TO: James L. App, City Manager

FROM: Ed Gallagher, Community Development Director

SUBJECT: City Council Special Meeting - Greenhouse Gas Reduction Plan "Toolbox"

DATE: May 23, 2013

NEEDS:

For the City Council to consider the proposed Greenhouse Gas (GHG) Reduction Plan "Toolbox" measures to include in the City's GHG Reduction Plan.

FACTS:

- The City of Paso Robles is participating with the San Luis Obispo County Air District
 on preparing a GHG Reduction Plan. This Plan is intended to include a strategy or
 "Toolbox" of measures that could be implemented to help the City meet the
 requirements of AB 32, to reduce GHG emissions from activities that occur within the
 City.
- 2. As part of this Plan, the project consultants have prepared a draft "Toolbox" of measures that the City can select from and/or add to in order to help the City reduce GHG emissions.
- The City Council and Planning Commission were introduced to the GHG toolbox at a Joint Study Session on February 12, 2013. The Planning Commission considered the Toolbox on April 23rd and continued it to May 14th.
- 4. Since this report was prepared before the Commission's meeting on May 14th the Commission's recommendation will be forwarded to the Council following their meeting, and a report of the Commission's recommendations will be presented at the Special Meeting of the City Council.
- 5. A copy of the Planning Commission's staff reports from their meetings on April 23rd and May 14th are attached to this report for review. See Attachment 1.

ANALYSIS & CONCLUSION:

The purpose of preparing a GHG Reduction Plan is to develop a realistic strategy to reduce GHG air pollution emissions so that the City can demonstrate compliance with State law - AB 32. While there are varying opinions on the necessity of this law and implications of enforcing it, it is similar to other State mandates that simply cannot be ignored.

AB 32 does not require the City to adopt a GHG Reduction/climate action plan per se, but it is incumbent upon the City to be able to demonstrate how it will reduce GHG emissions. Without some type of cohesive plan that is based upon the best available information and procedures available to quantify how much GHG the City emits and how it can be reduced to levels established by the State, neither the City nor the State

can determine that it is complying with the law. As outlined in the Planning Commission's staff report from April 23^{rd} , there could be significant consequences should the City Council not adopt a GHG Reduction Plan.

The primary consequence if the City does not adopt a GHG Reduction Plan is related to being able to prepare adequate environmental documents that comply with the California Environmental Quality Act (CEQA). SB 97, which was adopted by the State subsequently to AB 32, added environmental impact questions related to assessing GHG impacts and GHG policy consistency to the "Initial Study Checklist" form, which is the official State form used by the State under CEQA to evaluate environmental impacts from projects. If the City cannot answer these questions adequately, then the City's CEQA documents could be challenged in court. The City has several large-scale Specific Plans proposed that are actively being worked on. It would be prudent to develop a GHG Plan to ensure that these projects and others are not exposed to CEQA challenges based on not complying with AB 32 and SB 97. This type of legal challenge could delay proceeding with projects and invalidate City CEQA documents.

The GHG Toolbox includes 36 measures for consideration to include in the Plan. A copy of the Toolbox and each measure in provided in Attachment 2. Several measures were identified at the Joint Study Session and/or by the Planning Commission at their meeting on April 23rd to not include in the Toolbox. These include: (a) developing an Energy Conservation Ordinance; (b) creating a Community Choice Aggregation program; and (c) implementing a public parking pricing program. Again, a report on the Commission's full recommendations will be provided after May 14, 2013.

The Council and Commission asked questions about the cost of implementing the measures in the Toolbox. The GHG measures include a rough estimate of the range of costs for each measure which was prepared by the project consultant. Staff has done a more detailed analysis of potential associated costs to implement each measure. Costs to the City are largely measured in use of staff resources. Hard costs are estimated in dollars, as are costs to the community. This is provided in Attachment 3.

POLICY

REFERENCE:

2003 General Plan, AB 32, California Environmental Quality Act

FISCAL

IMPACT:

Costs to the City to implement the GHG Reduction Plan would be absorbed through existing City resources and through grants and/or augmented through contract employees paid for as "pass-through" expenses.

