#### STAFF REPORT

**DATE:** December 12, 2007

**TO:** City Council

**FROM:** Bill Emlen, City Manager

Mitch Sears, Open Space Planner and Sustainability Program Interim Coordinator

**SUBJECT:** Community Sustainability Project – Formation of a Climate Action Team and

Science Advisory Team Ad Hoc Advisory Committees

### Recommendations

1. Adopt the attached resolution (Attachment 2), approving the formation and scope of the Climate Action Team Ad Hoc Committee to advise on the development of a green house gas reduction plan for the city and community of Davis.

2. Adopt the attached resolution (Attachment 3), approving the formation and scope of the Science Advisory Team Ad Hoc Committee to advise on the development of a green house gas reduction plan for the city and community of Davis.

## Overview

The scientific evidence on the causes and potential consequences of climate change continues to build, prompting action at the local level in communities such as Davis.

Many impacts can be reduced, delayed or avoided by mitigation. Mitigation efforts and investments over the next two to three decades will have a large impact on opportunities to achieve lower stabilisation levels. Delayed emission reductions significantly constrain the opportunities to achieve lower stabilisation levels and increase the risk of more severe climate change impacts.

Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: November 17, 2007

The City Council has directed staff to prepare a greenhouse gas emissions reduction plan (Plan) that addresses GHG emissions generated by both City operations and the community as a whole. Based on this direction, the City has joined the Cities for Climate Protection (CCP) program along with hundreds of other communities across the globe to reduce greenhouse gas emissions at the local level. The program is designed to educate and empower local governments to take action on climate change. The CCP is a performance-oriented campaign that offers a framework for local governments to reduce greenhouse gas emissions and improve livability within their municipalities. Staff is currently working to complete a GHG inventory for City operations and the community, the first of five milestones of the CCP.

This report provides a brief update on the inventory, a preliminary process schedule for completion of the Plan, and recommendations on the scope of responsibilities and membership of the ad hoc advisory Climate Action Team (CAT) and Science Advisory Team (SAT).

#### **Council Goals**

The formation of the two advisory groups address the Council goal of conserving natural resources and protecting the environment. Specifically, the action is a key step in meeting the Council objective of addressing global warming and reducing the City 's carbon footprint.

# Fiscal Impact

Costs associated with the formation and function of these two advisory groups are staff time, possible costs for facilitation services for the groups, and costs associated with community forums. The support costs for the groups could run into the thousands of dollars over the life of the two groups. In addition, as part of its charge, the CAT will be organizing several community forums. The potential costs for these forums could also run into the thousands of dollars. In total, staff estimates the fiscal impact could total up to ten thousand dollars (\$10,000) for this fiscal year. Initial costs for the formation and function of these two groups will be paid for through the sustainability allocation that Council designated for fiscal year 2007/08. Additional costs for the groups will be addressed during the 08/09 budget process.

## **Analysis**

# Greenhouse gas inventory

The GHG inventory is the first phase of the CCP program milestone process.

## 5 milestone process

- 1. Conduct a baseline emissions inventory and forecast.
- 2. Adopt an emissions reduction target for the forecast year.
- 3. Develop a Local Action Plan.
- 4. Implement policies and measures.
- 5. Monitor and verify results.

A temporary staff position is currently dedicated exclusively to the completion of the inventory. The data collection for the inventory and emissions forecast is nearly complete. Initial analysis of the data is currently underway. As reported to Council in November, the inventory and forecast is on schedule to be completed in January. Completion of this important step will allow the City to then set emissions reduction targets and adopt actions to meet those targets.

# GHG emissions reduction plan -preliminary process schedule

Attachment 1 of this report is the preliminary process schedule for completing the Davis GHG emissions reduction plan. The preliminary schedule shows meetings, key milestones, public forums, joint meetings, and general work products. Staff is estimating that with the high level of public involvement and multiple layers of advisory bodies involved in plan development and evaluation, the plan will be completed in fall 2008. Detail on the roles and responsibilities of the various advisory bodies involved in the plan development is provided in the next section of this report.

Per Council direction, staff will continue to identify, evaluate, and recommend GHG reduction measures for early implementation concurrent with the development of the long-range plan. Staff will prioritize those early actions that will fit into the long-range plan when it is complete.

The preliminary process schedule is an organizational tool and is not intended to lock the Council or any advisory body into an inflexible timeline. Staff anticipates that as the CAT and the SAT begin their work, specific meeting schedules will be established that work for each body. Staff does however believe that a firm plan completion date is useful in keeping each body focused.

