



California Emission Estimator Model Training



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What is CalEEMod?



- Quantifies criteria pollutants and GHG emissions
- 63 land use subcategories
- Applies approved emission factors, established methodology, and latest survey data
- Statewide model – all 35 air districts



What is CalEEMod?



- Calculates for air district, county, air basin, state level
- Calculates emissions from construction and operation
- Calculates direct and indirect GHG emissions (e.g., energy use, water/wastewater use, solid waste disposal, and vegetation planting and/or removal)
- Calculates benefits from mitigation measures



Design Specifics



- Flexibility in usage
 - ✓ defaults allow minimal amount of required input
 - ✓ provides ability to insert spreadsheet for large projects (e.g., construction schedule, construction equipment list)
- Regional defaults
- Ability to change defaults
- All equations and sources verified and documented in appendices



New Features



- More GHGs
- Additional land uses
- Vendor trips based on the latest SMAQMD survey
- New consumer product methodology
- New trip rates used –
maximum (daily),
weighted average (annual)
- Default diverted and
pass-by trips included



Expected Use and Interest



- Variety of applications – specific project, mixed use, plans, inventory, *user defined* land uses
- Statewide users include:
 - ✓ environmental consultants
 - ✓ city and county planners
 - ✓ air quality districts
 - ✓ CEQA/NEPA document reviewers
 - ✓ developers
 - ✓ decision-makers
- Interest expressed by National Association of Clean Air Agencies (NACAA) for national model



Importance to California Air Districts



- Integrity of air quality analysis
- Standardize air quality analysis
- Substantial evidence supporting tool
- Mitigate projects as feasibly possible
- Comply with requirements (*e.g.*, CEQA, GHG, *planning, etc.*)
- Ensure ongoing maintenance and upgrades

Current Status



- Over 6,000 downloads since initial release
- California training classes
- Online training segments being produced
- Website - www.caleemod.com:
 - ✓ [Modeling files](#)
 - ✓ [User's Guide/User's Tips](#)
 - ✓ [FAQs](#)
 - ✓ [Subscriber sign-up](#)
 - ✓ [Upcoming events](#)
- Upgrades to make model faster and new features
- New version expected to be release Spring 2012

User's Tips



- Tips compiled to assist User in operation
- Guidance includes:
 - ✓ operational information
 - ✓ proper modification of defaults
 - ✓ program limitations
 - ✓ program flexibility
 - ✓ current inconveniences/bugs
- Future upgrade action on items
- Tips are available online
- Tips to be modified after next upgrade

Technical Paper



- Provides understanding as to the development of the model
- Prepared by statewide Focus Group
- Highlights:
 - ✓ New Features
 - ✓ Methodology Reasoning and Differences
 - ✓ Default References
- Available online

Advice to Users



- Calculation tool designed for range of users
- Understand default information
- Provide regional defaults
- Utilize site specific data
 - ✓ traffic studies
 - ✓ water usage
- GHG Mitigation
 - ✓ take advantage of criteria pollutant co-benefits
- Dynamic tool; will require ongoing upgrades

Future Upgrades and Maintenance



- EPA's AP-42 emission factors for paved roads
- CARB's EMFAC2011 and updated OFFROAD emission factors
- Update platform to optimize code and improve speed/model efficiency
- New features (*e.g., emissions from off-road equipment used in operation; energy from elevators/lighting/ventilation in parking structures*)
- Update any air district specific data
- Functionality inconveniences (reloading issues, etc.)
- Update construction profile (e.g., schedule, type, HP)

Contact Information



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