

Department:AdministrationCost Center:1005For Agenda of:7/6/2021Placement:Public HearingEstimated Time:60 minutes

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SUBJECT: LEAD BY EXAMPLE: A PLAN FOR CARBON NEUTRAL CITY OPERATIONS

RECOMMENDATION

Adopt a Resolution entitled, "A Resolution of the City Council of the City of San Luis Obispo, California, approving Lead by Example: A Plan for Carbon Neutral City Operations."

REPORT-IN-BRIEF

Lead by Example: A Plan for Carbon Neutral City Operations *(Lead by Example)* establishes a pathway to reduce greenhouse gas (GHG) emissions across City operations to achieve the Council-adopted goal of carbon neutral City operations by 2030.

Lead by Example builds on the City's long standing tradition of operational sustainability and commitment to excellence. Consistent with the foundation set by the Climate Action Plan for Community Recovery (2020), *Lead by Example* establishes a trajectory towards carbon neutral City operations through seven emissions sectors each with a long-term goal, set of measurable objectives, and actions to be initiated in the 2021-23 Financial Plan, 2023-25 Financial Plan, and 2025-27/2027-29 Financial Plans. *Lead by Example* places a special focus on actions to be initiated in the 2021-23 Financial Plan.

The long-term sector specific goals are as follows:

- 1. No fossil fuels are used to power City buildings and facilities.
- 2. The City eliminates fossil fuel use in vehicle and equipment fleet.
- 3. City employee commute is aligned with and substantially exceeds General Plan Mode Split Objectives by 2030.
- 4. City buildings, facilities, and operations are zero waste as defined by the Zero Waste International Alliance (ZWIA).
- 5. Direct emissions from the provision of wastewater are minimized to the maximum extent feasible.

- 6. Carbon sequestration within the City's Greenbelt and Urban Forest system is optimized.
- 7. The City's procurement, budget, investment, and finance processes support and accelerate achieving the City's carbon neutrality goal.

At full implementation, *Lead by Example* objectives (not taking into account emissions offsets from carbon sequestration activities) will contribute substantial progress towards the operational carbon neutrality goal and achieve GHG reductions of 54 percent below "business as usual" scenario emissions in 2025 and 84 percent below "business as usual" scenario emissions in 2030. With GHG emissions offsets from carbon sequestration initiatives included, the City is expected to achieve its carbon neutrality target.¹

DISCUSSION

Background

In August 2020, the City of San Luis Obispo City Council adopted the Climate Action Plan for Community Recovery (CAP) via Resolution R-11159 (2020 Series). The CAP establishes a trajectory to carbon neutrality through six decarbonization pillars and 27 foundational actions. Throughout the CAP development and adoption progress, the City heard from Council, the community, and key stakeholders that the City should play a highly visible leadership role in demonstrating the viability of low carbon operations.

In response to this feedback, the first pillar of the CAP, titled "*Lead by Example*", is focused on eliminating emissions from City operations while sharing successes and lessons learned with the community. The goal for the pillar is to achieve carbon neutral City operations by 2030, and foundational action "Leadership 1.1" calls for the City to adopt a municipal carbon neutrality plan in summer 2021.

Like many organizations, the City operates buildings, facilities, and a vehicle fleet, generates office and landscape waste, and has employees that commute to work. Allof these activities, collectively referred to as "City operations," generate greenhouse gas emissions.

For decades, the City has invested in organizational sustainability and over the last decade has made substantial investments in clean energy, energy efficiency, and clean fleet initiatives. Figure 1 shows a list of key climate and sustainability initiatives completed by the City before and during *Lead by Example*. These incremental improvements have established a foundation for the transformational actions required to achieve the Council's goal of carbon neutral municipal operations by 2030.

¹ Emissions offset estimates related to carbon sequestration initiatives currently have high levels of uncertainty and are called out separately from the other emissions reductions sectors for transparency. This issue is described in more detail in the body of the Council Agenda Report.

The plan to achieve these transformational actions, referred to as "Lead by Example: A Plan for Carbon Neutral City Operations" is included as Attachment A and provides the strategic framework and roadmap to achieve operational carbon neutrality while also helping the organization to thrive in a rapidly changing world.