OPTIONS:

- a. Approve a list of Toolbox measures to include in the City's GHG Reduction Plan.
- b. Amend, modify or reject the foregoing option.

TO:

Planning Commission

FROM:

Ed Gallagher, Community Development Director

SUBJECT:

Greenhouse Gas Reduction Plan "Toolbox"

DATE:

May 14, 2013

NEEDS:

For the Planning Commission to complete their review of the proposed Greenhouse Gas (GHG) Reduction Plan "Toolbox" measures, and to make a recommendation to the City Council on measures to include in the Plan.

FACTS:

- 1. The Planning Commission held a meeting on the GHG Toolbox on April 23, 2013.
- 2. The Commission considered seven of the 36 measures in the Toolbox. Review of the remaining measures was continued until their next meeting on May 14, 2013.
- The Commission received public testimony on the project and specific Toolbox measures on April 23, 2013. The Commission indicated they would accept further public input at the next meeting.

ANALYSIS & CONCLUSION:

The Commission and public provided significant input at the meeting on April 23, 2013. One of the Commission's specific requests is to have staff research the potential to use a different base year for the GHG Inventory. The base year used in the City's GHG Inventory is 2005. The intent of using a different base year is the assumption that using a year that did not experience as much development as in 2005 would yield a lower amount of GHG to be reduced.

The base year of 2005 was used since it is the earliest year the City has accurate data needed to complete the GHG inventory. This year has also been widely used since the Air Resources Board has pre-determined that agencies that reduce their GHG emissions by 15 percent from amounts produced in 2005 would be in compliance with the reductions required by AB 32. That said, a different base year is permissible.

Staff contacted the consulting firm of PMC Consultants, the firm that prepared the existing GHG Inventory in 2009. (This inventory was subsequently updated in 2011 to incorporate activities that had occurred to reduce GHG since 2005, and to also capture GHG reductions that will occur as a result of new State clean fuel and vehicle efficiency standards.) Staff discussed issues related to using different base years and technical requirements to change the base year with the consultants. Staff also obtained a cost estimate to redo the GHG Inventory using a different base year.

Issues to consider if the City were to use a later base year include the following:

- The base year is a "snapshot" in time of what was being emitted in a particular year. Using a different year will not materially change the bulk of what needs to be done to reduce GHG. For example, the amount of energy used for buildings and transportation-related emissions (the largest emissions sectors) probably did not change dramatically between 2005 and 2010, despite the fact that there were more buildings in 2010 than there were in 2005. However, the operation of construction-related equipment and amounts of solid waste were generally reduced. Since emissions mostly result from other sectors, primarily transportation, the significance in the change of emissions from construction between different years is likely negligible.
- Consistent with the City's planned growth in the General Plan, the City anticipates continued development over the next several years. The GHG inventory model includes a projection of future growth and development based on the General Plan. If a depressed base year were used, it may skew the data "snapshot" and result in a determination that more emissions need to be reduced in a shorter period of time. Even if it doesn't skew the data, the City would still have less time to meet the end goals if a later year were used.
- There may be unintended consequences of delaying preparation of the Plan, which would likely take upwards of 6 months or more to do. SB 97 requires analysis under the California Environmental Quality Act (CEQA) of GHG impacts in environmental documents. Thus, if the City's specific plans or any other major development project progress faster than it takes to complete the new inventory and adopt a GHG Reduction Plan, they could potentially be delayed or risk exposure to legal challenges on the adequacy of their CEQA documents. The City may also expose itself to legal challenges by what could be seen as unnecessary delay on adopting a GHG Plan.
- The adopted methodologies and modeling protocol used in 2005 changed between then and 2010. The GHG model now uses a different software program and the ability to get quality data has improved. Therefore a straight comparison from what was prepared with the prior protocol and a new inventory using current protocols would result in irregularities. Therefore, the 2005 Inventory would need to be redone for the year 2005 using the same modeling procedures to ensure an "apples-to-apples" analysis. This would add to the cost of preparing a new inventory.
- The consultants estimated the cost to redo the GHG Inventory to be approximately \$20,000. The costs of preparing the 2005 GHG Inventory was grant-funded. The City Council has not budgeted for this extra cost, nor has the City budgeted for the additional staff resources necessary to do this extra work.