The preliminary process schedule also includes joint meetings to ensure that the Council and Natural Resources Commission will receive formal updates and be able to provide direction as the Plan is being developed.

# **Advisory Bodies**

The development of a long range GHG reduction plan requires engagement across all sectors of the community. The objective of forming the CAT and SAT is to develop a deeper understanding of the issues associated with climate change and to take advantage of the extraordinary talent that is unique to Davis.

The following table provides a summary of the roles and responsibilities of the various groups. Additional detail on the CAT and SAT is provided later in this section of the report.

Body	Roles/Responsibilities	Reports to	Notes
City Council	<ul><li>Policy Guidance</li><li>Plan Approval</li><li>Funding Decisions</li></ul>	N/A	
Natural Resources Commission (NRC)	Focus Areas: City and Community  Draft Plan Review  Draft Plan recommendation to CC	CC	Receives reports from CAT and SAT.  NRC sub-committees to continue work on recommendations for near and long term actions.
Climate Action Team (CAT)	<ul> <li>Focus Area: Community</li> <li>Gather/Provide Community Input on Draft Plan</li> <li>ID and Evaluate Community Based Actions</li> <li>Draft Plan Review</li> <li>Draft Plan recommendation to NRC</li> </ul>	NRC	Primary opportunity for community input on plan. Plan, organize, and conduct public workshops.

Science Advisory Team (SAT)	<ul> <li>Focus Area: Community</li> <li>Assess draft plan targets and actions</li> <li>ID and Evaluate innovative/emerging actions not explored by other advisory groups</li> <li>Draft Plan Review</li> </ul>	CC and NRC	Serve as technical advisory body providing information/input on emerging research and technology related to climate change. Primary role later in plan development review process to assess where the plan is likely to achieve/miss objectives.
Sustainability Working Group	<ul> <li>Focus Area: City</li> <li>Assess draft plan targets and actions</li> <li>ID and Evaluate City Based Actions</li> <li>Draft Plan Review</li> </ul>	City Manager	Internal staff group that has been working to ID, evaluate, and implement early actions to reduce City GHG emissions. Group will continue in that role.

Staff notes that an aggressive timeline needs to be established for this process if Davis is to make a meaningful contribution in the effort to reduce global warming within the current critical timelines cited by the latest scientific research.

Footnote 20: For the lowest mitigation scenario category assessed, emissions would need to peak by 2015...

Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: November 17, 2007

## **Climate Action Team (CAT)**

The Council approved the formation of the CAT in late October and directed staff to return in December with final recommendations on the purpose, scope, and membership of the group. As stated in the draft purpose and scope statement considered by the Council, the primary function of this advisory group is to assist City staff in accelerating the development of a Climate Action Plan (Greenhouse Gas Reduction Plan), for the City and community.

Staff is recommending the following modifications to the original CAT scope considered by the Council in October. The following sections establishing the purpose, timeline, objectives, and membership of the CAT are included in the attached resolution (Attachment 2).

#### PURPOSE AND SCOPE

The purpose of the Ad Hoc Climate Action Team (CAT) is to assist city staff in accelerating the development of a <u>Greenhouse Gas Reduction Plan (Plan) Climate Action Plan</u> for the City of Davis and the community as a whole to address the issues of <u>energy use and</u> greenhouse gas emissions. The CAT will develop and implement with the active involvement of designated city staff a process to facilitate community input and comment designed to increase overall awareness of the efforts as well as to generate innovative approaches and comprehensive strategies to address the City 's <u>goal of significantly reducing the GHG emissions of the City and the community as a whole Council Sustainability goals</u>.

#### **TIMELINE**

This is an Ad Hoc and time limited effort. The development of a comprehensive Greenhouse Gas Reduction Plan-Climate Action Plan and community engagement process will be completed by October 31, 2008 June 30, 2008. The CAT will provide quarterly written status reports and formal presentations to the Natural Resources Commission and the City Council beginning no later than March 2008 December 31, 2007. The Climate Action Team shall be dissolved, unless extended by the City Council, upon completion of the initial charge as identified in this document.

## **OBJECTIVES**

With a primary focus on community wide GHG emissions, the CAT will, as directed by the City Council, and under the general coordination of the City Sustainability Coordinator:

- 1. Work on defined objectives, within the defined time frame, to produce materials that will assist in the rapid development of a <u>Greenhouse Gas Reduction Plan</u> Climate Action Plan for the City.
- Plan, organize, and conduct between one and three public workshops workshops
  to solicit community input and identify potential elements of an action plan for
  the city, including inviting appropriate speakers or others to make presentations at
  these forums.

