Electricity (BE1)

Staff agrees that incentives to promote fuel-switching from natural gas to electric heating in existing residential structures should be considered as part of a building decarbonization strategy. Currently, SVCE has funding for a pilot heat pump water heater incentive program beginning in 2019, with the goal of installing 150 heat pump water heaters throughout their service territory. Staff lowered the Task Force's GHG reduction estimates significantly as expected participation is likely to be much lower than predicted due to the limited scope of the rebate program and low participation rates in similar rebate programs, such as Palo Alto's heat pump water heater pilot program. It is unclear if funding for the rebate program will be extended beyond the pilot year. If SVCE or other external agencies do not continue funding this program beyond the pilot year, the City would need to pursue alternative funding strategies to continue offering this incentive in future years, which would increase costs from the Task Force's estimates.

Related Recommendations: B1, which would create a Building Decarbonization Road Map, and BN1, which would create Building Code standards that promote all-electric design in new and construction and remodels/renovations.

Encourage Installation of EV Chargers in Existing Multi-Unit Dwellings (BE7)

Staff agrees that installing EV chargers in multi-unit dwellings (MUDs) is important to support EV adoption and reduce GHG emissions from transportation. Staff estimates

that GHG reductions would be slightly lower than the Task Force recommendation based on calculations using a tool developed by Santa Clara County. Expected costs were increased slightly to include outreach and communications necessary to support this recommendation. The comprehensive resources available through the County's "Driving to Net Zero" initiative will support this effort.

Related Recommendations: T2 and T3, which also address electric vehicle adoption and charging infrastructure.

Adopt a Revenue-Neutral Differential Utility Tax Encouraging Low-Carbon Energy Use (BE9)

As noted in the original ESTF-2 report, differential utility tax rates are not currently possible in PG&E's billing system and would require significant investment by PG&E or action by State agencies to make such a change possible. The net cost to the City is expected to be higher than the Task Force estimated due to higher anticipated costs for the required ballot measure approving the change to the Utility Users Tax (UUT). These costs would be incurred regardless of whether the change to the UUT is approved by voters, meaning that the GHG reductions from this investment could be zero. Staff also noted that the estimated emissions reductions from this measure are quite low. Assuming the estimated increases in average annual costs to residents are correct, this increase in utility costs would provide little disincentive to using natural gas (for those households who could afford to invest in fuel switching or efficiency measures), and be punitive to those with the least control over the efficiency of their natural gas appliances, such as renters. Given the above factors, staff does not support this recommendation. An alternative option would be to fund an incentive program to reduce natural gas use through fuel switching and efficiency measures.

Increase Efficiency of Existing Buildings through Voluntary Programs and City Ordinances (BE4)

Staff is possibly supportive of this recommendation, but recognizes that implementing all the voluntary and nonvoluntary measures, and achieving higher participation in existing voluntary energy efficiency programs, would require a significant investment of staff time. For voluntary programs, it may be possible to leverage efforts by SVCE to accomplish greater participation and reduce the demand on City staff. Still, this recommendation has a high net cost to the community and is one of the more expensive in terms of net cost per metric ton of GHGs reduced, initially and ongoing. While staff time estimates were decreased slightly compared to the Task Force analysis, estimated costs to the City are projected to be higher due to reduced projected fee revenue. If the City is interested in pursuing the Task Force-proposed measures, staff recommends

investigating the potential to implement both the voluntary programs and ordinances on a regional basis.

Use City Buildings to Demonstrate Leadership in Electrification and Energy Efficiency (BE12)

Staff agrees that deep energy efficiency retrofits and electrification of City facilities has the potential to be a cost-effective GHG emissions reduction measure. An evaluation of energy efficiency and fuel switching measures in public buildings in a neighboring city demonstrated that packages of energy efficiency measures, combined with fuel-switching initiatives, could yield net energy and cost savings while eliminating the GHG emissions from natural gas use in City buildings. Based on an evaluation of utility usage at some City facilities, staff believes that both the GHG emissions reduction potential and cost savings for Mountain View would be higher than estimated in the Task Force recommendation. Implementing these measures would allow Mountain View to lead by example in building decarbonization while also yielding both financial savings and GHG emissions reduction benefits. Facilities staff has already audited the City's highest energy-using buildings, knows which upgrades provide the greatest financial and GHG savings, and currently has a number of projects in the planning phase. However, since municipal operations emissions represent less than 2 percent of communitywide emissions, and with high employee workload across the organization, Environmental Sustainability staff recommends working with Facilities staff to determine which upgrades can be performed in what time frame.

