SECTION 2.2 - GREENHOUSE GAS EMISSIONS

I. Background

The Introduction to the Calaveras County Draft General Plan describes it as a document that "guides rather than dictates." What that translates into throughout the document is a level of generality that provides little specific direction and few specific commitments. Throughout the 10 year General Plan Update process many of the Supervisors and Planning Commissioners involved have been resistant to state requirements or oversight, and skeptical about the reality of climate change. Therefore:

The EIR process can greatly strengthen the General Plan by requiring that there be specific implementation steps, timelines, monitoring methods and naming of accountable personnel/positions for achieving the stated goals. Otherwise, the Plan remains largely at the level of intentions.

Two clear commitments are at the heart of the document, and are forcefully stated: private property rights and economic development.

Even given these priorities, the issue of climate change must be addressed in the Environmental Impact Report, because not only is the State is requiring a robust response, but also because the changing climate will have enormous impacts upon the economic functioning and wellbeing of the County and its residents within the time frame of the General Plan.

The focus of these scoping comments is upon emissions of greenhouse gases (GHG). AB32, passed in 2006, called for a reduction of emissions of GHG to 1990 levels by 2020. Since 1990 levels were not determined for each county, the recommendation was for reductions of "…approximately 15 percent below emissions expected under a "business as usual" scenario." (Air Resources Board, Assembly Bill 32 Overview. https://www.arb.ca.gov/cc/ab32/ab32.htm)

The Calaveras County General Plan Update process commenced the same year as AB32 was passed. For emissions to be reduced, there must be a measure of baseline emissions. To date, there has been no such measurement. The need is addressed in COS-5B of the Draft Plan:

> "Undertake a greenhouse gas (GHG) emissions inventory to establish baseline levels of GHGs generated from all major emissions sources in the County consistent with the requirements of Assembly Bill 32 (California Global Warming Solutions Act)."
>
> COS-5C:
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> "Develop a GHG reduction plan outlining the strategies, goals, and actions for contributing to the overall reduction in greenhouse gas (GHG) emissions consistent with AB 32."

The Update identifies responsible entities as the Air Pollution Control District, CAO and Planning Department. There are, however, no deadlines provided for when the inventory and resulting plan will happen. A calendar for the process needs to be provided, with interim steps

specified along the way, especially given that 2020 is probably only 2 years away from when this General Plan will be completed.

That is even more crucial now, since in 2016, the State passed SB32, which calls for reducing GHGs to 40% below 1990 levels by 2030. That is only 13 years away, and the County has not yet begun the necessary processes. Nailing down steps and accountability is crucial because the task is immense. Together the two laws call for a reduction of GHG emissions of 55% in the next 13 years. The argument can be made that the vast majority of California emissions are generated in urban areas, not in a rural county with 44,000 people and no heavy industry. Moreover, the County is in the unfortunate position of sitting between the emissions-producing coastal areas and the mountains, so many of the GHGs and other forms of pollution that arise elsewhere are trapped here.

Nonetheless, rural counties are not exempted from the legislation.

II. Cumulatively Significant Impacts of Greenhous Gas Emissions

Climate change scenarios for Calaveras County have been developed by the California Energy Commission and are available on their website, http:caladapt.org/tools/factsheet. The Commission estimates that on average, under a high emissions scenario, Calaveras temperatures will rise 6.4 degrees by century's end, and under a low emissions scenario, by 3.7 degrees. These changes will impact areas identified in the General Plan Update as fundamental to the County's economy: agriculture, forestry, recreation and tourism (Int.1)

Warmer temperatures mean a smaller snowpack and earlier melting of that snowpack in the spring. That means:

- The possibility of water shortages for agriculture, animals and human use
- The gradual decline of winter sports, especially skiing and the ski industry
- Increasingly stressed upper elevation forests – which we are already seeing – with pest infestations, die-offs, and increased risk of severe wildfires, which in turn will both emit carbon into the atmosphere and reduce the carbon sequestration capacity of the forests, as well as reducing timber available for harvest
- Increasingly stressed oak woodlands
- A landscape increasingly unattractive to hikers, cyclists and other outdoor enthusiasts and perhaps less attractive to new residents
- Increased electricity demand, especially in summer

These climate trends are in place, and as population growth and some build out are likely, there will be cumulative impacts from the combination of climate changes and human activity. So a **mitigation measure** should be added to the Land Use Element stating that the County will work with the Air Pollution Control District to develop or use available metrics to estimate the likely increases of GHG emissions from new development and its associated traffic, and factor those

increases into the overall GHG inventory for the County (which will be updated regularly since there will be interim steps).

III. Impact Mitigation and Compliance with AB 32 & SB 32

As with other general plan impacts, meeting CEQA mitigation requirements and meeting other planning requirements go hand in hand. Mitigation for greenhouse gas emissions from future development should be integrated with general plan programs to implement AB 32 and SB 32. So to address GHG emissions, the goal for the Calaveras County General Plan would be a 15% reduction from current levels as determined by the inventory (COS-5B), with a date set for that goal if, as is likely, it cannot realistically be achieved by 2020. An added goal in the Plan, given SB32, would be a 40% reduction from the 15% level by 2030, again with a timeline of interim steps and defined personnel accountability.

Traffic is a major producer of GHGs. This is a challenge for a rural county in which people have to cover long distances in their vehicles. But a specific State goal is the reduction of vehicle miles traveled.

> "While [in the] County LOS [Level of Service] has been used as a measure of impact analysis, recent state legislation (SB 743, codified as PRC §21099) now mandates that environmental impact analysis utilize a different metric: Vehicle Miles Travelled (VMT). The County will utilize VMT with California Environmental Quality Act (CEQA) analysis when new guidelines are adopted." (GPU, pp.C-1-2)

Use of the VMT guidelines together with the requirement to factor the GHG implications of any new development provide added incentive for the County to encourage infill and community-centered development, and energy-saving building methods.

Buildings and the built environment are another major source of GHG emissions and another realm in which emissions can be reduced. The Land Use Element of the General Plan Update identifies as two Implementations:

> LU 5.9 Encourage and facilitate the renovation and reuse of underutilized and vacant parcels, industrial sites, buildings, and retail centers. (IP LU-2D and LU-5G)
>
> LU 4.1 New development shall be designed to be compatible with the natural, scenic, and historic resources of Calaveras County. (IM LU-4A, LU-4C and LU-4F)

The Air Resources Board (AB32 scoping plan update, Appendix B: Local Action) provides many measures for new building and upgrades. We recommend the following be included in the GP Update to **mitigate** for GHGs:

> Adopt local ordinances to require energy-efficiency upgrades for existing buildings at the time of a major remodel or change of ownership
>
> Reduce permit fees and streamline permitting requirements for energy-efficiency- and renewable energy-related building renovations

> Implement building energy audit and retrofit programs and residential solar programs
>
> Incentivize energy-efficiency upgrades to existing buildings, where appropriate, upon issuing a permit for substantial modification
>
> Require that air conditioning and refrigeration units in new construction (and at major renovation) rely on refrigerants with low global warming potential (e.g., they use CO2 or ammonia instead of hydrofluorocarbons)

And this recommendation, from The First Update to the AB32 Scoping Plan, Appendix D: Local and Regional Efforts to Implement Climate Protection Strategies, Feb. 10, 2014:

> When determined to be feasible and achievable within the local jurisdiction, adopt "Tier 2" residential and commercial green building standards of the 2016 California Green Building Standards (CALGreen Code), or a third party green building certification such as the LEED or GreenPoint rating systems

And as with all implementation measures, include timelines, interim steps, and accountable personnel/agency/position information.