



A Tradition of Stewardship  
A Commitment to Service

Agenda Date: 6/17/2009

Agenda Placement: 10A

## Napa County Planning Commission Board Agenda Letter

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**TO:** Napa County Planning Commission  
**FROM:** Hillary Gitelman - Director  
Conservation, Development & Planning  
**REPORT BY:** Hillary Gitelman, Director - 253-4805  
**SUBJECT:** GHG Reduction Plan -- Informational Presentation & Discussion

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### **RECOMMENDATION**

#### **GREEN HOUSE GAS EMISSIONS REDUCTION PLAN - INFORMATIONAL PRESENTATION & DISCUSSION**

Staff presentation and Commission discussion regarding the County-wide green house gas emissions inventory and development of an emission reduction plan. Staff will also provide an update on plans to adopt the California Green Building Code.

**Staff Recommendation:** This is an informational presentation and discussion item; no action is requested at this time.

**Staff Contact:** Hillary Gitelman, Director of Conservation, Development & Planning 253-4805

### **EXECUTIVE SUMMARY**

Action item CON CPSC-2 in the General Plan calls on the County to complete an inventory of green house gas emissions from all major sources in the County by the end of 2008, and then to seek reductions such that emissions are equivalent to year 1990 levels by 2020. As discussed at the Planning Commission meeting of January 21, 2009, County staff has been participating in a multi-jurisdictional effort headed-up by the Napa County Transportation and Planning Agency (NCTPA). The group has completed and refined a county-wide inventory of green house gas emissions and is now focusing its attention on creation of an emission reduction plan. County planning staff would like to update the Commission on this multi-jurisdictional effort, summarize the State "green" building code provisions proposed for adoption by the County Board of Supervisors later this month, and solicit the Commission's input regarding other strategies for emission reductions.

**FISCAL IMPACT**

Is there a Fiscal Impact?            No

**ENVIRONMENTAL IMPACT**

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

**BACKGROUND AND DISCUSSION**

Assembly Bill 32 (2006) mandated that emissions of green house gases (GHG) in California be reduced to 1990 levels by 2020 and delegated to the California Air Resources Board (CARB) responsibility for crafting related regulations. The CARB's Proposed Scoping Plan, which was released in 2008, refines the AB 32 mandate for local governments by recommending that agencies reduce both their operational emissions and community-wide emissions 15% by 2020. Operational emissions are those associated with local government activities and community-wide emissions are those associated with all activities within a jurisdictional area.

Consultants working under contract to NCTPA have completed and refined a community-wide inventory of GHG emissions for Napa County. As shown below, a significant percentage of the emissions are related to transportation, with a smaller percentage attributed to other sources (residential energy use, non-residential energy use, off-road vehicles, agriculture, solid waste, etc.). Notably, the methodology used calculates transportation-related emissions based on Vehicle Miles Traveled (VMT) on roads within each jurisdiction, so while the unincorporated Napa County has 21% of the countywide population in these calculations and 33% of countywide jobs, it is attributed with 55% of all transportation-related emissions, and 46% of all emissions in the County as a whole.

**Table 1: Existing (2005) GHG Emissions -- Unincorporated Napa County & County as a Whole  
(metric tons of CO<sub>2</sub> equivalents)**

|                             | Unincorp<br>County | % Unincorp<br>Total | Total Napa<br>County | % Napa<br>County Total |
|-----------------------------|--------------------|---------------------|----------------------|------------------------|
| Residential Buildings       | 48,224             | 9%                  | 196,350              | 16%                    |
| Commercial & Industrial     | 95,317             | 17%                 | 226,661              | 19%                    |
| On-Road (transportation)    | 349,764            | 63%                 | 636,724              | 53%                    |
| Off-Road (lawn & garden)    | 753                | 0%                  | 3,616                | 0%                     |
| Off-Road (indust/com equip) | 15,870             | 3%                  | 49,675               | 4%                     |
| Agriculture                 | 31,817             | 6%                  | 33,046               | 3%                     |
| Solid Waste                 | 9,241              | 2%                  | 54,209               | 5%                     |

Source: NCTPA April 2009

If these existing emissions are projected out to 2020 based on expected increases in employment, population,

and irrigated farmland in the County, they result in a forecast of emissions that is larger than the existing inventory, as shown in Table 2, below. (Notably, transportation-related emissions are projected to increase faster than other emissions.) These forecasted emissions for 2020 are being used to inform an emission reduction plan, which would need to accomplish a 15% reduction below 2005 emissions and a 29-30% reduction below the 2020 forecast if it were to be consistent with the AB 32 target!