- 3. Identify and interview persons with specific expertise important to the development of a city action plan.
- 4. Identify potential public education materials to promote the city's climate change program.
- 5. Identify potential partners and partnerships, which the city may wish to pursue in implementing a community—wide <u>Greenhouse Gas Reduction Plan-Climate</u>
  <u>Action Plan.</u>
- **6.** Research programs in other cities, develop detailed descriptions of these programs, and report to city staff, including recommendations.
- 7. <u>Assist in the identification and evaluation of potential community wide GHG emission reduction targets and measures for inclusion in the Plan.</u>
- **8.** In the interest of streamlining adoption of early GHG emission reduction measures by the City, the CAT will not have a primary role in the identification or evaluation of these early action measures.

#### CLIMATE ACTION TEAM COMPOSTION AND STRUCTURE

To constitute a small group of individuals from the community with expertise on the subject of energy use and climate change, the CAT shall consist of not more than 15 18 persons, as designated by the City Council, including representatives from:

- The chairs One member of the Natural Resources, Open Space, and Planning Commissions:
- The Davis Energy Group;
- The University of California at Davis Sustainability Committee;
- Pacific Gas and Electric;
- The Davis Joint Unified School District;

- The Sierra Club, Yolano Chapter or other Local environmental organization;
- The Chamber of Commerce or another representative of the general business community;
- The Interfaith Group 'Care for God's Creation' or another member of the Faith Community;
- Yolo County;
- Associated Students of UC Davis;
- <u>Davis High School Student Government;</u>
- Davis Downtown Business Association;
- Three public at large members.

#### CAT selection process

Generally the proposed structure and membership of the CAT targets specific groups that currently or could play a significant future role in addressing GHG emissions in the community. Staff recommends that where specific groups have been identified, they be permitted to self-select their representative. The City would solicit interest in the 'Public at large" category and the Council could select from interested parties in January.

## Science Advisory Team (SAT)

The intent of forming a Science Advisory Team (SAT) is to gather experts in the various disciplines that address climate change and ask that they (as a group), review and evaluate the draft GHG reduction plan. The objective is to draw on the extraordinary local expertise that will allow the Davis GHG reduction plan to benefit from both tested and emerging thought on how climate change can be addressed at the local level.

In order to recruit and benefit from this local expertise, the SAT would have a focused purpose of concentrating on the review and evaluation of GHG reduction measures and policies. To gain maximum benefit, the independence of the SAT would be recognized and emphasized. The purpose of the SAT would not be to gather public input, which would be a primary objective of the CAT.

The following sections establishing the purpose, timeline, objectives, and membership of the SAT are included in the attached resolution (Attachment 3).

#### **PURPOSE**

The purpose of the Ad Hoc Science Advisory Team (SAT) is to ensure that the Davis Greenhouse Gas Reduction Plan (Plan) is informed by the best available expertise and green house gas (GHG) reduction strategies and measures. To meet this purpose, a group of local scientists and experts will be convened to evaluate and provide objective insight and expert opinion pertaining to GHG reduction strategies and measures for the Davis community. As necessary, the SAT will recommend GHG reduction strategies and measures that draw on emerging information and research that may not be readily available to the Climate Action Team or the Natural Resources Commission in their respective roles in developing the Davis GHG reduction plan. The overall goal of the SAT is to generate innovative approaches and comprehensive strategies to address the City's goal of significantly reducing the GHG emissions of the City and the community as a whole. The Davis City Council recognizes that the independence of the SAT is important and recognizes that its ability to provide objective insight benefits from this status. Conversely, the SAT recognizes that it plays an advisory role in the development of the Davis GHG reduction plan.

#### **TIMELINE**

This is an Ad Hoc and time limited effort. The development of a comprehensive Greenhouse Gas Reduction Plan and community engagement process will be completed by October 31, 2008. The SAT will provide quarterly written status reports to the Natural Resources Commission and the City Council beginning no later than March 2008. The SAT shall be dissolved, unless extended by the City Council, upon completion of the initial charge as identified in this document.