Require LEED Platinum® for City-Owned New Construction or Major Renovation (BN6)

Adoption of a LEED Gold® certification level was already approved as part of ESAP-3, though it has not yet been implemented. While staff is supportive of the benefits associated with LEED Platinum® certification for new City-owned construction and major renovations, staff recommends that the costs and benefits of such certification be evaluated on a project-by-project basis rather than a firm requirement. Since LEED is a points-based certification system where projects have flexibility in choosing which credits to pursue, it is impossible to accurately estimate the overall cost differential to the City for achieving a higher certification level; it will be highly dependent on the specifics of the project. The estimated increased cost, expected energy savings and other benefits, and overall feasibility of achieving LEED Platinum® will need to be evaluated on a project-by-project basis.

Expected GHG emissions reductions from this recommendation were decreased due to eliminating the emissions from additional commercial buildings inspired by the City to

achieve LEED Platinum®. LEED Platinum® certification is already part of the green building FAR bonus incentives in areas of the City where any "headquarters-scale" new commercial development could be built, meaning those reductions would already be counted under the estimates for other recommendations. The net cost to the City is predicted to be lower than the Task Force estimated due to lower incremental costs (as California's mandatory green building standards become stricter) and higher estimated energy savings.

Reduce Embodied Carbon in Building Construction and Maintenance (BN4)

While the City does not currently account for the emissions from "embodied carbon"—greenhouse gases emitted during the manufacture, transportation, and construction of building materials—in the City's GHG emissions inventory, staff recognizes they are a significant contributor to climate change. However, it is likely that emissions reductions would be lower than the Task Force estimated since current California Green Building Standards Code (CALGreen) voluntary measures and LEED credits for reducing the life-cycle impact of buildings set reduction thresholds at 10 percent rather than the 20 percent estimated in this recommendation. The City could explore leveraging these voluntary standards as part of green building FAR bonus programs and other incentives for new construction. Additionally, the City could consider adopting the standards set by AB 262[3] for all City-owned new construction and major renovation projects along the same timeline as it will be adopted by State agencies. This would effectively reduce embodied GHG emissions in new City-owned facilities, leveraging the State's supporting efforts in this area.

Related Recommendations: W16, which would develop a consumption-based inventory that accounts for the embodied emissions addressed by this recommendation.

Enliven Mountain View with Native Plants and Oak Trees (BT1)

Staff supports continuing efforts to increase Mountain View's tree canopy, but cautions against setting large target goals for single tree species. It may be possible to increase the planting of some oak species where appropriate, with consideration to the specific needs of each potential planting location. While California oaks offer increased carbon sequestration potential compared to street tree varieties commonly used in Mountain View, native species are not always the best adapted to the density and growing conditions of an urbanized area. Maintaining diversity of climate-appropriate trees in

[3] AB 262 requires State agencies to consider global warming potential in the bidding process for certain types of construction materials. The Department of General Services is tasked with setting a maximum acceptable global warming potential for each material category: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB262

size, shape, and care also provides important community benefits, including resistance to disease and pests. Staff could examine ways to encourage planting of more native or adapted varieties where appropriate while maintaining diversity in Mountain View's tree canopy.

Related Recommendations: W12, which includes a lawn replacement program.

CIRCULAR ECONOMY

Adopt a Consumption-Based Emissions Inventory for Mountain View's GHG Accounting (W16)