**Table 2: 2020 GHG Emission Forecast -- Unincorporated Napa County & County as a Whole (metric tons of CO2 equivalents)**

|                             | Unincorp<br>County | % Change<br>2005-2020 | Total Napa<br>County | % Change<br>2005-2020 |
|-----------------------------|--------------------|-----------------------|----------------------|-----------------------|
| Residential Buildings       | 51,232             | 6%                    | 219,924              | 12%                   |
| Commercial & Industrial     | 107,599            | 13%                   | 292,783              | 29%                   |
| On-Road (transportation)    | 437,836            | 25%                   | 797,054              | 25%                   |
| Off-Road (lawn & garden)    | 800                | 6%                    | 4,053                | 12%                   |
| Off-Road (indust/com equip) | 17,915             | 13%                   | 59,839               | 20%                   |
| Agriculture                 | 31,817             | 0%                    | 33,046               | 0%                    |
| Solid Waste                 | 9,790              | 6%                    | 60,201               | 11%                   |

Source: NCTPA April 2009 (based on ABAG *Projections 2005*)

### Reducing Emissions Associated with New Construction

Assuming the forecasted development by 2020, a relatively small percentage of emissions will be due to new construction (3,008 metric tons from new residential buildings and 12,282 metric tons from new commercial & industrial buildings, representing 2.3% of the 656,989 metric tons total in the unincorporated County). These emissions could be reduced by applying building code standards designed to ensure "high performance" buildings. As a result, the State has promulgated "green" building code standards which will gradually become mandatory between now and January 2011. Also, in response to AB 32, the 2007 Building Energy Efficiency Standards (Title 24) have been updated to achieve an estimated 15% more energy conservation, effective August 1, 2009. When fully implemented, the California Green Building Code would achieve an estimated additional 15% energy conservation (for 30% total reduction) and generally ensure non-residential construction equivalent to LEED Silver.

Locally, Napa County's Chief Building Official (CBO) obtained input from a variety of stakeholders at four meetings earlier this year, and has analyzed the drop-off in new construction (including building additions) due to the economic recession. Based on this input and analysis, the CBO is proposing that the County Board of Supervisors affirmatively adopt the State code on June 23, 2009, retaining each section as voluntary until they are made mandatory by the State. This approach would allow County staff and applicants time to become familiar with most of the new standards before they take effect, and would signal the County's interest in reducing emissions associated with new construction while acknowledging the difficulties faced by the current economic downturn.

### Other Emission Reduction Strategies

NCTPA and their consultants have been working with planning staff from all the jurisdictions in Napa County, hoping to outline a list of common strategies for reducing GHG emissions as well as lists of strategies for each individual jurisdiction. Strategies are being developed in five categories, in descending order of importance: Transportation, Buildings & Energy, Solid Waste, Agriculture, and Government Operations. Some of the most obvious common strategies are listed below for the Commission's input/discussion:

- | Enhance our commitment to urban-centered growth, adopting policies, zoning and design standards to encourage mixed use, "walkable" and bikeable neighborhoods.
- | Support construction of an off-road multi-use trail from American Canyon to Calistoga, connecting a network of bicycle and pedestrian trails within each city/town.
- | Make wise land use decisions that generally maintain or improve the County's overall "balance" of 70,690 jobs and 64,100 employed residents (per ABAG Projections 2005), locate jobs and housing in proximity to each other, and work to improve the match between wages and housing costs.
- | Maintain rail as an option for movements of goods and develop a strategy to minimize truck traffic within residential areas.
- | Assess the feasibility of bus rapid transit, rail, and other transit options consistent with NCTPA's Strategic Transportation Plan.
- | Adopt policies to encourage the use of vehicles powered by clean, renewable energy sources.
- | Adopt building code standards for "high performance" buildings.
- | Provide AB 811 financing for property owners seeking to improve energy conservation in their buildings and install alternative energy generation systems.
- | Encourage alternative energy generation and work to remove regulatory hurdles and economic disincentives associated with solar, wind, and geothermal systems.
- | Adopt policies and ordinance changes to require water efficient landscape improvements associated with new construction.

Staff is interested in any ideas that could be added to this list for consideration, and would welcome input on how general (e.g. policy language) versus specific (e.g. action items) the Commission thinks the plan should be.

The group working with NCTPA hopes to have a draft emission reduction plan for review by individual jurisdictions later this summer, and has secured funding for the subsequent phase of work, which will involve quantifying the plan's effectiveness and refining the plan to meet the AB 32 target if necessary and feasible. In the end, if the plan does not achieve a 15% reduction below 2005 levels (or 29-30% below the 2020 business-as-usual forecast), it will include a "what would it take" analysis, specifying the degree of additional effort at the local, regional, State, and federal level needed to meet the target.

### **SUPPORTING DOCUMENTS**

- A . GHG Emissions Inventory - Revised Draft
- B . Draft Building Code Amendment

Napa County Planning Commission: Approve

Reviewed By: John McDowell