#### **OBJECTIVES**

With a primary focus on community wide GHG emissions, the SAT will, as directed by the City Council, and under the general coordination of the City Sustainability Coordinator:

- 1. Work on these defined objectives, within the defined time frame, to produce materials that will assist in the rapid development of a Greenhouse Gas Reduction Plan for the City and community.
- 2. Evaluate and provide objective insight and expert opinion pertaining to GHG reduction strategies and measures for the Davis community. The SAT's primary task will be the review and evaluation of draft strategies and measures. For the

purpose of gaining maximum value from its expertise, as necessary, the SAT may identify, evaluate, and recommend GHG reduction measures and strategies based on emerging research and/or information.

- 3. Serve as a technical resource to the City Council, NRC, SAT, and City staff for the purposes of informing the development of the GHG reduction plan.
- **4.** In the interest of streamlining adoption of early GHG emission reduction measures by the City, the SAT will not have a primary role in the identification or evaluation of these early action measures although they may suggest alternatives or new measures as appropriate.

## SCIENCE ADVISORY TEAM COMPOSTION AND STRUCTURE

To constitute a small group of individuals from the community with expertise on the subject of climate change, the SAT shall consist of not more than 9 persons, as designated by the City Council, including experts in the following academic and/or professional fields:

- Transportation
- Land Use
- Atmospheric Sciences
- Energy Conservation/Use/Production
- Health Sciences
- Water Resources
- Ecological Sciences
- Law
- Agricultural Sciences

## SAT selection process

Based on previous Council direction, staff has been in contact with several preeminent scientists associated with UCD to gauge interest in serving on this type of advisory body. The general reaction has been positive, with the primary concerns being time commitment and level of independence. Staff would work with the scientists who have indicated an initial interest to fill out the remaining positions on the SAT.

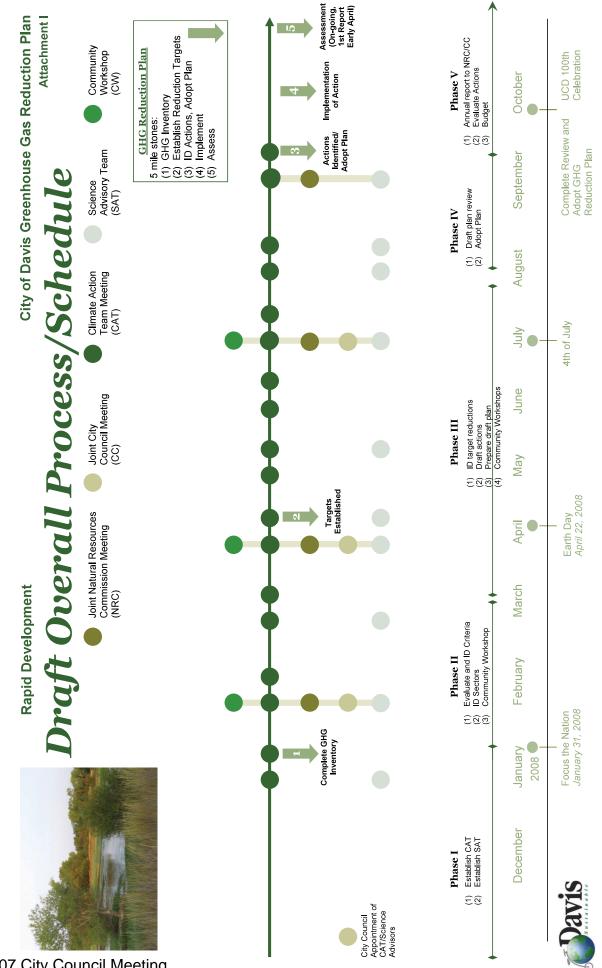
## Conclusion

Choices about the scale and timing of GHG mitigation involve balancing the economic costs of more rapid emission reductions now against the corresponding medium-term and long-term climate risks of delay.

Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: November 17, 2007

## **Attachments**

- Process schedule
- Resolution Establishment of the Climate Action Team and scope
- Resolution Establishment of the Science Advisory Team and scope



#### **RESOLUTION NO. 07-XXX, SERIES 2007**

# RESOLUTION FORMING THE AD HOC DAVIS CLIMATE ACTION TEAM AND ADOPTING THE PURPOSE, SCOPE AND MEMBERSHIP STURCTURE

WHEREAS, the Davis General Plan establishes visions, goals and policies that guide the community away from impacts on natural systems and toward sustainability; and

WHEREAS, the City has adopted resolutions supporting the Cities for Climate Protection Campaign in 1999 and the U.S. Mayor's Climate Protection Agreement in 2006; and

WHEREAS, the adopted City Council goals for 2007/08 provide clear direction that action on climate change and related issues is a City priority and that many of the other Council goals (downtown, housing, infrastructure, etc.) are related to and affected by the approach the community takes to sustainability; and

WHEREAS, as part of its action in adopting the City of Davis Climate Protection/Community Sustainability framework Strategy in April 2007, the City Council directed staff to develop a long range plan to reduce greenhouse gas (GHG) emissions from City operations and the community; and

WHEREAS, the City recognizes that the development of an effective long range GHG reduction plan requires engagement across all sectors of the community; and

WHEREAS, the objective of forming the Climate Action Team (CAT) is to develop a deeper understanding of the issues associated with climate change and to take advantage of the extraordinary talent that is unique to Davis.