Figure 1. Previous Municipal Climate Action and Sustainability Initiatives

- Installed a solar EV charger at City Hall
- Completed first purchase order for two electric buses
- Continued to enhance the City's award- winning bus system
- Completed area 4 and 5 paving with new bike lanes
- Retrofitted streetlights with high-efficiency LED
 bulbs in 2016
- Retrofitted 842 Palm parking garage with high-efficiency LED bulbs in 2020
- Diverted recycled water for use at Corp Yard car wash
- Retrofitted the Water Resource Recovery Facility for energy efficiency and constructed a methane gas recapture plant to generate power
- Supported development of the regional anerobic digester to generate clean power and • compost from the City' green waste
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- Adopted Active Transportation Plan in Q1 2021
- Established Solid Waste and Recycling Section
 of the Utilities Department

- Adopted a community transportation policy with the goal of 20 percent of trips on bicycle, 12 percent on transit, and 18 percent walking, car-pools, and other forms of transportation! Purchased hybrid fleet vehicles, an electric bicycle fleet vehicle, and transitioned diesel fleet vehicles to renewable diesel
- Conserved over 3,000 acres since 2005, and over 7,800 acres since the inception of the Open Space Conservation Program
- Initiated energy efficiency and energy generation project at the Water Treatment Plant
- Identified Climate Action as a Major City Goal in the 2017-19 Financial Plan
- Identified Climate Action, Housing, and Sustainable Transportation, as Major City
 Goals in the 2019-21 Financial Plan
 Identified Climate Action, Open Space, and
 Sustainable Transportation as Major City Goals
 in the 2021-23 Financial Plan
- Updated the Water and Wastewater Element of the General Plan to include climate change impacts to water supply projections

Lead by Example: A Plan for Carbon Neutral City Operations

Lead by Example provides goals, objectives, and actions for each emissions sector will allow the City to accomplish Council's goal of carbon neutrality by 2030. It also lays the foundation for further strategic planning over the next nine years as new best practices emerge and market conditions change to support actions that are currently infeasible. While the plan is centered around reducing operational greenhouse gas emissions from the City, it also focuses on using resources more effectively, orienting the organization to thrive and provide excellent community services in a rapidly changing climate, accessing funding opportunities, and improving employee well-being. This section describes the emissions sectors included in *Lead by Example*, the organization of the planning document, the approach staff took to develop *Lead by Example*, the greenhouse gas emissions reductions estimates associated with *Lead by Example* implementation, and areas for improvement for future *Lead by Example* updates.

Greenhouse Gas Emissions Sectors

Lead by Example is organized around a total of seven emissions sectors. The sectors broadly encompass the daily business activities undertaken by the City to carry out regular functions. Each sector is described below:

- 1. Building & Facility Energy this sector focuses on emissions from energy (electricity and natural gas) used to power buildings, facilities, and equipment owned and operated by the City.
- 2. *Fleet* this sector focuses on emissions from fossil fuel (gasoline and diesel) used in fleet vehicles owned and operated by the City, including maintenance vehicles, buses, fire trucks, and police vehicles.
- 3. *Employee Commute* this sector estimates emissions from vehicle miles traveled (VMT) by employees traveling to and from work.
- 4. *Solid Waste* This sector focuses on emissions from landfilled solid waste, including the paper and food products disposed in offices and landscape maintenance waste.
- 5. Wastewater This sector focuses on direct emissions from wastewater treatment processes, specifically methane (CH4) from incomplete combustion of digester gas. Informational GHG emission estimates for Wastewater are included in Attachment C: Greenhouse Gas Emission Inventory and Forecast Report. but are not included in the total GHG emissions for the baseline, inventoried, or forecast year(s). Energy use from wastewater treatment processes is included in the Building & Facility Energy sector.
- Natural Solutions This sector focuses on emissions offsets from carbon sequestration activities, including tree planting and carbon farming. The Natural Solutions sector is not included in the GHG emissions inventory for baseline year 2005 or inventory year 2019 because it is not considered an emissions source and sequestration activities
- 7. are to be initiated after *Lead by Example* adoption. However, estimates for offsets are included in the *Lead by Example* GHG emissions forecast.
- 8. *Procurement, Budget, and Finance* This sector is not directly associated with an emissions source. This sector focuses on aligning City financial processes with Council's adopted goal. While purchasing, investments, and other financial activities are associated with indirect GHG emissions, they are not currently quantified in *Lead by Example* consistent with local government emissions reporting protocols.