Staff is supportive of this recommendation but could not accomplish it with current staff capacity. A consumption-based emissions inventory (CBEI) contains many emissions not currently accounted for in Mountain View's community GHG inventory (e.g., emissions from the food we eat, goods and services we purchase, miles we fly, etc.) and makes the conversation about GHG reductions more relevant and tangible to the community by tying it directly to individual household choices. Conducting a City-level CBEI is a time-intensive effort, requiring a significant investment of staff resources for data collection and research. Staff adjusted the GHG reduction estimates to reflect that there are no direct GHG reductions from conducting a CBEI; rather, the CBEI can be used to inform separate policies, programs, and outreach designed to address consumption-based GHG emissions. The Bay Area Air Quality Management District (BAAQMD) recently conducted a CBEI for 2015 for the Bay Area region that estimates household consumption-based emissions down to the census tract level,[4] and includes a household-level carbon footprint calculator for the region.[5] Individuals can use this emissions calculator today to measure their own consumption-based emissions, which is an eye-opening experience. With sufficient resources for outreach, staff may be able to leverage these findings and resources to address these sources of GHG emissions, but notes that BAAQMD has no current plans to conduct a CBEI for the region on an ongoing basis. Staff does not recommend conducting a CBEI each year since current data estimation methods for emissions beyond those included in the City's normal GHG inventory are not sophisticated enough to show annual changes in consumption-based emissions in Mountain View.

[4] BAAQMD Consumption-Based GHG Emissions Inventory: http://www.baaqmd.gov/about-air-quality/research-and-data/emission-inventory/consumption-based-ghg-emissions-inventory
[5] CoolClimate Network Carbon Footprint Calculator: https://coolclimate.berkeley.edu/calculator

Adopt a Citywide Ban on Single-Use Disposable Plastic Foodware (W9)

Staff agrees that developing an ordinance to restrict the use of some types of disposable plastic foodware could have environmental benefits, including reducing plastic pollution in stormwater systems, local creeks, and the ocean. However, it is unlikely to achieve significant GHG emissions reductions unless these items are replaced with reusable rather than compostable disposable alternatives. GHG reductions in the Task Force recommendation were calculated based on a life-cycle analysis (LCA) of common disposable plastic food service items, but ESTF-2 did not compare those items to the LCA impacts of their likely compostable replacements, which can be quite similar. Assisting food-service businesses to transition to reusable rather than compostable or recyclable disposable items is the best scenario from an environmental perspective.

City staff is currently discussing this issue at the County level, with the goal of developing a regional set of standards and potential model ordinance. This process is similar to how the plastic bag and polystyrene ordinances were developed, with each city adopting minimum standards but having the ability to exceed them. Solid Waste and Recycling staff recommends continuing to participate in the County-level process, which will likely be a priority item in Fiscal Year 2019-20.

Related Recommendations: W16, which would develop a consumption-based inventory that accounts for the embodied emissions addressed by this recommendation.

Implement a Sustainable Landscaping Program in Mountain View (W12)

With sufficient staffing levels for outreach, staff supports the voluntary outreach-based measures in this recommendation, including encouraging lawn replacement with native or adapted shrubs, encouraging sustainable landscape care, and promoting electrification of landscape and garden equipment. This recommendation would require significant community outreach, particularly with the landscaping providers. Staff decreased the Task Force GHG reduction estimates to reflect lower projected emissions from replacement of gas-powered leaf blowers. If the City is interested in pursuing either the proposed voluntary or mandatory measures, staff recommends investigating the potential to implement these as part of a coordinated regional effort to increase effectiveness, reduce the burden on City staff, and improve compliance through regional consistency in regulations.

The City currently uses electric landscaping equipment for some applications, especially in downtown, near parks, or in areas where noise complaints are an issue. Staff is supportive of evaluating the potential to replace more gasoline-powered landscaping equipment with electric models; however, currently used electric

equipment has had problems with battery life and run time. Shifting all gasoline-powered landscaping equipment to electric models will be contingent on comparable-performing electric options being available that are appropriate for the specific conditions and uses at City facilities, and sufficient funds to cover the cost premium for electric models.

Related Recommendations: BT1, which would encourage use of native plants.

Partner with Palo Alto to Install Anaerobic Digesters to Produce Clean Energy (W15)

Based on discussions with City staff and partners at the Palo Alto Regional Water Quality Control Plant (RWQCP), staff believes the anaerobic digester option is not the most cost-effective way to achieve GHG emissions reductions at the RWQCP. In staff's assessment, the Task Force recommendation significantly overestimates the potential GHG reductions as direct carbon dioxide (CO_2) emissions from bio-solids incineration are considered biogenic rather than anthropogenic and, therefore, are not accounted for in GHG emissions inventories. The costs were also substantially underestimated, according to official project estimates for anaerobic digesters at this facility. However, the incinerators are being decommissioned as planned at the wastewater plant in 2019, and RWQCP facility staff is planning to truck bio-solids off-site to digestion and composting facilities, which will achieve similar GHG emissions reductions.

