

**Tier 4 Performance Standard Approach
Emission Reduction Target
Scenario 1**

Project Base Case Scenario Emission Calculations: Unmitigated project emissions reflecting only rules adopted as of 2006 (i.e., same assumptions as AB32 Scoping Plan)

Staff proposal: Performance standard based on the higher of the most recently adopted AB32 Scoping Plan overall reduction target and aggregated applicable source-specific reduction target

Hypothetical Scenario for Illustration Purpose

Applicable Tier IV Reduction Target:

- 1) Scoping Plan Overall: **28% reduction**
- 2) Source Specific: BAAQMD pg 15
 - a. Mobile Sources: 2.9 to 19.7%
 - b. Area Sources: 9.5%
 - c. Indirect/offsite Sources: 1.5 to 21%
 - d. Land use sector overall: **23.9%**
- 3) **Applicable reduction target: 28% (>23.9%)**

Proposed Project Emission Profile- Pre-AB32 Scoping Plan (% contribution to the total project emissions):

- 1) Natural Gas –related Emissions: 24%
- 2) Water Use Related Electricity Consumption: 1%
- 3) Electricity: 25%
- 4) On-road Mobile: 50%

Proposed Project Design and/or Mitigation Measures

- 1) Green building design to reduce natural gas consumption beyond Title 24 by 35%
- 2) Draught-tolerant landscape design to reduce water by 15%
- 3) On-site solar energy to reduce grid power by 30%
- 4) Increased density and near transit services to reduce VMT by 30%

$$(24\% * 35\%) + (1\% * 15\%) + (25\% * 20\%) + (50\% * 30\%) = 28.6\%$$

Comparison with Applicable Reduction Target

$$28.6\% > 28\%$$

If the residual project emissions less than 25,000 mty CO₂e, the project is presumed not significant for GHG impacts.

**Tier 4 Performance Standard Approach
Emission Reduction Target
Scenario 2**

Project Base Case Scenario Emission Calculations: Unmitigated project emissions reflecting only rules adopted as of 2006 (i.e., same assumptions as AB32 Scoping Plan)

Staff proposal: Performance standard based on the higher of the most recently adopted AB32 Scoping Plan overall reduction target vs. aggregated applicable source-specific reduction target

Hypothetical Scenario for Illustration Purpose

Applicable Tier IV Reduction Target:

- 4) Future Scoping Plan Overall: **25% reduction from projected 2020**
- 5) Source Specific measures in the Scoping Plan:
 - a. Mobile Sources: 25%
 - b. Area Sources: 15%
 - c. Indirect/offsite Sources: 30%
 - d. Land use sector overall: **28%**
- 6) **Applicable reduction target: 28% (>25%)**

Proposed Project Emission Profile- Pre-AB32 Scoping Plan (% contribution to the total project emissions):

- 5) Natural Gas –related Emissions: 24%
- 6) Water Use Related Electricity Consumption: 1%
- 7) Electricity: 25%
- 8) On-road Mobile: 50%

Proposed Project Design and/or Mitigation Measures

- 5) Super energy-efficient building design to reduce natural gas consumption by 25 %
- 6) Draught-tolerant landscape design to reduce water by 20%
- 7) On-site solar energy to reduce grid power by 50%
- 8) Increased density and near transit services to reduce VMT by 20%

$$(24\% * 25\%) + (1\% * 20\%) + (25\% * 50\%) + (50\% * 10\%) = 23.7\%$$

Comparison with Applicable Reduction Target

$$23.7\% < 28\%$$

The proposed project is significant for GHG impacts unless a different approach is taken.