

## CARB Cap and Trade Program Overview

CARB's Cap and Trade program provides fixed limits on GHGs from key sectors of the economy that represents about 85% of the state's total GHGs. The fixed limit of GHGs is scheduled to decline to meet targets in 2020 and beyond. The program is scheduled to start on January 1, 2012.

1. **CAP.** With California's Cap and Trade Program, CARB determines which facilities are covered and sets an overall emission target or "cap" for covered entities.
  - a. The cap is the sum of all allowed emissions for covered facilities.
  - b. Covered facilities in 2012 include electrical generators and large industrial sources. In 2015 the scope of covered entities expands to include emissions from transportation fuels (e.g. refineries) and non-industrial users of natural gas (commercial and residential customers).
  - c. The cap declines about 2% per year in initial period (2012 to 2014) and 3% per year after that (2015 to 2020).
2. **TRADE.** Once the cap is set, covered entities receive tradable emissions allowances authorizing emission of carbon dioxide equivalent.
  - a. The total number of allowances equals the overall emissions cap.
  - b. Initially, CARB will freely allocate 90% of emissions allowances and they will auction off the remaining 10%.
    - i. CARB assures us that they will transition as quickly as possible to 100% auction.
  - c. Allowance trading occurs because individual firms face different costs for reducing emissions.
    - i. Covered facilities can use all of their emission allowances to meet their goal.
    - ii. However, facilities that can reduce their emissions relatively inexpensively will be motivated to do so; they can then sell their surplus allowances to firms that face higher emission control costs.
3. **OFFSETS.** Offsets are surplus GHG emission reductions from sectors outside the cap that can be used by covered facilities (along with their allowances) to meet their compliance obligations.
  - a. An advantage of offsets is that they lower the overall cost of the program by bringing in low-cost emission reduction opportunities from outside the cap.
    - i. However, they need to be measurable, additional, real and verifiable (MARV).
  - b. CARB limits offsets to 8% of any one facility's compliance obligation.
    - i. This is to ensure that the majority of emission reductions come from sources within the program.
  - c. Four initial offset protocols are included as part of the program: forestry; urban forestry; livestock (manure/methane) management; and, removing existing stock of ozone-depleting substances.
  - d. May include international offset programs in the future that could be used to help preserve international forests.