Lead Collaboration Among Bay Area Cities to Develop a Solution to Overseas Recycling Crisis (W1)

While staff is supportive of efforts to address the overseas recycling crisis, the City is not the appropriate entity to lead this effort. The development of domestic markets for recyclables is an active focus of CalRecycle, the State agency charged with overseeing waste management and diversion efforts in California. Because many factors can influence the demand for recycled materials, the State has an appropriately high-level view of the issue. Minimum recycled-content requirements for manufacturers (through legislation), grants to help fund processing facilities and the development of products that use recycled materials, and business incentives are most effective at a State level rather than a regional one, as suggested by this recommendation. Mountain View currently utilizes in-State processing facilities for recyclable materials collected in the City whenever available, and supports the State's efforts to address this issue.

Pass a Resolution to Support "Green Monday" (W2)

Staff is supportive of this recommendation, but additional staff capacity would be required to implement the recommended measures. While Mountain View's

community GHG inventory does not currently account for consumption-based emissions from food, staff recognizes these emissions sources (particularly from meat and dairy products) are a significant contributor to climate change, and by some estimates the largest source of emissions from any sector in society. Staff believes GHG reductions would be lower than estimated by the Task Force due to a decreased estimated participation rate based on similar programs elsewhere (rather than using the maximum possible reductions from all residents and 50 percent of employees switching to a vegetarian or plant-based meal one day a week). Successful implementation of this measure would likely require significant investment of staff time for outreach to local food service businesses and residents.

Related Recommendations: W16, which would adopt a consumption-based inventory that accounts for these emissions sources.

Expand Mountain View's Composting Program to All Residential and Commercial Properties (W5)

Staff supports this recommendation and is currently in the process of implementing the proposed measures. The City currently offers food scraps collection to all commercial customers and residential customers with curbside bin service, and has existing plans to expand this service to all interested residential customers. However, GHG reductions are likely to be lower than the Task Force estimated, based on participation rates from current commercial and curbside compost collection.

City staff is in the process of implementing a Multi-Family Food Scraps Program (MFSP) pilot[6] that began in October 2018. Similar to the roll-out of the Curbside Food Scraps Program for smaller residential properties, the MFSP will be used to test various measures and inform the development of a Citywide program. The pilot will be implemented by existing staff. However, there will be hard costs for program implementation that were not included in the ESTF-2 estimates. Program details and associated costs will be largely contingent on the success of various measures tested as part of the pilot program. Since the MFSP is currently in progress, cost estimates were not developed as part of this report as they may not accurately reflect proposed program conditions. Staff recommends continuing development of the MFSP and efforts to expand this service Citywide.

[6] Information on the City's Multi-Family Food Scraps Program pilot can be found at: https://www.mountainview.gov/depts/pw/includefood/includefood/default.asp

OUTREACH, REGIONAL COLLABORATION, AND ADVOCACY

Create a New Sustainability Office for Mountain View (O1)

Staff agrees additional staffing would be needed to implement all of the recommendations in this report, as well as other initiatives to achieve Mountain View's ambitious sustainability goals. The appropriate level of staffing will depend on how environmental sustainability initiatives are prioritized and phased. If the City were to implement the staffing and structure recommended by the Task Force, the net cost to the City is estimated to be lower than what the Task Force calculated due to recent staffing increases that result in a smaller incremental increase in costs to achieve the proposed staffing levels. Even still, the cost would be fairly significant. To help inform the appropriate structure and staffing levels for the City's Environmental Sustainability program, the City Council authorized an appropriation as part of the Fiscal Year 2018-19 budget to hire a consulting firm with expertise in environmental sustainability, municipal operations, and organization best practices to work with staff to assess current staffing and operations, and develop a strategic plan for the sustainability program. This Environmental Sustainability Program Assessment and Strategic Plan initiative, currently under way, will also provide recommendations based on programmatic priorities. Staff anticipates this planning process to be complete in March 2019.