NOW, THEREFORE, BE IT RESOLVED that the Davis City Council does approve of the formation of the Climate Action Team (CAT) and hereby adopt the purpose, scope, and membership structure for the CAT as shown in Attachment 1 of this resolution.

PASSED AND ADOPTED by the City Council of the City of Davis this eighteenth day of December 2007, by the following votes:

AYES:	
NOES:	
ABSENT:	Sue Greenwald
ATTEST:	Mayor
Margaret Roberts, MMC	

City Clerk

## Attachment 1 - Climate Action Team purpose and scope

## **PURPOSE**

The purpose of the Ad Hoc Climate Action Team (CAT) is to assist city staff in accelerating the development of a Greenhouse Gas Reduction Plan (Plan) for the City of Davis and the community as a whole to address the issues of greenhouse gas emissions. The CAT will develop and implement with the active involvement of designated city staff a process to facilitate community input and comment designed to increase overall awareness of the efforts as well as to generate innovative approaches and comprehensive strategies to address the City's goal of significantly reducing the GHG emissions of the City and the community as a whole.

#### **TIMELINE**

This is an Ad Hoc and time limited effort. The development of a comprehensive Greenhouse Gas Reduction Plan-and community engagement process will be completed by October 31, 2008. The CAT will provide quarterly written status reports to the Natural Resources Commission and the City Council beginning no later than March 2008. The Climate Action Team shall be dissolved, unless extended by the City Council, upon completion of the initial charge as identified in this document.

## **OBJECTIVES**

With a primary focus on community wide GHG emissions, the CAT will, as directed by the City Council, and under the general coordination of the City Sustainability Coordinator:

- 1. Work on defined objectives, within the defined time frame, to produce materials that will assist in the rapid development of a Greenhouse Gas Reduction for the City.
- Plan, organize, and conduct public workshops to solicit community input and identify potential elements of an action plan for the city, including inviting appropriate speakers or others to make presentations at these forums.
- 3. Identify and interview persons with specific expertise important to the development of a city action plan.

- 4. Identify potential public education materials to promote the city's climate change program.
- 5. Identify potential partners and partnerships, which the city may wish to pursue in implementing a community –wide Greenhouse Gas Reduction Plan.
- 6. Research programs in other cities, develop detailed descriptions of these programs, and report to city staff, including recommendations.
- 7. Assist in the identification and evaluation of potential community wide GHG emission reduction targets and measures for inclusion in the Plan.
- 8. In the interest of streamlining adoption of early GHG emission reduction measures by the City, the CAT will not have a primary role in the identification or evaluation of these early action measures.

#### CLIMATE ACTION TEAM COMPOSTION AND STRUCTURE

To constitute a small group of individuals from the community with expertise on the subject of climate change, the CAT shall consist of not more than 45 18 persons, as designated by the City Council, including representatives from:

- One member of the Natural Resources, Open Space, and Planning Commissions;
- The Davis Energy Group;
- The University of California at Davis Sustainability Committee;
- Pacific Gas and Electric;
- The Davis Joint Unified School District;
- The Sierra Club, Yolano Chapter;
- The Chamber of Commerce;
- The Interfaith Group 'Care for God's Creation';

- Yolo County:
- Associated Students of UC Davis;
- Davis High School Student Government:
- Davis Downtown Business Association;
- Three public at large members.