Lead by Example Organization

Lead by Example: A Plan for Carbon Neutral City Operations contains four chapters:

- Chapter 1: Introduction includes highlights of past climate actions and sustainability initiatives completed by the City; reviews Council's goal and it's context in the Climate Action Plan for Community Recovery; provides an overview of staff's approach to the Lead by Example initiative; summarizes the 2005 baseline and 2019 Municipal Greenhouse Gas Emissions Inventories; describes the role of the Green Team; and discusses diversity, equity, and inclusion considerations.
- 2. *Chapter 2: The Path to Carbon Neutrality* provides an overview of the City's approach to achieving municipal carbon neutrality.
- 3. Chapter 3: Carbon Neutral City Operations provides the objectives and actions for each of the seven emissions sectors and includes information about each sector's strategy, goal and objectives, emerging challenges and opportunities, GHG reduction actions grouped by Financial Plan period(s), and a summary of forecasted emissions if the individual sector's actions are implemented.
- 4. Chapter 4: Achieving Our Goals includes a list of administrative actions to be completed by staff to ensure active and effective implementation of *Lead by Example* and an implementation matrix that includes all GHG reduction actions for each sector, an extended action description, the department(s) primarily responsible for implementation, and the planned initiation period by Financial Plan(s).

Lead by Example Development Process

The planning and implementation of *Lead by Example* occurred over three main phases outlined in Figure 2. As opposed to following the traditional project development approach of planning followed by implementation, staff began by identifying and supporting immediate actions. For example, the Office of Sustainability supported the Fleet Replacement Policy update to include guidance on electric vehicles, initiated conversations with PG&E to explore on-bill financing retrofit opportunities, and helped edit the *Lead by Example* portions of the Active Transportation Plan concurrent with the development of *Lead by Example*.

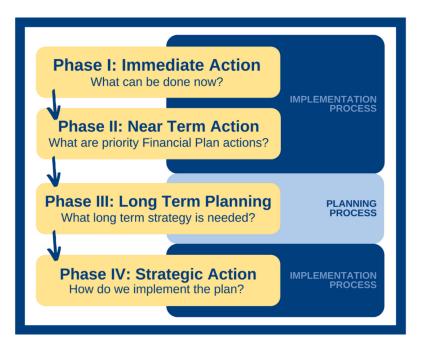


Figure 2. Lead by Example Planning and Implementation Process

As staff were implementing immediate actions, Phase II was initiated. Staff recognized the importance of integrating *Lead by Example* work into the 2021-23 Financial Plan to properly allocate staff time and resources, and the Green Team worked together over roughly three workshops to identify priority actions to include in the 2021-23 FP. Staff narrowed actions to those that were considered to be foundational and essential for scaling long-term emission reductions over the next nine years. A combination of capital projects and programs were proposed, including the installation of electric vehicle chargers and solar panels across key facilities and a Building and Facility Energy and Decarbonization Study.

Phase III is the final phase of *Lead by Example* pre-adoption. Following Phase II, the Green Team convened another series of workshops to brainstorm a sector-specific long-term strategy to achieve Council's goal that builds upon actions identified for the 2021-23 Financial Plan. Staff developed a list of actions to be implemented in the 2023-25, 2025-27, and 2027-29 Financial Plans. Leaving room for uncertainty in market developments and future *Lead by Example* planning updates as opportunities emerge, the long-term actions create a bridge between now and the 2030 goal and focus on emissions reduction steps that will likely be feasible in the next five to ten years.