Implement a Community and Business Outreach Initiative (O2A)

Staff agrees that a robust community and business outreach program is critical to implementing most of the ESTF-2 recommendations, as well as other City sustainability initiatives. Recently, staff launched a monthly newsletter and a City sustainability Facebook site to keep the community more frequently informed, leveraging the e-mail lists compiled by ESTF-2. These efforts will be supported by an online engagement platform to directly engage community members in sustainability projects and create opportunities for input. Further, there are plans to create a community advisory group and implement online tools such as those mentioned in Recommendation O2B, below. Development of a more extensive outreach program would be contingent on increased sustainability staffing levels.

Related Recommendations: O1, which would provide the necessary staffing to conduct this recommendation and other outreach measures, and T2, T3, T5, T6, T7, BE7, BE9, BE1, BN1, BN4, B1, BT1, W1, W2, W9, W12, O3, O2B, M4, and M10, which are supported by the outreach program in this recommendation.

Provide Community Engagement Tools to Facilitate Household-Level GHG Reductions (O2B)

Staff agrees with this recommendation and, depending on prioritization of goals and staffing levels, could implement both of the recommended tools: Community Climate Solutions (CCS) and Cool Block. Due to the overlap between the GHG emissions reduction actions in both tools and other recommendations in this report, it is likely the vast majority of emissions reductions achieved through these outreach platforms (which are not already accounted for elsewhere in this report) would be considered consumption-based emissions and, therefore, not included in the City's current community GHG inventory. Expected GHG reductions for this recommendation were categorized accordingly. Implementation of CCS is planned for 2019, and staff will be working with the creator of CCS to tailor this platform for Mountain View.

Related Recommendations: O1, which would provide the necessary staffing to conduct this recommendation and other outreach measures, and O2A, which creates an outreach program.

Conduct Annual Summit to Review and Track County, State, and Federal Sustainability Actions (O3)

Staff is supportive of improving the current legislative review and advocacy process around sustainability and climate issues, but is unsure if the proposed measure is the most effective means of achieving this outcome. There may be alternative formats for this type of regional dialogue worth investigating, including workshops, quarterly meetings, or regular regional conference calls. Also, it may be more appropriate for an external group focused on regional collaboration, such as Joint Venture Silicon Valley or the County, to take the lead on such an effort, and staff supports initiating discussions to investigate this possibility.

MEASUREMENT AND METRICS

Manage Mountain View's Emissions Budget as Carefully as Its Financial Budget (M1)

Staff is supportive of introducing more measurement and rigor into the GHG emissions reduction process, but is unsure if purchasing offsets is the best use of City funds. Staff anticipates that the cost of purchasing offsets will be higher than the Task Force estimated, due to the likelihood of the City not achieving its reduction targets by a greater amount in the near term (based on recent GHG inventories), requiring purchase of a larger number of offsets. However, overall net costs for this recommendation are predicted to be lower due to reduced staff time and lower annual costs for a consultant to estimate GHG emissions from transportation. The reduction in staff time to complete

an inventory is the result of a successful collaboration with Google to streamline the City's GHG inventory process, enabling completion of annual inventories more easily. Given the reliance on external data sources that are not available until five to seven months after the end of the calendar year, it would be difficult to complete an accurate, preliminary inventory in time for the fiscal year budget process (although an "estimated" inventory based on some proxy data might be possible). Departments submit their budget requests in December and the City Manager's final decisions are due by March 31. Therefore, purchase of carbon offsets to meet the City's annual GHG reduction targets would likely need to be a midyear budget request, or part of the regular budget process with a one-year delay. Purchasing carbon offsets would allow the City to meet its yearly GHG reduction targets. That said, offsets would not reduce in-City emissions, but instead would offset them by funding GHG reduction projects elsewhere, which would lower global emissions. Also, the cost is significant and could take away from funding to implement actions to reduce in-City emissions, and therefore would need to be considered against other City services and priorities.

Related Recommendations: M13, which sets annual GHG emissions targets.