#### **RESOLUTION NO. 07-XXX, SERIES 2007**

# RESOLUTION FORMING THE AD HOC SCIENCE ADVISORY TEAM AND ADOPTING THE PURPOSE, SCOPE, AND MEMBERSHIP STRUCTURE

WHEREAS, the Davis General Plan establishes visions, goals and policies that guide the community away from impacts on natural systems and toward sustainability; and

WHEREAS, the City has adopted resolutions supporting the Cities for Climate Protection Campaign in 1999 and the U.S. Mayor's Climate Protection Agreement in 2006; and

WHEREAS, the adopted City Council goals for 2007/08 provide clear direction that action on climate change and related issues is a City priority and that many of the other Council goals (downtown, housing, infrastructure, etc.) are related to and affected by the approach the community takes to sustainability; and

WHEREAS, as part of its action in adopting the City of Davis Climate Protection/Community Sustainability framework Strategy in April 2007, the City Council directed staff to develop a long range plan to reduce greenhouse gas (GHG) emissions from City operations and the community; and

WHEREAS, the City recognizes that the development of an effective long range GHG reduction plan requires engagement across all sectors of the community; and

WHEREAS, the Davis community has an extraordinary pool of scientific and professional expertise that provides a unique opportunity to develop new strategies for addressing climate change at the local level; and

WHEREAS, the objective of forming the Ad Hoc Science Advisory Team (SAT) is to ensure that the Davis Greenhouse Gas Reduction Plan is informed by the best available expertise and green house gas (GHG) reduction strategies and measures.

NOW, THEREFORE, BE IT RESOLVED that the Davis City Council does approve of the formation of the Science Advisory Team (SAT) and does hereby adopt the purpose, scope, and membership structure for the CAT as shown in Attachment 1 of this resolution.

PASSED AND ADOPTED by the City Council of the City of Davis this eighteenth day of December 2007, by the following votes:

December 2007, by the following votes:	
AYES:	
NOES:	
ABSENT:	

Sue Greenwald
Mayor

ATTEST:

Margaret Roberts, MMC City Clerk

# Attachment 1 – Science Advisory Team purpose and scope

#### **PURPOSE**

The purpose of the Ad Hoc Science Advisory Team (SAT) is to ensure that the Davis Greenhouse Gas Reduction Plan (Plan) is informed by the best available expertise and green house gas (GHG) reduction strategies and measures. To meet this purpose, a group of local scientists and experts will be convened to evaluate and provide objective insight and expert opinion pertaining to GHG reduction strategies and measures for the Davis community. As necessary, the SAT will recommend GHG reduction strategies and measures that draw on emerging information and research that may not be readily available to the Climate Action Team or the Natural Resources Commission in their respective roles in developing the Davis GHG reduction plan. The overall goal of the SAT is to generate innovative approaches and comprehensive strategies to address the City's goal of significantly reducing the GHG emissions of the City and the community as a whole. The Davis City Council recognizes that the independence of the SAT is important and recognizes that its ability to provide objective insight benefits from this status. Conversely, the SAT recognizes that it plays an advisory role in the development of the Davis GHG reduction plan.

#### **TIMELINE**

This is an Ad Hoc and time limited effort. The development of a comprehensive Greenhouse Gas Reduction Plan and community engagement process will be completed by October 31, 2008. The SAT will provide quarterly written status reports to the Natural Resources Commission and the City Council beginning no later than March 2008. The SAT shall be dissolved, unless extended by the City Council, upon completion of the initial charge as identified in this document.

#### **OBJECTIVES**

With a primary focus on community wide GHG emissions, the SAT will, as directed by the City Council, and under the general coordination of the City Sustainability Coordinator:

- 1. Work on these defined objectives, within the defined time frame, to produce materials that will assist in the rapid development of a Greenhouse Gas Reduction Plan for the City and community.
- 2. Evaluate and provide objective insight and expert opinion pertaining to GHG reduction strategies and measures for the Davis community. The SAT's primary task will be the review and evaluation of draft strategies and measures. For the purpose of gaining

maximum value from its expertise, as necessary, the SAT may identify, evaluate, and recommend GHG reduction measures and strategies based on emerging research and/or information.

- 3. Serve as a technical resource to the City Council, NRC, SAT, and City staff for the purposes of informing the development of the GHG reduction plan.
- 4. In the interest of streamlining adoption of early GHG emission reduction measures by the City, the SAT will not have a primary role in the identification or evaluation of these early action measures although they may suggest alternatives or new measures as appropriate.

## SCIENCE ADVISORY TEAM COMPOSTION AND STRUCTURE

To constitute a small group of individuals from the community with expertise on the subject of climate change, the SAT shall consist of not more than 9 persons, as designated by the City Council, including experts in the following academic and/or professional fields:

- Transportation
- Land Use
- Atmospheric Sciences
- Energy Conservation/Use/Production
- Health Sciences
- Water Resources
- Ecological Sciences
- Law
- Agricultural Sciences