

Greenhouse Gas CEQA
Significance Threshold
Stakeholder Working Group #14

November 19, 2009

SCAQMD

Diamond Bar, California

Agenda Item #2 - Proposed Residential/Commercial Thresholds – Screening Values (Tier III)

- Staff GHG ST recommendation – two options
- Lead agencies would select 1 of the 2 options:
 - ✓ GHG ST Option #1: By land use type
 - Residential: 3500 tpy CO₂e
 - Commercial: 1400 tpy CO₂e
 - Mixed use: 3000 tpy CO₂e
 - ✓ GHG ST Option #2: Combined approach (all 3 land use types)
 - 3000 tpy CO₂e for all land use projects

Agenda Item #2 – Proposed Residential/Commercial Thresholds – Screening Values (Tier III) *(Concluded)*

- OPR 2007-2008 database of 711 projects survey results:
 - ✓ GHG STs based on 90% emission capture rate
 - ✓ Project capture rate Option 1
 - Residential = 34 %
 - Commercial = 39%
 - Mixed use = 34%
 - ✓ Project capture rate Option 2 = 34%
- 17% (120 projects) more EIRs prepared (assumes no additional GHG mitigation measures)

Agenda Item #3 – Proposed Performance Standards (Tier IV)

- Tier IV Compliance Option #1: Reduction Target (%)
 - ✓ Max % reduction (land use sector reduction-23.9%, Scoping Plan overall reduction-28%)
 - ✓ Target updated as AB32 Scoping Plan revised
 - ✓ Residual emissions not to exceed 25,000 mty CO₂e
 - ✓ Base case scenario to be defined

BAAQMD Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures

Affected Emissions Source	California Legislation	% Reduction from 2020 GHG inventory	End Use Sector (% of Bay Area LU Inventory)	Scaled % Emissions Reduction (credit)
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				23.9%

Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard

Agenda Item #3 – Proposed Performance Standards (Tier IV) *(Continued)*

- Tier IV Compliance Option #2: Efficiency Target
 - ✓ 4.6 mt CO₂e per SP* for project level threshold (land use emissions only) & total residual emissions not to exceed 25,000 mty CO₂e
 - ✓ 6.6 mt CO₂e per SP for plan level threshold (all sectors)
- Sample calculations

*sp (service population)= population+employment

BAAQMD Table 7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors

All Inventory Sectors Greenhouse Gas Emissions Target	426,500,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO ₂ e)/SP ¹	6.6
Notes: AB = Assembly Bill; CO ₂ e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
¹ Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	

Agenda Item #4 – Base Case Scenario

- Pre-defined to avoid gaming the system
 - ✓ Final project type
 - ✓ Final project location
 - ✓ Same projected future year inventory methodology and assumptions as the most recent AB32 Scoping Plan for estimating project emissions
 - ✓ Vehicle trips, trip lengths, and density
- Base case derived using land use emission calculation models with default emission rates (pre-AB32 Scoping Plan)

Comparison Between SCAQMD & BAAQMD Proposed GHG STs (MTCO₂e/yr)

Category	SCAQMD	BAAQMD
Construction	30-yr amortization applied to operational ST	None recommended at this time
Stationary Sources Operation	10,000	10,000
Land Use Projects		
Numerical (Tier 3)	R = 3,500; C = 1,400; M = 3,000	
	Or RCM = 3,000	RCM = 1,100
Performance Std (Tier 4)		
Compliance Option #1 - % Reduction	28%	None
Compliance Option #3 - GHGs/unit		
Project Level	4.6/SP/yr	4.6/SP/yr
General Plans, etc.	6.6/SP/yr	6.6/SP/yr
Maximum Emission Limit	25,000	None
R = Residential; C = Commercial; M = Mixed Use; SP = Service Population (jobs + residents)		

Agenda Items #5, #6, & #7

- Other topics?
- Closing remarks
- Other business
- Next working group meeting scheduled for 12/17/09, 10:00 a.m.