Set GHG Reduction Targets According to Per-Capita Goals Based on Service Population (M2)

Converting the current absolute GHG reduction targets in the Climate Protection Road Map (CPR) to "per-capita" targets is a good idea and would be a relatively simple endeavor, though these per-capita targets would differ from those in the City's Greenhouse Gas Reduction Program (GGRP). Revising the per-capita goals in the GGRP is a more complicated process since the GGRP is a State-qualified Climate Action Plan that serves as a guideline for CEQA compliance. It is unclear to what degree the City would be able to align the emissions reduction targets in the GGRP with the more stringent reductions in the CPR due to the various requirements of the GGRP as a CEQA guidance document. The net cost is dependent on which option the City chooses to pursue. Staff recommends evaluating the measures proposed in M1, M2, and M13 together and making a recommendation to Council on options for updating Mountain View's GHG reduction targets and assessing the City's progress. A discussion about reduction targets would be appropriate when staff presents the results of the City's 2017 GHG inventory to the Council in spring 2019.

Related Recommendations: M1, which creates an annual "emissions budget" based on the City's GHG emissions reduction targets, and M13, which creates annual GHG reduction goals.

Set Annual GHG Reduction Targets for Mountain View that Decline by a Constant Percentage (M13)

Staff agrees that having regular targets would be useful in helping Mountain View track its short- and long-term GHG emissions. While targets that decline by a constant percentage are more achievable in the long term, there are challenges to having GHG reduction targets that are out of sync with the State. It is important to consider this measure as part of a broader examination of Mountain View's GHG reduction targets and the proposed changes in other recommendations. Staff recommends evaluating the measures proposed in M1, M2, and M13 and making a recommendation to Council on options for updating Mountain View's GHG reduction targets and assessing the City's progress. A discussion about reduction targets would be appropriate when staff presents the results of the City's 2017 GHG inventory to the Council in spring 2019.

Related Recommendations: M1, which uses these targets as an annual "emissions budget," and M2, which translates the GHG reduction goals into per-capita rather than absolute targets.

Eliminate Emissions Associated with Direct Access Electricity by 2025 (M4)

Staff agrees efforts should be made to reduce GHG emissions from Direct Access electricity use, although the exact amount of emissions from this source is unknown. Staff predicts GHG reductions would be substantially lower than the Task Force estimate due to the increasing renewable energy content required by State law and the likelihood that some Direct Access customers are already purchasing more than the minimum required amount of renewable electricity. This recommendation would be difficult or impossible to implement due to the fact that the identities of most Direct Access customers cannot be known due to privacy laws. If these customers were known, they would not likely share their Direct Access data with the City, and some would not consider purchasing cleaner electricity if there was a cost premium. That said, staff recommends working with SVCE and other member cities to evaluate potential actions to reduce Direct Access emissions as part of a regional effort, with SVCE hopefully taking the lead on this effort.

Implement a Knowledge Resource for Electrification and Other Sustainability Actions (M10)

Staff agrees that a knowledge resource for electrification and other sustainability actions is a key part of supporting the City's sustainability efforts. SVCE has taken a lead role in developing this online resource in collaboration with member agencies and will be responsible for creating and maintaining this database, which will provide a broad array of information for customers. Staff recommends continuing to collaborate with

SVCE to develop this knowledge resource and leveraging their efforts to support the City's outreach and implementation of sustainability initiatives.

Related Recommendations: BE1, BE7, and BE4, which include building electrification retrofits and other actions supported by this knowledge resource.

ADDITIONAL CITY INITIATIVES

The City is already undertaking a number of actions that will inform and directly support many of the measures recommended in the ESTF-2 report, shown below. Relevant City initiatives have been identified in each of the recommendation summaries in the previous section.

Environmental Sustainability Program Assessment and Strategic Plan

The City Council appropriated funds as part of the Fiscal Year 2018-19 budget to hire a consulting firm with expertise in environmental sustainability, municipal operations, and organization best practices that would work with staff to assess current staffing and operations in order to provide options for structures and staffing levels going forward, and to develop a strategic plan for the sustainability program. This project, currently under way, will also provide recommendations that will inform the overall program size and focus, the actions included in ESAP-4, and any resulting funding requests to be considered as part of the Fiscal Year 2019-20 budget process.