Lastly, Phase IV is focused on implementing the strategic *Lead by Example* plan and will be initiated upon adoption. In Phase IV, the Green Team will continue to collaborate around action implementation throughout the 2021-23 Financial Plan period. Ahead of the next Financial Plan period in 2023, staff intend to revisit Phases II through IV with the Green Team to re-align the trajectory towards carbon neutral City operations with emerging best practices and market developments.

Greenhouse Gas Emissions Reduction Estimates

Lead by Example: A Plan for Carbon Neutral City Operations provides GHG reduction estimates as a result of achieving each sector's objectives. Figure 3 shows forecasted municipal operations GHG emissions across three scenarios: business as usual, *Lead by Example* implementation, and *Lead by Example* implementation including emissions offsets from the Natural Solutions sector. The *Lead by Example* GHG reduction quantifications are a result of an exhaustive work effort completed by staff to model expected emissions outcomes following implementation.

If objectives are achieved and assumptions that underscore quantification methodology are accurate, full *Lead by Example* implementation (not taking into account emissions offsets from carbon sequestration activities) will contribute substantial progress towards the operational carbon neutrality goal and achieve GHG reductions of 54 percent below "business as usual" scenario emissions in 2025 and 84 percent below "business as usual" scenario emissions will result in estimated annual remaining GHG emissions of 2,290 MTCO2e in 2025 and 850 MTCO2e in 2030.

When taking GHG emissions offsets from carbon sequestration activities in the Natural Solutions sector into account, operational emissions reach net-zero in 2027. While the estimated emissions offsets from the Natural Solutions sector allow the City to technically achieve and surpass carbon neutral City operations ahead of Council's 2030 goal, staff recognize uncertainties surrounding the quantification methodology of carbon sequestration activities. Staff used best available modeling, but local and site-specific conditions can cause actual offset results to vary from estimates.

Based on these uncertainties and on Council's intention for the City to lead by example to community partners and peer cities, it is important for the City to continue innovating, learning, and refining its approach in order to lower annual operational GHG emissions to as close to zero as possible.

Item 6b

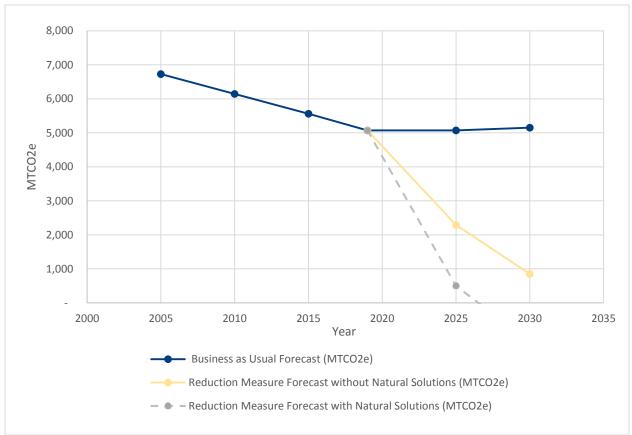


Figure 3. Forecasted Municipal Operations GHG Emissions

Administrative Actions

In addition to actions aimed at reducing operational greenhouse gas emissions, *Lead by Example* also includes a series of administrative actions:

- 1. Administrative Action 1: Lead by Example Update. The City will update Lead by Example every four years (concurrent with every other Financial Plan). The City will synch the update with the Community Plan so that each plan is updated in an alternating fashion concurrent with every Financial Plan.
- 2. Administrative Action 2: Plan Monitoring and Reporting. The City will monitor and report implementation to City Council on a regular basis.

Previous Council or Advisory Body Action

City Council adopted the Climate Action Plan for Community Recovery (CAP) in August of 2020. The CAP includes the goal of carbon neutral municipal operations by 2030 and direction to develop a plan by summer of 2021 to achieve this goal.

Public Engagement

Staff facilitated a variety of engagement activities and events both internally and externally. This section provides an overview of the main outreach conducted by staff to support Lead by Example.