If the GHG Inventory were redone using a different base year, the amount of emissions generated in the base year and the amount of reductions necessary may be slightly reduced. The Planning Commission may include in their recommendation to

the City Council on the Toolbox that the City Council also consider redoing the GHG Inventory using a different base year, and accept the associated risks and costs.

POLICY

REFERENCE: Assembly Bill 32, California Environmental Quality Act, 2003 General Plan

FISCAL

IMPACT: Costs to the City to implement the GHG Reduction Plan would be absorbed through

existing City resources and through grants and/or augmented through contract employees paid for as "pass-through" expenses. Costs associated with redoing the GHG Inventory

(estimated to be \$20,000) would be a General Fund expense.

OPTIONS: After opening the public hearing and taking public testimony, the Planning Commission

is requested to take one of the actions listed below:

(1) Recommend that the City Council approve the Toolbox measures identified.

(2) Amend, modify or reject the foregoing option.

TO: Planning Commission

FROM: Ed Gallagher, Community Development Director

SUBJECT: Greenhouse Gas Reduction Plan "Toolbox"

DATE: April 23, 2013

NEEDS:

For the Planning Commission to consider the proposed Greenhouse Gas (GHG) Reduction Plan "Toolbox" measures, and to make a recommendation to the City Council on measures to include in the Plan.

FACTS:

- 1. The Toolbox measures are actions that would be implemented by the City to reduce GHG emissions from activities that occur within the community.
- 2. The GHG Toolbox was introduced to the Planning Commission at a Joint City Council/Planning Commission workshop on February 12, 2013. The Commission, Council and the public provided input on measures to consider including in the City's GHG Reduction Plan, measures to exclude, and those measures that should be researched further.
- 3. Staff analyzed the measures supported by the Commission and Council at the workshop to determine if the combination of those measures would meet the reduction targets. An amended Toolbox and GHG reduction analysis is included in this report in Attachment 1.
- 4. Staff prepared an analysis of potential impacts to City resources if the proposed measures are implemented. This analysis is provided in Attachment 2.
- 5. General GHG planning questions were also raised at the Joint Workshop. Answers to these questions are provided below.

ANALYSIS & CONCLUSION:

The project consultants prepared a "Toolbox" that includes a range of measures that can be selected from to reduce GHG emissions. The City may add additional measures to the Toolbox if desired. There are 36 measures in the Toolbox that cover topics including: Energy; Transportation and Land Use; Off-Road Equipment/Vehicles; Water; Solid Waste; and Trees and Open Space.

Direction received at the Joint Workshop was to include 31 of the 36 measures. A full description of the 31 measures that were generally supported is provided in Attachment 1. The five measures that were not included were deemed to be too onerous on businesses and/or the community. These measures are highlighted in red in Attachment 2, and are noted below.

- #4 Energy Conservation Ordinance
- #9 Community Choice Aggregation
- #18 Employer-Based Transportation Demand Management (TDM)
- #21 Public Parking Pricing
- #33 Recycling at Public Events

The GHG Analysis indicates that if the City included the remaining 31 measures in the GHG Toolbox the City would meet the State target for reducing GHG emissions. The emissions calculated for Paso Robles were "adjusted" last November to reflect GHG emissions reductions from changes in State regulations on new clean fuel and vehicle efficiency standards. This reduced the amount of GHG that the City will need to reduce. See Attachment 3, Summary of GHG Targets and Measure Reductions.

When reviewing the Summary of GHG Targets and Measures, note that for some of the measures selected that some of the actions are "required". This means that if the City selects that measure that certain actions are prerequisites and need to be implemented as a part of the measure.

Questions raised at the workshop were in regard to specific toolbox measures, economic impacts, and general questions about the State regulations. These questions and answers are provided below.

 What would the cost be to employers if #18 on Transportation Demand Management for employers was selected?