Comprehensive Modal Plan

The Comprehensive Modal Plan will integrate the various existing transportation plans and studies into a single, comprehensive plan so Council can prioritize improvements and services and evaluate funding strategies. This effort will help identify gaps in the City's transportation network, including bicycle, pedestrian, and transit infrastructure, and prioritize projects for implementation. The Comprehensive Modal Plan will evaluate both transportation infrastructure and services in support of Council Goal 3: "Develop and implement comprehensive and coordinated transportation strategies to achieve mobility, connectivity, and safety for people of all ages."

Downtown Paid Parking Study

A study to evaluate options for paid parking in downtown Mountain View and to develop an action plan for implementation is currently under way, with the results expected to be presented to Council in early 2019. This comprehensive effort will include policy and ordinance recommendations, development of a financial modeling

workbook, an outreach plan, evaluation of staffing and budget impacts, TDM measures, and a revenue management plan.

Driving to Net Zero[7]

Mountain View was a partner in this collaborative effort led by the County of Santa Clara to develop a comprehensive set of resources to support EV adoption and charging infrastructure. These resources include an assessment of Mountain View's current building and zoning codes related to EV charging, recommendations for ordinances and policy changes, an analysis of local EV incentives and funding mechanisms, a municipal clean fleet planning guide, and an EV Siting Analysis that projects charging port demand at the Traffic Analysis Zone level throughout the City. Staff is currently analyzing these resources and will use them to inform ESAP-4.

Multi-Family Food Scraps Program Pilot

The City's Multi-Family Food Scraps Program (MFSP) pilot, launched in October 2018, will expand the current collection of food scraps and food-soiled paper to properties with nine or more dwelling units, including apartments, condominiums, and large multi-family complexes with shared trash bins. Similar to the development of the Curbside Food Scraps Program that serves smaller properties, the MFSP pilot will be used to determine feasibility and establish costs and rates for a Citywide program. Further, the City will be launching a Drop-Off Food Scraps Pilot beginning in February 2019 that will allow subscribed residents to drop off their food scraps directly at the Mountain View Recycling Center. These two pilot programs will expand the reach of the City's composting program to a larger number of residents.

NEXT STEPS

Staff is continuing to review all Task Force-proposed measures. In addition to the projects described in the previous "Additional City Initiatives" section, staff recommends starting the following "early actions" by June 30, 2019.

1. **Environmental Sustainability Action Plan 4**

   Based on: (1) guidance provided by the City Council during this meeting; (2) further refining the analysis of the Task Force recommendations; and (3) the Environmental Sustainability Program Assessment and Strategic Plan recommendations, staff will develop ESAP-4, covering Fiscal Years 2019-22. This

[7] Santa Clara County's "Driving to Net Zero" project resources can be found at: https://www.sccgov.org/sites/dnz/Pages/home.aspx

new plan will be presented to the Council in spring 2019, along with any funding requests for the Fiscal Year 2019-20 budget.

2. **2017 Community and Municipal Operations Greenhouse Gas Inventories**

As a result of the summer 2018 "Civic Leadership" project collaboration with Google, which enabled staff to reduce the time to complete a greenhouse gas inventory from about 260 to 40 hours, and largely now conduct the inventory in-house (by eliminating need for one of the two consultants, at a cost savings of approximately $15,000), staff proposes completing the 2017 community and municipal operations inventories by April 2019. Staff estimates the cost for updated data from the City's transportation consultant to be $10,000.

3. **EV Chargers**

Related to Task Force Recommendation T3, staff will evaluate new "first-phase" opportunities to expand EV charging at City-owned sites downtown, and analyze available grants and incentives to partially offset the costs. Staff will incorporate these new first-phase sites into the current CIP process and apply for the grant(s). Without knowing the exact locations of the first-phase downtown chargers, staff estimates conservatively that their cost could be up to $125,000 for five to seven Level 2, dual-port chargers, not considering any grant funding received. Separately, the City is installing five chargers (with nine charging ports) at the Community Center and will plan to install additional chargers as part of the Aquatics Center renovation.

4. **Energy Efficiency Incentives and Outreach**

City staff is currently evaluating many of the voluntary green building incentive measures proposed in the Task Force's "Transportation" and "Buildings and Land Use" recommendations for inclusion into future FAR/density bonus programs. SVCE is also already in the process of implementing an incentive program for replacing natural gas water heaters with electric heat pump models (Recommendation BE1), as well as an online consumer knowledge resource for building and transportation electrification and other sustainability actions (Recommendation M10). Staff will incorporate these energy efficiency incentives and other resources into its community engagement program as soon as feasible.

