

Greenhouse Gas CEQA  
Significance Threshold  
Stakeholder Working Group #9

March 19, 2009

SCAQMD

Diamond Bar, California

# Agenda Item #2 – Recent GHG Activities

- At the 12/5/08 Governing Board adoption hearing for staff's GHG significance proposal the Board directed staff to report back in March 2009
- Report to the Board on 3/6/09 covered the following:
  - ✓ Status report on CARB' GHG significance threshold (ST) process
  - ✓ Status report on progress identifying a commercial & residential ST
  - ✓ Status report on progress developing Tier 4 option

# Recent GHG Activities (Cont.)

- Other GHG activities
  - ✓ Status of CARB's interim GHG ST process
    - Released initial proposal 10/24/08
    - Held 2 workshops: 10/27/08 & 12/9/08
    - Revised interim GHG ST proposal delayed to consider/respond to voluminous comments received
    - Revised interim GHG ST proposal schedule TBD
  - ✓ SCAQMD staff will brief GHG Climate Change Committee on any future CARB GHG activities or GHG threshold proposals
  - ✓ Status of OPR GHG activities
  - ✓ Status of CEC GHG activities

# Recent GHG Activities

- SCAQMD held 8<sup>th</sup> working group meeting 1/28/09
  - ✓ At the working group meeting staff identified near-term goals of the group, which include:
    - Further develop interim GHG ST for residential & commercial projects
    - Develop calculation/inventory methodologies
    - Identify GHG mitigation measures & control efficiencies
    - Further evaluate Tier 4 performance standards

# Agenda Item #3 – GHG Emission Inventory Methodology

- San Bernardino Co. GHG emission inventory completed
  - ✓ Develop GHG Emission Inventory for the years 1990, 2007, 2020, & 2030
  - ✓ Pollutants: CO<sub>2</sub>, N<sub>2</sub>O, & CH<sub>4</sub>
  - ✓ Use Methodology Consistent with 2007 AQMP
    - For Stationary Sources
      - Establish a base year inventory (2002)
      - Use growth surrogates & SCAG growth factors to forecast/backcast
    - For Mobile Sources
      - Use CARB On-Road & Off-Road Models for all the years

# GHG Emission Inventory Methodology

- Methodology
  - ✓ Inventory Methodology
    - Bottom UP Approach
    - Emissions By Major Source Categories as 2007 AQMP
  - ✓ Source Categories
    - Stationary Sources
      - ☐ Point & Area Sources
    - Mobile Sources
      - ☐ On-Road
      - ☐ Off-Road
    - Electricity Usage

# GHG Emission Inventory Methodology

- Stationary Sources

- ✓ For fuel combustion sources

- Actual reported fuel consumption by fuel type
    - HHVs (AP-42)
    - CARB Default GHG EFs (AB-32)

- ✓ For non-fuel combustion sources

- TOG (as reported) & CARB CH<sub>4</sub> speciation profiles
    - For few sources, actual activity and GHG EFs (i.e., Prescribed burning, livestock-dairy)

# GHG Emission Inventory Methodology

- Mobile Sources

- ✓ On-Road

- CARB EMFAC2007 Model ( $\text{CO}_2$ , &  $\text{CH}_4$ )

- $\text{N}_2\text{O}$  emissions based on CARB methodology (VMT x CARB  $\text{N}_2\text{O}$  EF)

- ✓ Off-Road

- CARB OFFROAD Model ( $\text{CO}_2$ ,  $\text{N}_2\text{O}$ , &  $\text{CH}_4$ )

- Different inventory methodology for missing categories (i.e., aircraft, trains, CHE, etc)



# GHG Emission Inventory Methodology

- Electricity Usage

- ✓ GHG emissions = Electricity Usage x EF

- Actual Electricity usage for residential & non-residential sectors (1996 & 2005)
    - Developed growth factors based on Population and employment data to forecast/backcast electricity consumptions
    - Used utility-specific EFs

# Agenda Item #4 – Residential & Commercial GHG ST Work Plan

- Residential & commercial work plan developed to identify 90% GHG emissions capture rate level, includes:
  - ✓ Obtain and review CEQA documents
  - ✓ Log each project into an Excel spreadsheet
  - ✓ Information logged includes:
    - Project description
    - GHG emissions for construction & operation

# Residential & Commercial GHG ST Work Plan (Cont.)

- ✓ GHG residential & commercial work plan cont.:
  - If GHG emissions not provided, will quantify using URBEMIS2007 based on land use type, size, etc.
  - GHG emissions will be calculated for electricity use using information from document, if no energy information provided use CAR protocol
  - Once data collected, a GHG emissions distribution curve generated & 90<sup>th</sup> percentile identified
  - Report will be prepared summarizing data collected & 90<sup>th</sup> percentile

# Residential & Commercial GHG ST Work Plan (Cont.)

- A consultant has been hired to perform the CEQA document survey and analysis
- Status to date:
  - ✓ 286 projects in the data set
  - ✓ 242 surveyed & categorized according to land use type, as follows:
    - 25 residential
    - 79 commercial
    - 51 industrial
    - 46 mixed use
    - 43 general or specific plans (will not be evaluated)

# Residential & Commercial GHG ST Work Plan (Cont.)

- Status to date cont.:
  - ✓ Detailed evaluation will occur by land use category: 1) commercial, 2) mixed use, 3) residential, & 4) industrial
  - ✓ Commercial projects currently under evaluation:
    - Of the 79 projects, 46 include quantified operation GHGs & 40 include quantified construction GHGs
    - GHGs not quantified for 33 projects
    - May be able to quantify GHGs for 26 of the 33 projects
  - ✓ Expect to have preliminary results by the next GHG working group meeting

# Agenda Items #5, #6, & #7

- Other topics?
- Closing remarks
- Other business
- Next meeting scheduled for 4/22/09,  
10:00 a.m.