Green Team

The Green Team is a cross-departmental collaborative body of staff that have been reconvened to help guide the City's approach to achieving carbon neutral City operations. Originally formed during the 2017-19 Financial Plan, the group was recommitted to in the 2021-23 Financial Plan to support the development and implementation of Lead by Example. The intent of the updated Green Team was to ensure staff from each department participated in the planning and implementation of emissions reduction measures to achieve a truly all-City approach to municipal carbon neutrality. The Green Team was further divided into individual working groups based on each emissions sector. The objectives of the Green Team are to:

- 1. Cultivate an educated core group of staff that understand how their department's operations contribute to the City's overall GHG emissions and, in turn, recognize opportunities for emission reductions
- 2. Build capacity within the organization to lead by example by developing and implementing emissions reduction measures and supporting key technical tasks
- 3. Maximize opportunities for partnership between departments to share responsibilities and take action
- 4. Establish a foundation for ongoing employee education and outreach on municipal carbon neutrality

In September 2020, Office of Sustainability Staff coordinated with the Department Head Leadership Team to identify staff that would participate in the Green Team. It was critical that staff whose primary duties and workplans directly involve or relate to the emissions sectors joined, and that each working group represented the diverse array of relevant departments within the agency. The following is a list of participants broken down by Green Team working group:

- 1. Building and Facility Energy Greg Cruce, Alejandro Hernandez, and Brian Lindsey (Public Works); Jennifer Metz and Cori Burnett (Utilities); Devin Hyfield (Parks and Recreation)
- 2. Fleet Chris Felt, Gamaliel Anguiano, Gaven Hussey (Public Works)
- 3. Employee Commute Adam Fukushima (Public Works); Sharon Seitz (Human Resources)
- 4. Solid Waste Jordan Lane and Jennifer Metz (Utilities); Greg Cruce (Public Works)
- 5. Wastewater Jennifer Metz and Cori Burnett (Utilities); Greg Cruce and Brian Lindsey (Public Works)
- 6. Procurement, Budget, and Finance Dan Clancy and Natalie Harnett (Finance); Miguel Guardado (Information Technology)

Staff have convened four full Green Team meetings and 24 working group meetings, three for each working group. During each full-team and working group meeting, staff aimed to maximize the opportunity to collaborate and do work. To prepare, staff utilized pre-meeting questionnaires and created activities to ensure each meeting was an effective use of time.

During these activities, participants were able to articulate current departmental priorities, identify relevant and current work efforts in need of immediate support, and brainstorm pathways to carbon neutral City operations. Outside of meetings, Green Team facilitators would execute on identified priority tasks, summarize and refine ideas generated within the meetings, and engage in technical work for *Lead by Example* to maintain forward progress. Following *Lead by Example* adoption, staff intend to continue utilizing the Green Team to collaborate around equity and resilience in implementation.

Diversity, Equity, and Inclusion Committee

On Monday, May 3, 2021, Staff facilitated a presentation and interactive discussion with the City's Internal Diversity, Equity, and Inclusion (DEI) Committee. Staff framed the presentation and discussion around the way DEI was currently integrated and reflected in *Lead by Example*, the present equity nexus between DEI and the substantive aspects of pursuing carbon neutral City operations, and opportunities for staff to pursue a more equitable planning process in the future.

Through the discussion, staff were able to collect thoughtful feedback from the committee to develop the following set of DEI-related actions staff are committed to taking throughout the implementation of *Lead by Example* and future planning updates:

- 1. Staff will develop an employee outreach and education program to share accessible information about *Lead by Example* and Council's operational carbon neutrality goal to staff outside of the Green Team.
- 2. Staff will facilitate employee feedback sessions to continue exploring opportunities and challenges in integrating and addressing diversity, equity, and inclusion through the work.
- 3. A DEI committee member will be invited to join Green Team meetings quarterly to facilitate collaboration around diversity, equity, and inclusion in *Lead by Example* implementation.
- 4. Staff will integrate diversity, equity, and inclusion at the initial stages of the next *Lead by Example* update in 2023 and intend to collaborate with the DEI committee throughout the planning process.