This measure would require businesses with 25 or more employees to provide encouragement, incentives and support for employees to reduce single-occupancy vehicle employee commuter trips. This measure differs from #19 (which is also a TDM measure) because it places the burden of encouragement with the employer, whereas in #19 it would be the responsibility of the City to work with the San Luis Obispo Rideshare Program to implement. The types of incentives and encouragement are the same, however an employers could go beyond encouragement by providing information on rideshare /carpool matching, transit, vanpooling availability, etc., and they could also offer incentives such as preferred parking, flexible work schedules, to financial incentives. However, measure #18 does not require financial contributions to employees; it would be an option. This measure may be something the City may want to reconsider including this since the estimated GHG reduction is fairly high -883 metric tons of carbon dioxide equivalent (MTCO2e). If after reconsideration this measure is included, it may be either voluntary or mandatory.

There was discussion regarding measure #27, Off-Road Equipment/Vehicles, and
whether the measure is feasible since construction vehicles and equipment are
typically diesel or gasoline fueled. This measure applies to construction-related
vehicles and equipment only, not to off-road recreational vehicles.

The target for this measure is to replace 20% of construction equipment with alternative fuel vehicles, such has electric or compressed natural gas (CNG). Staff confirmed with the Air District that the availability of alternative fueled vehicles is not readily available, at least not yet on the Central Coast. However, a CNG fueling

station is being planned in Paso Robles which will encourage the availability CNG vehicles and equipment in the future. This measure could potentially be implemented further into the planning period (the next 7 years), and could be adjusted to change the assumptions to 10% if that would seem feasible. GHG reduction from this measure is estimated to be very high - 2,073 MTCO2e.

 Could the City use a later year such as 2010 for the Baseline Year in the GHG Emissions Inventory?

The project consultants prepared a memorandum in response to this issue, which is included in Attachment 4. However, a summary of the memo is that if a later year were used for the City's GHG Emissions Inventory, the City may need to establish a greater reduction target for 2020 in order meet the targeted reductions. For the State, 15% below 2005 levels or 30% below "business-as-usual" projected 2020 levels is approximately equivalent to 1990 levels. In essence, the City would have less time to demonstrate reduction compliance. Using an earlier year allows the City to include reductions achieved since the baseline, which reduces the amount of GHG now required to be reduced.

Would all the measures be implemented at once?

The short answer to this question is "no". The objective is to implement the measures included in the Plan over the timeframe of the project.

The GHG Plan will include a chapter on Implementation. The Implementation plan will be based on consideration of measures that are easier to pursue than those that are more difficult. For example, stepping up efforts on programs that the City is already pursuing would require less time and effort than developing new programs.

It would also be prudent to review the status of implementation measures on an annual basis to determine which efforts are successful, which might be adjusted or eliminated, and/or whether to add new measures that have yet to be identified. Program effectiveness would be measured by determining if the outcome meets the objectives or assumptions in the measure. For example, if the assumption for solar installations is to install 700 solar panels over 7 years, and if at "Year 3" only a few panels have been installed, perhaps the measure should be reviewed to determine how to remedy the situation, or reconsider the whether to continue with the measure.

When would the various measures be implemented?

As noted above, measures would be implemented in accordance with a timeline to be developed as part of the Implementation Plan. The availability of staff resources to implement measures would be taken into account.

• Would "rural waivers" be available if the City cannot meet reduction targets?

There is no mechanism or process in the State law to waive requirements for meeting the reduction targets. The targets apply to all jurisdictions regardless of size. It is the City's intention to include measures that meet the targets and that are feasible to implement.

• Is methane capture possible?

Yes. For instance, methane capture from the City's wastewater treatment plant and landfill is already planned. The wastewater treatment plant upgrade includes an energy system that will capture methane produced at the plant and it will be used to help fuel the new plant.

The Paso Robles Landfill Master Plan identifies methane capture as a potential to create energy, however at this time it is cost prohibitive to pursue.

 How are GHGs being measured? Where will measurements take place? What instruments and models will be used?

