California Emissions Estimator Model®

The California Emissions Estimator Model® (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

The model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions. The model is free of charge and will be periodically updated when modifications are warranted.

The model is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.