SLO Climate Coalition

On Thursday, May 20, 2021, staff facilitated a presentation and interactive discussion with the San Luis Obispo Climate Coalition. Staff framed the presentation and discussion around the City's approach to reducing greenhouse gas emissions across operational activities and how the City can engage the community on the initiative throughout implementation. Attendants of the presentation provided valuable feedback on opportunities to connect with peer organizations in the community that staff will consider when moving into post-adoption engagement.

Chamber of Commerce

On Tuesday, May 25, 2021, staff facilitated a presentation and interactive discussion with the San Luis Obispo Chamber of Commerce Business and Economic Council. Staff framed the presentation and discussion around the City's approach to reducing greenhouse gas emissions across operational activities, how and in what circumstances that approach is applicable to local businesses, and the kinds of steps businesses can take to reduce emissions, advance sustainability, and be a community leader in the climate action space. Attendants of the presentation provided valuable feedback on opportunities to connect with local businesses that staff will consider when moving into post-adoption engagement.

CONCURRENCE

There is concurrence from the Utilities Department, Public Works Department, Parks and Recreation Department, Information Technology Department, Human Resources Department, and Community Services in the approach to achieving Council's carbon neutral City operations goal outlined in *Lead by Example*.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the City prepared, circulated for public review, and on August 19, 2020 adopted an Initial Study-Negative Declaration (IS/ND) of environmental impact (EID-0275-2020) that addressed the environmental impacts of implementing the City of San Luis Obispo 2020 update to the Climate Action Plan and titled Climate Action Plan for Community Recovery that established a community-wide target of carbon neutrality by 2035, adopted sector specific goals, and provided foundational actions to establish a trajectory towards achieving those goals. The Climate Action Plan for Community Recovery is a Qualified GHG Emissions Reduction Plan to reduce GHG emissions within its jurisdictional boundary to meet and exceed state targets consistent with CEQA Guidelines Section 15183.5 for year 2030 and includes CEQA Greenhouse Gas (GHG) Emissions Thresholds and Guidance.

The Lead by Example: Plan for Carbon Neutral City Operations is a measure and supportive action within the scope of the project covered by the already adopted IS/ND for the Climate Action Plan for Community Recovery and includes quantified actions to address emissions that were accounted for in the community inventory and forecast. On the basis of substantial evidence in the light of the whole record, the project does not trigger any of the conditions of CEQA Guidelines § 15162 (subsequent EIRs and negative declarations) as outlined below, no new significant impact on the environment would occur and no new mitigation measures are required, and no further environmental analysis is therefore required:

- No substantial changes are proposed in the project which will require major revisions
 of the previously adopted Negative Declaration due to the involvement of new
 significant environmental effects or a substantial increase in the severity of previously
 identified effect;
- No substantial changes will occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of an identified effect;
- No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous Negative Declaration was adopted, shows that the project will have one or more significant effects not discussed in the previous Negative Declaration or that any previously examined effect would be more severe than shown in the previous Negative Declaration.

FISCAL IMPACT

Budgeted: Yes Funding Identified: Yes Budget Year: 2021-22

Fiscal Analysis:

Funding Sources	Total Budget Available	Current Funding Request	Remaining Balance	Annual Ongoing Cost
General Fund	\$	\$	\$	\$
State				
Federal				
Fees				
Other:				
Total	\$	\$	\$	\$

No funds are requested at this time. All tasks and work items described in this Council Agenda Report and Attachment A are supported by annual program budget appropriations and have been included in department budget requests for the 2021-23 Financial Plan and departmental work plans. Tasks and work items described in Attachment A that are to be initiated after the 2021-23 Financial Plan will be re-evaluated by staff and if feasible, will be proposed during future Financial Plan periods.

ALTERNATIVES

- 1. Council could request more information, suggest substantial changes, or otherwise request that Lead by Example: A Plan for Carbon Neutral City Operations be presented for adoption at a later date.
- 2. Council could take no action and direct staff to pursue other initiatives.

ATTACHMENTS

A – Draft Resolution - Approving Lead by Example: A Plan for Carbon Neutral City Operations

B – Lead by Example: A Plan for Carbon Neutral City Operations

C – Lead by Example Appendix A – GHG Inventory and Forecast