5. **Building Decarbonization**

Related to Task Force Recommendations B1 and BN1, staff will evaluate potential energy "reach codes" for inclusion as part of the 2019 California Building Code update cycle that is under way. Staff is currently working with SVCE and other partners to ensure cost-effectiveness studies are completed for many of the potential reach codes recommended in the Task Force report. When these studies are completed in early 2019, staff will evaluate any measures deemed cost-effective that align with City goals and work with stakeholders to develop draft ordinances for Council consideration. Additionally, staff will evaluate voluntary CALGreen tiers when the 2019 code update is published and make recommendations to Council for adoption of any relevant measures as part of the Mountain View Green Building Code update. Any measures adopted as part of the 2019 Building Code update process will have an effective date of January 1, 2020.

Time permitting, staff proposes beginning the process of developing a Building Baseline Study and Decarbonization Road Map (Recommendation B1) to guide a comprehensive Citywide approach to reducing GHG emissions from the built environment. This effort would help prioritize both mandatory and voluntary programs, and would take about six to 12 months. If Council is supportive, staff will develop a proposed scope, issue an RFP, select a consultant, and incorporate funding for developing the Study and Road Map into the Fiscal Year 2019-20 budget process. If staff capacity is not sufficient to pursue an RFP before the Fiscal Year 2019-20 budget is finalized, staff will return to Council thereafter with a midyear funding request. Staff estimates the cost for the Building Baseline Study and Decarbonization Road Map to be $100,000.

Questions for Consideration

City Council input is requested related to the following questions:

1. Is the City Council supportive of the five projects listed above under Next Steps?

2. Does the Council have any preliminary thoughts on priority projects to include in ESAP-4?

3. Does the Council have any other guidance for staff related to the ESTF-2 recommendations or this analysis?

Timeline

Staff proposes pursuing the following initiatives before the end of Fiscal Year 2018-19.

#	PROJECT	OWNER	COMPLETION
1	Environmental Sustainability Program Assessment	Consultant	February 2019
2	Environmental Sustainability Strategic Plan	Consultant	March 2019
3	2017 Community and Municipal Operations Greenhouse Gas Inventories	Staff	April 2019
4	Environmental Sustainability Action Plan 4	Staff	April 2019
5	EV Charger Grant Application	Staff	May 2019
6	Building Decarbonization "Reach Codes"	Staff	May 2019
7	Energy Efficiency Incentives and Outreach	Staff	June 2019
8	Building Baseline Study and Decarbonization Road Map RFP (Time Permitting)	Staff	June 2019

FISCAL IMPACT

At its June 26, 2018 meeting, the City Council expressed an interest in funding any staff-proposed "early actions" prior to availability of the Fiscal Year 2019-20 budget. While staff has not yet developed detailed work plans for the five early actions, staff has conservatively estimated the cost of the three early action projects (Nos. 2, 3, and 5) that require preliminary funding and is requesting $235,000. Staff will prepare more detailed work plans for these three projects and, as needed, return to the Council for supplemental funding.

CONCLUSION

The City acknowledges the significant work of Environmental Sustainability Task Force 2 in presenting its 36 recommendations. Staff, or a consultant, evaluated each recommendation and made adjustments to the assumptions or calculations, as needed, based on staff's professional network, access to best practices, and knowledge of the public process. The adjustments are summarized in this Council report and Attachment 1, and detailed in Attachment 2. Staff proposes five projects as "early actions" to be started by June 30, 2019, including developing the City's next three-year environmental sustainability road map (Environmental Sustainability Action Plan 4, ESAP-4) covering Fiscal Years 2019-22. Staff is requesting preliminary input on any Council priority

projects to include in ESAP-4, direction to initiate the five proposed early actions, and funding for three of the five early actions.

PUBLIC NOTICING

Agenda posting and e-mails sent to the Environmental Sustainability Task Force 2 and community members interested in sustainability.

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Attachments:
1. Summary Table Staff Analysis of ESTF-2 Recommendations
2. Detailed Staff Analysis of ESTF-2 Recommendations