The objective of this program is to reduce the amount of GHG emissions from activities in Paso Robles. GHGs in the air will not be measured as a part of this program. The State Air Resources Board has pre-determined the amount of GHG to be reduced by jurisdictions throughout the state.

• Does the City have to adopt a GHG Reduction Plan/Climate Action Plan?

The answer to this is two-fold. Under AB 32, the City is required by law to demonstrate how it will reduce GHG emissions to the 1990 level by 2020. (This equates to reducing emissions by 15% from the year 2005, by 2020.) Without a plan or strategy that is based on measurements of what was emitted by activities in the baseline year and measures or actions that have been calculated to reduce emissions, it would be impossible to quantify how the City is reducing emissions and demonstrate compliance. This could expose the City to legal liability of not complying with State law.

The other issue is that under SB 97, GHG emissions analysis became a part of the required environmental analysis under the California Environmental Quality Act (CEQA). Again, without a plan in place demonstrating consistency of development with AB 32, an adequate environmental determination under CEQA would be impossible to document, and it would expose the City and developers to legal challenge.

Additionally, integration of GHG reduction policies within the City's General Plan would establish policy consistency between development proposals, CEQA compliance, and it would demonstrate compliance with AB 32. In the future, when the City updates the General Plan, integration of programs that reduce GHG should be included to make this consistency determination as seamless as possible.

Attachment 5 includes a "Frequently Asked Questions" sheet from the State Attorney General's Office provides information that helps address these issues.

The Council and Commission both raised concerns regarding potential cost impacts to the City and community. The GHG Toolbox model includes general information on costs for the City and the community associated with implementation of each measure. However, these estimates are presented as a "cost range" since there are variables that could change such as modifications to assumptions.

Therefore, staff prepared a more detailed analysis that identifies the number of in-kind staff time hours that are anticipated with implementation of each measure included in the toolbox. Some measures would require a "one-time" commitment of staff time that would be used for activities such as preparing codes or ordinances. Other items require "ongoing" staff time that may be intermittent.

If the in-kind staff time is divided over the 7 year planning period the cost in staff time would be approximately 335 hours per year which would be spread over a few departments such as Public Works, Community Development, and Administrative Services. Staff time used on implementing the programs would need to fit into the workloads and commitments of existing staff resources. Many of the measures are activities the City is already involved in such as pursuing grants and providing information on various programs. For those types of measures, staff would allocate a little more time to those specific activities.

It is not anticipated that approval of this plan would require hiring additional staff. If workloads increase in the future to the extent that staff could not keep up with their regular workload and implement GHG programs, the City could consider contract assistance. The Community Development Department has done this in the past when workloads are too much to handle efficiently, and the City is not ready to hire new staff.

Hard costs for materials and equipment would either need to be included in specifications for projects such as new streetlights when new development occurs, or be grant funded.

Costs to the public are structured so that they would be covered by grants or incentive programs, or they may require small financial contributions on a voluntary basis. For instance, the cost for solar system installations for residences (after rebates) may be as low as \$2,475.

POLICY

REFERENCE: Assembly Bill 32, California Environmental Quality Act

FISCAL

IMPACT: As noted above, costs to the City would be absorbed through existing City resources and

through grants and/or augmented through contract employees paid for as "pass-through" expenses.

OPTIONS:

After opening the public hearing and taking public testimony, the Planning Commission is requested to take one of the actions listed below:

- (1) Recommend that the City Council approve the Toolbox measures included in Attachment 1.
- (2) Amend, modify or reject the foregoing option.

Attachments:

- 1 GHG Toolbox
- 2 City Resources Impact Analysis
- 3 Draft GHG Target and Measure Reductions
- 4 Baseline Inventory Memorandum
- 5 Climate Change, CEQA and Frequently Asked Questions
- 6 News Notice

April 23, 2013

Attachments 1-6

GHG Toolbox Summary of Measures

Copy available in the Community Development Department or downloaded online:

April 23, 2013 Planning Commission Agenda Item 1

[pdf:121pp/9mb]

www.prcity.com/government/plancommission/agenda-items/2013/04_April/2013_04-23_PC_ITM_01.pdf