

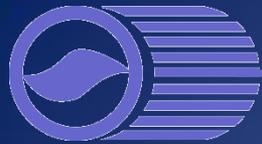
## ARB GHG inventory overview

- Enabling legislation (2006): AB 1803, AB 32
- Report annual emissions for all major sectors of state economy
- Uses
  - Set the 2020 statewide emissions limit (427 MMT CO<sub>2</sub>e)
  - Track emission trends
- Data sources
  - Mandatory facility GHG reporting (via Cal e-GGRT)
  - State and federal agency data, research



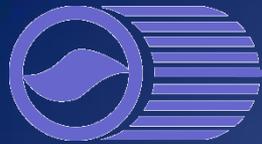
## GHG inventory sector: forest, range, and other lands statewide

- Estimate annual land-atmosphere GHG exchange over forest, range, and other lands statewide
- Atmospheric Flow Approach (IPCC)
- CO<sub>2</sub> uptake and emission, net CO<sub>2</sub> flux
- CH<sub>4</sub>, N<sub>2</sub>O emission
- Emission processes (combustion, decay)
- Emissions from wood products



## GHG inventory update: forest, range, and other lands statewide

- Current estimates based on legacy research products (CEC PIER), limited scope
- Initiated process to improve inventory
  - Forest GHG research symposium October 2009
  - Follow-up discussions (ARB, CALFIRE-FRAP)
  - Developed contract to improve & update inventory
- Project start September 2011
  - Team: UC Berkeley, NPS, USDA-FS PSW, USDA-FS Region 5 RSL
  - Technical working group: ARB, CALFIRE-FRAP, CalEPA, CEC, FS R5
- Integration: FIA, MODIS, LANDFIRE, harvest, fire, other



## GHG inventory update: forest, range, and other lands statewide

- Products
  - Land CO<sub>2</sub> uptake, emission, net flux
  - CH<sub>4</sub>, N<sub>2</sub>O emission by process (fire, decay, etc.)
  - Wood product emissions (CA forest-origin vs. imports)
  - Tech transfer: data (tabular, geospatial), procedures, code
- Other concurrent work
  - Forest GHGs + disease/pest (CEC)
  - Urban forests (FRAP)
- Anticipated draft results Feb 2013